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The Role of the Media in Promoting and Reducing Tobacco Use

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Other NCI Tobacco Control Monographs

Strategies to Control Tobacco Use in the United States: A Blueprint for Public Health Action in the 1990's. Smoking and Tobacco Control Monograph No. 1. NIH Pub. No. 92-3316, December 1991.

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We dedicate this monograph
to our cherished colleague and friend,

Ronald M. Davis, M.D.

We have considered it a privilege to work with Ron Davis as the lead Senior Scientific Editor of this monograph. Ron is known to many as a passionate advocate for tobacco control, who has used his finely honed skills as a translator of complex scientific concepts to facilitate progress in public health policy. Ron guided the development of this monograph from its conception to completion with outstanding leadership qualities and an unflinching pursuit of excellence. The extraordinary breadth and depth of his knowledge and experience in this field, combined with his scientific rigor and precision, made his contributions invaluable.

Despite being diagnosed with pancreatic cancer in early 2008, Ron continued to work tirelessly on this monograph, employing his characteristic patience, good humor, and focused determination. His contributions will help ensure that this volume will serve as a definitive resource to guide the tobacco control community for many years to come.

Both we and the tobacco control community are indebted to Ron for his work on this monograph and for his remarkable and inspiring leadership in the cause of public health.

The Editorial Team of Monograph 19
M.W., E.G., B.L., K.V., S.M., and M.R.

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Foreword

When I first started TV work with the ABC affiliate in Boston in 1972, broadcast television was king, with a realm dominated by only ABC, CBS, and NBC. Even though I got into the business by accident and had no formal training in media, I quickly understood the power of the airwaves to influence the minds and hearts of viewers. I also became very conscious of the attendant responsibility to be accurate and understandable, remembering Mark Twain's admonition (loosely phrased) to beware of reading health books because mistakes can kill you.

Perusing the information in this enormously informative volume, I was once again reminded of those elemental emotions: exhilaration about the opportunities offered by media and anxiety about the potential for misuse. Any phrase or sound bite can affect millions of people. In dealing with tobacco, I think the power of this potential must never be forgotten. Tobacco captivates people when they cannot rationally resist its siren call and can unleash a slow, deadly disease that can kill them even as they try to escape the tenacious trap of addiction. So those of us given the privilege of access to media should be aware of our own responsibilities in the fight against tobacco use—including the need to choose words and images to counter misinformation and temptation aimed at the young entrusted to our care.

I have come to believe that unless we think and feel that we are fighting a lethal battle against tobacco use, we will not succeed in stemming the forces that would promote it. This volume contains a wealth of information about how tobacco companies use media to their benefit. I predict that, like me, even though you have seen them in action, you will be amazed by the tactics used to promote tobacco. Tobacco use is a social phenomenon largely propelled by mass media over the past century, led by tobacco industry professionals who constantly change strategies to reach their goals. They combine the resourcefulness of a profit-making industry with a changing media and regulatory landscape to sell a product that remains our greatest public health challenge. We will not remove tobacco from our society unless we are willing to understand the industry's constantly changing tactics.

But this volume provides encouragement—information about successful efforts to fight back. Again I was surprised by what can work and stimulated to think about new ways to take a stand and make a difference.

I invite you to consider this volume a valuable reference for understanding how media can be used in the war against tobacco. Keep it handy for wise counsel, strategic encouragement, and a partner in a noble cause.

Tim Johnson, M.D., M.P.H.
Medical Editor, ABC News
June 2008

Message from the Series Editor

This volume is the 19th of the Tobacco Control Monograph series of the National Cancer Institute (NCI). This series began in 1991 with a visionary blueprint for public health action on tobacco prevention and control. In the years since, it has disseminated important cross-cutting research in areas such as the effectiveness of community-based and population-level interventions, the impact of tobacco control policies, the risks associated with smoking cigars and low-tar cigarettes, and systems approaches to tobacco control.

The subject matter of this monograph stands at the confluence of three major trends of the past century: the growth of mass media, the concomitant rise in cigarette smoking as a social phenomenon, and more recently, research to understand and to decrease the disease burden caused by tobacco use. Cigarettes are a product of the mass media era; the art and science of mass communications and mass marketing were critical to the growth of tobacco use in the past century. At the same time, however, the media have contributed significantly to the roughly 50% decline in smoking prevalence that took place over the past four decades, by increasing public knowledge of the health hazards of cigarette smoking, helping to change social norms about cigarette smoking, and increasing public acceptance of tobacco control policies.

This monograph summarizes what we have learned about the ability of the media to encourage and discourage tobacco use. There has been much interest in and study of media, and several government publications document the impact of advertising on tobacco use. This publication provides the most comprehensive and critical review and synthesis of the current evidence base in this area, drawing on work from many disciplines and research traditions. There is growing interest in applying what we have learned in tobacco prevention and control to other public health areas (such as dietary behavior). This monograph has important messages for public health researchers, practitioners, and policymakers as well as those in the communication science and media studies communities.

This monograph provides a comprehensive assessment of the literature on developing effective pro-health media messages and on policies to control tobacco marketing, both in the United States and abroad. This information is critical to support efforts to reduce the use of tobacco and the morbidity and mortality associated with its use. The evidence presented in this volume also underscores the need to continue to study and understand the ability of protobacco forces to change media strategies to adapt to a changing tobacco control policy environment.

We are pleased that Dr. Timothy Johnson, Medical Editor for ABC News, has provided the Foreword to this volume. As a physician who began working in television in 1972, he has a long-standing record of communicating the harmful effects of smoking to the public. His background and commitment provide invaluable perspectives about the power of the media and why this monograph is so important for tobacco prevention and control.

Stephen E. Marcus, Ph.D.
Monograph Series Editor
June 2008

Preface

The work presented in the National Cancer Institute's Tobacco Control Monograph 19, *The Role of the Media in Promoting and Reducing Tobacco Use*, is the most current and comprehensive distillation of the scientific literature on media communications in tobacco promotion and tobacco control. This ambitious effort to synthesize the science bridged the disciplines of marketing, psychology, communications, statistics, epidemiology, and public health and represents the combined efforts of five scientific editors, 23 authors, and 62 external peer reviewers.

The six main parts of this monograph deal with aspects of media communications relevant to tobacco promotion and tobacco control. Part 1, an overview, frames the rationale for the monograph's organization and presents the key issues and conclusions of the research as a whole and of the individual chapters. This section describes media research theories that guided this assessment of the relationship between media and tobacco use, which can be viewed as a multilevel issue ranging from consumer-level advertising and promotion to stakeholder-level marketing aimed toward retailers, policymakers, and others.

Part 2 further explores tobacco marketing—the range of media interventions used by the tobacco industry to promote its products, such as brand advertising and promotion, as well as corporate sponsorship and advertising. This section also evaluates the evidence for the influence of tobacco marketing on smoking behavior and discusses regulatory and constitutional issues related to marketing restrictions.

Part 3 explores how both the tobacco control community and the tobacco industry have used news and entertainment media to advocate their positions and how such coverage relates to tobacco use and tobacco policy change. The section also appraises evidence of the influence of tobacco use in movies on youth smoking initiation. Part 4 focuses on tobacco control media interventions and the strategies, themes, and communication designs intended to prevent tobacco use or encourage cessation, including opportunities for new media interventions. This section also synthesizes evidence on the effectiveness of mass media campaigns in reducing smoking. Part 5 discusses tobacco industry efforts to diminish media interventions by the tobacco control community and to use the media to oppose state tobacco control ballot initiatives and referenda. Finally, Part 6 examines possible future directions in the use of media to promote or to control tobacco use and summarizes research needs and opportunities.

Key lessons from this volume can inform policymakers as well as scientists and practitioners. Most critical from a policy standpoint is the conclusion, supported by strong evidence, that both exposure to tobacco marketing and depictions of tobacco in movies promote smoking initiation. A fundamental theme throughout this monograph is the dynamic interplay between tobacco promotion and tobacco control, whereby action in one area produces change in the other. For example, when limits have been placed on tobacco promotion, the tobacco industry typically has resisted, evolving alternative strategies to effectively reach current and potential smokers with media messages that promote its products.

In the United States in 2005—the same year in which 2.7 million American adolescents aged 12 to 17 used cigarettes in the past month¹ and 438,000 Americans died prematurely from diseases caused by tobacco use or secondhand smoke exposure²—the tobacco industry spent \$13.5 billion (in 2006 dollars) on cigarette advertising and promotion,³ an average of \$37 million per day. The tobacco industry continues to succeed in overcoming partial restrictions on tobacco marketing in the United States, and tobacco marketing remains pervasive and effective in promoting tobacco use. Efforts to curb the depiction of tobacco use in movies have increased in recent years, and the evidence reviewed here indicates that progress in this area could be expected to translate into lower rates of youth smoking initiation in the future.

Strong evidence indicates that media campaigns can reduce tobacco use. This underscores the importance of adequately funding mass media campaigns and of protecting them from the tobacco industry's efforts to impede them. The monograph provides guidance about the types of media campaign messages that are most and least likely to perform well.

This volume highlights the complexities of assessing the media's influence on tobacco-related attitudes and behavior. The ubiquity of the media means that randomized controlled trial designs are typically not feasible, so other study approaches must be used to assess causality of associations between exposures and outcomes. Accordingly, a vast range of research—from experimental forced-exposure studies in the laboratory to survey and cohort studies of populations—is reviewed.

The monograph editors hope that the evidence gathered and synthesized in this volume will facilitate progress in tobacco control in the United States and throughout the world. This review should be a valuable resource for those seeking to understand the effects of tobacco promotion and tobacco control media campaigns in their own jurisdictions as well as those charged with implementing aspects of the Framework Convention on Tobacco Control. Finally, this monograph contributes to a broader understanding of the media's past and potential roles to exacerbate or ameliorate other major public health problems of our time.

The Scientific Editors of Monograph 19
R.D., E.G., B.L., K.V., and M.W.

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Acronyms and Abbreviations

AB	Assembly Bill
ACS	American Cancer Society
AFSCME	American Federation of State, County, and Municipal Employees
AHA	American Heart Association
ALA	American Lung Association
ALF	American Legacy Foundation
ASH	Action on Smoking and Health
ASSIST	American Stop Smoking Intervention Study for Cancer Prevention
AzTEPP	Arizona Tobacco Education and Prevention Program
BUGA-UP	Billboard Utilising Graffitists Against Unhealthy Promotions
CBOs	community-based organizations
CBPR	community-based participatory research
CD	compact disc
CDC	Centers for Disease Control and Prevention
CI	confidence interval
COMMIT	Community Intervention Trial for Smoking Cessation
DFL	Democratic Farm Labor Party
DHHS	Department of Health and Human Services
DMAs	designated market areas
DOC	Doctors Ought to Care
DV	dependent variable
DVD	digital versatile disc
ESPN	<i>[a multimedia sports entertainment company]</i>
FCC	Federal Communications Commission
FDA	Food and Drug Administration
FTC	Federal Trade Commission
FTCP	Florida Tobacco Control Program
FY	fiscal year
HB	House Bill
HIS	Health Interview Survey
HYD	“Helping Youth Decide” <i>[an education campaign]</i>
IAA	International Advertising Association
IHC	interactive health communications
IMPACT	Initiatives to Mobilize for the Prevention and Control of Tobacco Use
IV	independent variable
LGIs	large group interventions
LISREL	<i>[software for structural equation modeling]</i>
MBH	Maine Bureau of Health
MCRC	Media Campaign Resource Center
MDPHHS	Montana Department of Public Health and Human Services
MEA	Michigan Education Association
MSA	Master Settlement Agreement
MSAs	metropolitan statistical areas

Acronyms and Abbreviations

MSDH	Mississippi State Department of Health
MTV	Music Television
NA	not applicable
NAAG	National Association of Attorneys General
NASBE	National Association of State Boards of Education
NCSH	National Clearinghouse for Smoking and Health
NRT	nicotine replacement therapy
NTC	National Tobacco Campaign
OECD	Organisation for Economic Co-operation and Development
OR	odds ratio
OSH	Office on Smoking and Health
PM21	Philip Morris in the 21st century <i>[an advertising campaign]</i>
PREP	potential reduced exposure product
PSA	public service announcement
ROM	read only memory
SWAT	Students Working Against Tobacco
TACNH	Technical Advisory Committee on Nonsmoking and Health
TUPAC	Tobacco Use Prevention Advisory Committee
UK	United Kingdom
WHO	World Health Organization

Part

1

Introduction

The growth of mass media has been critical to the rapid expansion of tobacco use in the 20th century and the subsequent evolution of effective tobacco control interventions into the early 21st century. The public health field's understanding of this relationship has paralleled the growth of tobacco control efforts, even as smoking levels in the United States declined by approximately half since their peak in the 1960s. Today, innovative research frameworks advance the study of tobacco use and the media at individual, organizational, and societal levels, and the knowledge and evidence base in this area continues to expand.

This introductory part highlights the key issues and conclusions of this monograph and describes the theoretical frameworks for media research that shaped the individual chapters. The relationship between media and tobacco use is explored as a multilevel issue, ranging from consumer-oriented advertising and promotion to stakeholder-level marketing aimed toward retailers and policymakers among others. This systemic view of tobacco use and media is reflected in the structure of the monograph as it explores the impact of these issues on tobacco promotion and tobacco control.

1

Overview and Conclusions

This chapter introduces a monograph examining the relationship between tobacco and mass communications media. It summarizes the role of media as an agent for both tobacco promotion and tobacco control efforts, and the broader societal role that media plays within nested levels of advertising, marketing communications, consumer marketing, and stakeholder marketing.

This chapter introduces the methodological challenges inherent in studying the impact of media on tobacco and describes the organization of this monograph around topic areas including tobacco marketing, tobacco coverage in news and entertainment media, tobacco control media interventions, tobacco industry counter-efforts, and future directions. The closing sections of this chapter present the volume and chapter conclusions that spring from the work presented here.

Media communications play a key role in shaping attitudes toward tobacco, and current evidence shows that tobacco-related media exposure affects both tobacco use and prevention. Tobacco advertising and promotion in the United States totalled more than \$13.5 billion in 2005 (in 2006 dollars), and media communications continue to play an important role in tobacco control efforts and policy interventions. Against this context, the intention of this volume is to stimulate dialogue on what remains an important issue in global public health.

Introduction

Tobacco use is the *single largest cause* of preventable death in the United States. According to the Centers for Disease Control and Prevention, cigarette smoking is responsible for more than 400,000 premature deaths per year and reduces the life expectancy of smokers by an average of 14 years. This total exceeds the death toll of HIV/AIDS, substance abuse, motor-vehicle collisions, suicide, and homicide combined.¹

In 1964, the first Surgeon General's report on smoking and health raised the alarm about the dangers of cigarette smoking.² Four decades later, despite a rapidly growing evidence base on the impact of tobacco use, 1 in 5 American adults continue to smoke³ and more than 4,000 young people smoke their first cigarette each day.⁴ Illnesses caused by smoking cost the nation more than \$160 billion per year in health care expenditures and lost productivity. While tobacco use continues, evidence implicating the number of illnesses caused by tobacco continues to mount. Smoking plays a key role in the causation of lung, oral, laryngeal, and pharyngeal cancers. It has also been implicated in other cancers, such as those of the cervix, pancreas, and kidney, and has a substantial impact on the prevalence of heart disease, emphysema, and pneumonia, among other health problems.^{5,6}

Yet, the proportion of adults who are current smokers has declined from 42% in 1965 to 21% in 2006,³ and the percentage of ever smokers (aged 18–35 years) who have quit was 34% in 2006.⁷ More important for the future, youth smoking prevalence has declined substantially; between 1976 and 2006, the 30-day prevalence of current smoking (smoking on one or more occasions during the past 30 days) among high school students decreased from 39% to 22%.⁸ Given these promising trends, how does one explain the paradox of millions who successfully

quit tobacco use while millions more initiate tobacco use and continue to smoke?

The history of tobacco control efforts to date ranges from educational and community-based efforts directed at smoking prevention and cessation to policy interventions such as tobacco tax increases, clean indoor air laws, and stricter enforcement of laws restricting youth access to tobacco products.⁹ Against this backdrop, this monograph focuses on what remains one of the most important phenomena in both tobacco promotion and tobacco control: mass communications. A uniquely twentieth-century development, mass communications are the product of enterprises that are explicitly organized to produce and distribute information products such as news, entertainment, and advertising to inform, amuse, and/or sell commodities to the public. Analogous to the agent-vector-host-environment model for transmission of infectious diseases, mass media became a powerful vector that carried tobacco—the agent—to a growing number of susceptible hosts throughout the country. Mass media have also changed the fabric of the environment in ways that facilitate the movement of that agent (for example, by influencing social norms surrounding tobacco). At the same time, media play a critical role in tobacco control, helping to counterbalance the protobacco cues in the environment.¹⁰

The influence of the media and their role in product marketing represent one of the key developments of modern society. Effective advertising and promotion through media channels have created entire categories of human product and service needs beyond basic survival, which, in turn, have fueled the economic growth of communication media that include newspapers, magazines, radio, and television. Today, these media have evolved to become part of a global virtual society linked by channels such as the Internet, text messaging, and interactive gaming. As mass communications have

bridged societies around the world, they have also magnified the impact of media on global public health. Over 80% of the more than 1 billion smokers worldwide live in developing countries, and the impact of globalization has led to an increase of more than 250% in cigarette exports from the United States alone in the decade preceding 2002.¹¹ Moreover, smoking prevalence in the developing world is rising as prevalence among developed nations continues to decline, with the United Nations projecting a 1.7% net global annual increase between 1998 and 2010. If current trends continue, more than one-half billion of the world's current inhabitants are predicted to lose their lives to tobacco use,^{12,13} underscoring the urgency of examining the media's role in global tobacco marketing.

At the same time, the media have an equally powerful role in influencing individuals and policymakers and have made critical contributions to the cause of tobacco control. Media channels hold the power to frame conceptual models, influence the evolution of these models in the public's perceptions, and ultimately guide these perceptions toward the implementation of policy.¹⁴ Tobacco control interventions have been inherently intertwined with the media, ranging from the antitobacco public service announcements broadcast on television under the Federal Communications Commission's (FCC's) Fairness Doctrine in the late 1960s^{15,16} to the advertising restrictions of the 1998 Master Settlement Agreement and the advertising restrictions contained in the World Health Organization's (WHO's) Framework Convention on Tobacco Control.¹⁷ Annual adult per capita cigarette consumption in the United States has declined from its peak level of 4,345 cigarettes in 1963 to a preliminary estimate of 1,654 in 2006,^{18,19} a process that started with the media publicity surrounding the 1964 Surgeon General's report and continues through today's media advocacy efforts on behalf of tobacco control.

Despite these successes, tobacco use still accounts for nearly one-third of cancer deaths worldwide. As a result of growing international tobacco use, WHO predicts that deaths caused by tobacco will increase to 6.4 million per year by 2015, representing 10% of all deaths worldwide.^{10,20} These trends, combined with the interrelationships between tobacco and media, mean that it is critical to understand how exposure to media influences tobacco use and to explore ways to effectively leverage the media to improve the overall state of public health.

This introductory chapter provides a framework for understanding the relationship between tobacco and the media, methodological issues in researching media-related issues in tobacco, and an overview and summary of the specific areas addressed in this monograph. Subsequent sections present the conclusions of individual chapters, followed by the major conclusions of the volume, as an executive summary of its overall findings.

Tobacco and the Media: A Multilevel Perspective

A complete and comprehensive understanding of the role of mass communications in tobacco control and tobacco promotion requires a multilevel approach. At the individual level, one must examine how individual-level factors such as knowledge, beliefs, and attitudes influence and are influenced by tobacco-related media messages and the channels in which the messages occur. At the organizational level, attention needs to be focused on (1) how the structure of mass media organizations and the practices of media practitioners lead to the production of media messages in the form of advertising, news, and entertainment; (2) how advocates for both the tobacco industry and tobacco

1. Overview and Conclusions

control attempt to influence the news and entertainment media; and (3) the role of regulation and public policy in influencing tobacco communications. Finally, at the population level, it is important to consider the larger cultural environment that is shaped by the interplay of the tobacco industry, mass media, tobacco control researchers, advocates, and policymakers.

The media also function at several levels, and the levels at which stakeholders on both sides of tobacco issues interact with media can be seen as a nested relationship, as shown in figure 1.1. Each level from 1 through 4 represents a broader and more indirect level

of marketing effort, and at the same time, a more powerful one. For example, although the ultimate impact of media efforts may be felt most clearly by direct consumer response to advertising or marketing communications, interventions at the stakeholder level often have broad-reaching effects on promotional efforts, social attitudes toward an issue or product, or even policies and regulation. This monograph attempts to examine the dynamics of tobacco-related media interventions at each of these levels, within a systemic framework.

The relationships among these levels and stakeholders on either side of the tobacco

Figure 1.1 The Nested Relationships among Advertising, Marketing Communications, Consumer Marketing, and Stakeholder Marketing in Tobacco Promotion



debate, and their relationships with chapters in this monograph, can be seen as follows:

Advertising. Cigarette advertising and promotion in the United States totaled more than \$13.5 billion in 2005 (in 2006 dollars),²¹ with effects that included recruiting new smokers, especially young smokers, as well as expanding the market for tobacco products by reinforcing smoking, discouraging quitting, and appealing to health concerns. Chapter 4 provides an overview of tobacco advertising and promotional efforts throughout modern history, while chapters 3 and 8 examine the rationales for and legal issues faced in regulating such efforts. Chapter 11 provides a detailed look at the strategies and themes of media efforts used by tobacco control advocates. Finally, chapter 14 explores how the tobacco industry uses media advertising and promotion to defeat state tobacco control referenda and ballot initiatives.

Marketing communications. Tobacco advertising forms part of an integrated marketing communications strategy combining sponsorship, brand merchandising, brand stretching, packaging, point-of-sale promotions, and product placement, across a broad range of channels ranging from event marketing to the Internet.^{22,23} Chapter 3 explores key aspects of the branding process, and (along with chapter 4) defines these terms and strategies as they relate to tobacco. Chapter 6 examines tobacco manufacturers' corporate sponsorship efforts—i.e., those carried out in the name of the company but not connected to a specific tobacco product brand. Chapter 15, the monograph's concluding chapter, examines future issues in tobacco promotion, including point-of-sale displays, discounting, and brand marketing, in the context of the current regulatory and social environment.

Consumer marketing. Consumer-product marketing efforts, including pricing,

distribution, packaging, and product design, are aimed at the development of tobacco product brand identities that often are targeted toward specific demographic, psychographic, or ethnic markets.^{24,25} Chapter 3 examines key principles of targeted marketing and communicating brand image, while chapter 5 looks in detail at common marketing themes used by tobacco companies to reach their target audiences. An even more important issue is the effectiveness of such media efforts on targeted consumers. Chapters 7 and 12 review the impact of media interventions by tobacco industry and tobacco control advocates, respectively, on smoking behavior, while chapters 9 and 10 explore the role of the news and entertainment media in influencing tobacco use among consumers.

Stakeholder marketing. Image- and relationship-building initiatives aimed at stakeholders, such as retailers, the hospitality industry, and policymakers, range from personal outreach to mass media organizations and public relations efforts around broad themes such as corporate social responsibility, youth smoking prevention, and providing information on health risks.^{26–28} Chapters 6 and 9, discussed previously, explore corporate advertising and news media advocacy as tools to create an image among stakeholders, while chapter 13 addresses how the tobacco industry uses stakeholder marketing efforts in an attempt to mitigate the impact of tobacco control media interventions on tobacco product sales.

These integrated levels of marketing and promotion pose a challenge to the goals of tobacco control and public health and underscore the need to further examine appropriate policy interventions to address the role of media efforts by the tobacco industry. Moreover, as direct advertising channels have become increasingly restricted by policy interventions on both the domestic and global levels, promotional expenditures for tobacco continue to

increase in areas such as point-of-purchase displays, promotional allowances, and viral, or “stealth,” marketing.^{21,24,25,29,30}

Given these trends and the realities of a digitally interconnected age, public health stakeholders must continue to monitor the relationship between media and tobacco use as both evolve in the twenty-first century.

Studying the Media and Tobacco

As is the case with most social science research, assessing causality is a significant challenge—in this instance, in determining the relationship between mass communications and tobacco-related outcomes. Establishing causality is even more challenging in the case of mass communications, given their ubiquity, the complex nature of communication effects, and the limitations of research designs.^{31,32}

Major challenges in assessing causality in media studies include the following:

- Media effects are complex and multidimensional.³² (1) media can have short-term effects such as the impact of a short burst of advertising on consumer attitudes and behaviors—for example, on sales of cigarettes—and long-term effects that are stable and sustained, such as on social norms and values; (2) media influence may be at the micro level, such as on individual cognitions, affect, and behavior, or at the macro level, influencing social policies, social movements, and social actors; (3) some effects may alter norms or opinions, such as changing norms regarding tobacco use, while others may stabilize and reinforce existing norms on smoking; (4) the effects of media can accumulate after sustained exposure to messages or be noncumulative; (5) media influence may range from effects on individual cognitions or attitudes to direct behavior; (6) some media effects are direct and others conditional; and (7) media effects can be as diffuse as general exposure to media or can be content specific.
- It is difficult to establish control groups. In epidemiology, some consider the randomized clinical trial as a gold standard that can clearly establish the difference in “exposures” between control and treatment groups. The fundamental assumption behind the idea of a control group is that the members of this group are not exposed to “treatment,” in contrast to an intervention group that is exposed to treatment.⁵ In the case of media, it is often difficult to confine the spread of messages to specified geographic areas, control for prior exposure or “background” exposure to the messages, blunt the impact of competing messages, and achieve sufficient exposure to messages in the treatment group so that it can be distinguished from control-group exposure.
- As noted above, media effects, particularly in the complex domain of health, may take longer to establish, whereas most research designs may not have observations for a sufficiently long duration to document the effects.³¹ A research design with observations over a short duration may not be able to document media effects adequately.
- Media effects can be selective for certain population subgroups; that is, not all groups are equally influenced by the media. For example, evidence shows that information campaigns or diffusion of information could potentially benefit some groups more than others.^{10,33}
- Media effects are not always direct but instead may be diffused through others.³¹ For example, a campaign to promote a tobacco quitline may reach a smoker only through a family member or friend who is exposed to the campaign and shares messages with the smoker. If the observations are limited to those receiving

quitline services, one might underestimate the effectiveness of the campaign.

- Last, the all-pervasive nature of the media environment includes both messages of interest as well as background “noise.”

Given these challenges, no single study method or design is likely to provide the weight of evidence necessary for causal inferences regarding the influence of mass communications on tobacco control or tobacco promotion. What is needed is a combination of methods, designs, interpretive techniques, and judgments that provides a body of evidence to enable an overall assessment of the relationship between media and outcomes pertaining to tobacco use.³⁴ In assessing the impact of media, studies should examine how media messages are generated (e.g., interplay between journalistic practices and tobacco industry efforts to influence news coverage), the nature of the media environment (how news on tobacco use and its effects are covered or the depiction of tobacco use in entertainment media), and the impact of the media environment on a range of tobacco-related outcomes. The phrase “range of tobacco-related outcomes” is worth underscoring here. Unlike epidemiological studies in many other fields of research—in which exposure-outcome relationships are more straightforward—it is not always easy to establish a direct causal link between media messages and behavior. Often, as discussed above, media effects could be on antecedents to behavior such as beliefs, norms, and intentions. Focusing on behavior alone could lead one to falsely conclude that media effects are weak.

This monograph reviews studies based on multiple research designs and methods including surveys, field and laboratory experiments, and analyses of media content and tobacco industry documents. Studies based on surveys of population groups or subgroups have the advantage of observing

people in their natural environment, do not interrupt or disrupt their routines, and are generalizable. What is gained in external validity, however, is traded against internal validity in the form of controlling for extraneous factors. The choice of these control variables is often important. Surveys can be single or repeated cross-sections, or they can be longitudinal (or panel) designs in which the same persons are interviewed at different points in time. The latter method can be quite effective in measuring change over time and can be an important contributor to providing evidence of causality.

Experiments, particularly laboratory-based experiments, provide the advantage of internal validity and are helpful in confirming causal relationships. These experiments, however, are often limited in terms of the rather forced nature of exposure, unnatural viewing situations, and the limitations of the experimental populations, which are often college students. Field experiments have the potential to increase external validity, while maintaining a degree of internal validity, but are subject to a number of sources of error, as discussed by Cook and Campbell in their classic work on quasi-experimental designs.³⁵

Analyses of media content can be both quantitative and qualitative. The analysis of news content on tobacco for example, as reviewed in chapter 9, demonstrates how systematic analysis of news coverage can provide an understanding of the news to which consumers are likely to be exposed. This facilitates the interpretation of the impact of news content on audiences exposed to news. Systematic content analyses require that the criteria for classifying media content be explicit and formal and that the classification, or coding, be done by more than one coder. Documentary analysis (e.g., the analyses of tobacco industry efforts to influence media) may not be “systematic” but may rely more on expert judgment. This analysis can be considered valid as long as

the criteria for interpretation are transparent and the inferences are plausible in light of the evidence from other methods.

In summary, this monograph relies on the totality of evidence from multiple studies using a variety of research designs and methods to understand the effects of media on tobacco promotion and tobacco control. The evidence is based on consistency, strength of associations, and theoretical plausibility.^{5,34}

Preparation of this Monograph

The National Cancer Institute's Tobacco Control Research Branch invited five experts representing the domains of medicine, public health, communications, marketing, epidemiology, and statistics to serve as editors of this monograph. This ambitious effort to synthesize the science included the contributions from 23 authors selected for their individual expertise. The monograph was subjected to a rigorous review process, which began with a review of the monograph outline. As each chapter was drafted, the chapter was reviewed by multiple peer reviewers with expertise on the individual topic. When the entire volume was complete, the full draft was submitted to expert reviewers who evaluated the monograph as a whole, who related one chapter to another, and who ensured that the volume level conclusions were supported by the monograph's content. The National Cancer Institute conducted the final review before the monograph was printed. Comments from 62 expert reviewers formed the basis of revisions the authors and volume editors made to the monograph. All of these efforts have culminated in a monograph that includes nearly 2,000 references, 44 tables, 15 figures, and numerous illustrative examples used in the media to promote and to discourage tobacco use.

This monograph is supported by its Web page, <http://www.cancercontrol.cancer.gov/tcrb/monographs/19/index.htm>, where supplemental materials for this monograph (fact sheets and presentation slides) and links to additional resources on the media and tobacco are located.

Monograph Organization

This monograph reflects a comprehensive examination of how mass media have been used in both tobacco promotion and tobacco control by various stakeholders and the consequences of such use. This examination included reviewing

- different types of media, such as news, television, advertising, movies, and the Internet;
- strategies to influence the content of media products, such as public relations and strategic communications; and
- the effects of media communications on tobacco initiation and use.

Part 1—Introduction, frames the discussion of media and tobacco use. This first chapter provides an overview of the topic of this monograph. It also includes volume-level conclusions and chapter-by-chapter synopses and conclusions. The second chapter summarizes the theoretical underpinnings of media research that support the rationale and methodology for the subsequent examination of specific areas of interest surrounding tobacco and media.

Part 2—Tobacco Marketing, explores issues related to the media interventions used by the tobacco industry to promote its products. Its chapters focus on areas that include several aspects of tobacco advertising and promotion, the use of media by the tobacco industry for corporate

sponsorship and advertising, the influence of tobacco marketing on smoking behavior, and the regulatory and constitutional issues surrounding policy interventions directed at tobacco marketing.

Part 3—Tobacco in News and Entertainment Media, looks at two media channels that go beyond traditional paid advertising and promotion to play a key role in shaping public opinion on smoking. Its chapters explore how news media coverage influences tobacco use and the role that entertainment media play in attitudes toward tobacco use.

Part 4—Tobacco Control Media Interventions, focuses on how media efforts are used in support of tobacco cessation and prevention, including an overview of the strategies and themes in tobacco control media interventions and efforts to assess the effectiveness of mass media campaigns in reducing smoking.

Part 5—Media, Tobacco Control Interventions, and Tobacco Industry Mitigation Efforts, discusses two separate aspects of tobacco industry counterefforts and the media: the industry's efforts to weaken tobacco control media interventions and its use of the media in the political realm to attempt to defeat state tobacco control ballot initiatives and referenda.

Part 6—Future Directions, examines possible future trends in the use of media for both tobacco promotion and tobacco control, as a summary of the issues discussed throughout the previous sections.

Major Conclusions

These conclusions are based on the scientific evidence and evaluation provided in the monograph.

1. Media communications play a key role in shaping tobacco-related knowledge, opinions, attitudes, and behaviors among individuals and within communities. Media communications on tobacco include brand-specific advertising and promotion, news coverage, depictions of tobacco use and tobacco products in entertainment media, public relations, corporate sponsorship, corporate advertising, political advertising for ballot initiatives and referenda, and media campaigns for tobacco control.
2. Cigarettes are one of the most heavily marketed products in the United States. Between 1940 and 2005, U.S. cigarette manufacturers spent about \$250 billion (in 2006 dollars) on cigarette advertising and promotion. In 2005, the industry spent \$13.5 billion (in 2006 dollars) on cigarette advertising and promotion (\$37 million per day on average). Currently, most of the cigarette industry's marketing budget is allocated to promotional activities, especially for price discounts. Price discounts accounted for 75% of total marketing expenditures in 2005 (\$10.1 billion in 2006 dollars). Less than 1% of cigarette marketing expenditures are now used for advertising in traditional print media.
3. Tobacco advertising has been dominated by three themes: providing satisfaction (taste, freshness, mildness, etc.), assuaging anxieties about the dangers of smoking, and creating associations between smoking and desirable outcomes (independence, social success, sexual attraction, thinness, etc.). Targeting various population groups—including men, women, youth and young adults, specific racial and ethnic populations, religious groups, the working class, and gay and lesbian populations—has been strategically important to the tobacco industry.
4. The total weight of evidence—from multiple types of studies, conducted by

investigators from different disciplines, and using data from many countries—demonstrates a causal relationship between tobacco advertising and promotion and increased tobacco use.

5. The depiction of cigarette smoking is pervasive in movies, occurring in three-quarters or more of contemporary box-office hits. Identifiable cigarette brands appear in about one-third of movies. The total weight of evidence from cross-sectional, longitudinal, and experimental studies indicates a causal relationship between exposure to depictions of smoking in movies and youth smoking initiation.
6. Evidence from controlled field experiments and population studies shows that mass media campaigns designed to discourage tobacco use can change youth attitudes about tobacco use, curb smoking initiation, and encourage adult cessation. The initiation effect appears greater in controlled field experiments when mass media campaigns are combined with school- and/or community-based programming. Many population studies document reductions in smoking prevalence when mass media campaigns are combined with other strategies in multicomponent tobacco control programs.

Chapter Summaries and Conclusions

Part 1—Introduction

Chapter 1. Overview and Conclusions

This chapter provides an introduction and framework for the monograph, describes how it is organized, and includes major volume conclusions and individual chapter conclusions.

Chapter 2. Theoretical Underpinnings of Media Research in Tobacco Control and Tobacco Prevention

This chapter examines the history and theory of conceptual models currently used in media research. It looks at three broad levels of theories and analysis for media studies in tobacco—the individual, organizational, and societal levels—and how these levels affect the framing of research efforts and their findings. This chapter lays the groundwork for understanding some of the important theoretical and methodological differences underlying the media studies discussed in this monograph and their impact on tobacco control efforts.

Part 2—Tobacco Marketing

Chapter 3. Key Principles of Tobacco Promotion and Rationales for Regulation

This chapter explores the use of advertising and promotion by the tobacco industry to create demand for its products, including market segmentation to target consumers by demographic, geographic, behavioral, and psychographic factors, as well as branding strategies to create a consistent product identity and message.

Conclusions

1. The promotion of tobacco products involves sophisticated targeting and market segmentation of potential customers. Common market segmentation dimensions include demographics (e.g., age, gender, race/ethnicity), geography (e.g., market density, regional differences within a domestic or international market), behavioral characteristics (e.g., occasions of cigarette use, extent of use, user's smoking status), and psychographics (lifestyle analysis).

2. Internal tobacco company documents reveal that two key typologies of cigarette consumers used by cigarette firms are “starters” (who frequently initiate smoking during adolescence) and “pre-quitters” (i.e., existing smokers who need reassurance).
3. The brand image of most tobacco products represents the end result of a multifaceted marketing effort involving brand identity, logos, taglines and slogans, pictorial elements, and the use of color. The development, enhancement, and reinforcement of this brand imagery are primary objectives of tobacco promotion.
4. Tobacco companies have designed their communications of brand image to use principles relating to message repetition, consistency, and relevance to a contemporary audience. The brand’s image is built slowly and collectively by all of the accumulated associations and images of the communications strategy, such as social status, sophistication and social acceptance, athleticism and healthfulness, glamour and fashion, rewarded risk-taking and adventure, and masculinity or femininity.
5. The key rationales cited for implementing a comprehensive ban on tobacco advertising and promotion include (1) the health consequences of tobacco use (including addiction); (2) the deceptive or misleading nature of several tobacco promotional campaigns; (3) the unavoidable exposure of youth to these campaigns; (4) the role of tobacco advertising and promotion in increasing tobacco use in the population, especially among youth; (5) the targeting of “at-risk” populations, including youth, women, and ethnic and racial minorities, through advertising and promotion; (6) the failure of the tobacco industry to effectively self-regulate its marketing practices; and (7) the ineffectiveness of partial advertising bans.
6. Substantial evidence exists from the United States and several other countries that the tobacco industry does not effectively self-regulate its marketing practices.
7. Substantial evidence exists from the United States and several other countries that tobacco companies typically respond to partial advertising bans in ways that undermine the ban’s effectiveness. These responses include shifting promotional expenditures from “banned” media to “permitted” media (which may include emerging technologies and “new” media), changing the types and targets of advertising in permitted media, using tobacco-product brand names for nontobacco products and services, and availing themselves of imprecise clauses in the legislative text of the bans that allow them to continue to promote their products.

Chapter 4. Types and Extent of Tobacco Advertising and Promotion

This chapter examines the scope of tobacco advertising and promotion in the United States and its evolution over time. Areas discussed include a taxonomy of past and present channels used in advertising and promoting tobacco products; emerging promotional channels such as packaging, viral marketing, and the Internet; and recent trends in tobacco advertising and promotional expenditures, including the shift from traditional print advertising to promotional activities.

Conclusions

1. Cigarettes are one of the most heavily marketed products in the United States. Between 1940 and 2005, U.S. cigarette manufacturers spent about \$250 billion (in 2006 dollars) on cigarette advertising and promotion. In 2005, the industry spent \$13.5 billion (in 2006 dollars) on cigarette advertising and promotion (\$37 million per day on average).

2. Most of the cigarette industry's marketing budget is allocated to promotional activities, especially for price discounts, which accounted for 75% (\$10.1 billion in 2006 dollars) of total marketing expenditures in 2005. From 1970 to 2005, the pattern of marketing expenditures shifted dramatically; the proportion of expenditures allocated for advertising in "measured media" decreased from 82% in 1970 to almost none in 2005. Measured media include television, radio, newspapers, magazines, and billboards. Correspondingly, the proportion of marketing expenditures devoted to promotional activities increased from 18% to almost 100%.
3. During the past three decades, Philip Morris has consistently committed more than \$100 million per year (in 2006 dollars) to advertising for Marlboro, the industry's dominant brand, which currently has 40% of the U.S. market share. In 2006, the Marlboro brand was the 12th most highly valued brand worldwide, with an estimated \$21.4 billion in brand equity.
4. Expenditures for smokeless tobacco advertising and promotion reached \$259 million (in 2006 dollars) in 2005. The five largest categories of expenditure were price discounts (40%), coupons (11%), sampling (11%), point of sale (8%), and magazines (8%).
5. Cigarette advertising and promotion are heavy in volume and high in visibility at the point of sale, particularly in convenience stores. Cigarette marketing at the point of sale increased substantially after the 1998 Master Settlement Agreement, which included a ban on cigarette advertising on billboards. About 60% of all cigarettes sold in the United States are purchased in convenience stores, where cigarettes are the top in-store product category in terms of consumer sales.
6. As cigarette advertising is being curtailed in some traditional media, cigarette companies are exploring the use of new or nontraditional media for distributing protobacco messages and images, including the Internet and cigarette packages. In addition, cigarette firms (like other companies) are experimenting with viral (stealth) marketing to create a "buzz" about a product.

Chapter 5. Themes and Targets of Tobacco Advertising and Promotion

This chapter provides an overview of specific themes and population targets used in tobacco advertising and promotion on the basis of studies of marketing materials and tobacco industry documents. It examines key themes for tobacco marketing efforts such as taste and satisfaction, implied harm reduction, social affinity, brand loyalty, and "smokers' rights." It also discusses efforts to market tobacco products to specific populations—most of which are defined by age, gender, race or ethnicity, and sexual orientation—and the implications of these targets for marketing themes and brand identity.

Conclusions

1. Tobacco advertising has been dominated by three broad themes: providing satisfaction (taste, freshness, mildness, etc.), assuaging anxieties about the dangers of smoking, and creating associations between smoking and desirable outcomes (independence, social success, sexual attraction, thinness, etc.).
2. Targeting various population groups—including men, women, youth and young adults, specific racial and ethnic populations, religious groups, the working class, and gay and lesbian populations—has been strategically important to the tobacco industry.
3. The tobacco industry has become increasingly sophisticated in applying

market research to population segments in order to design products, messages, communication channels, and promotions more aligned with the needs and susceptibilities of particular market segments. This research results in more efficiency, greater reach, and increased effectiveness for marketing activities aimed at targeted populations.

4. Little attention has been paid to understanding tobacco marketing aimed at American Indians and Alaska Natives, despite their high prevalence of tobacco use.
5. Targeted marketing of tobacco products to specific groups such as youth, women, and minorities has become a focus for monitoring and protest by antitobacco advocates and community groups.

Chapter 6. Tobacco Companies' Public Relations Efforts: Corporate Sponsorship and Advertising

This chapter examines corporate public relations activities that can have an important impact on public perceptions of and attitudes toward individual tobacco companies. Such activities include corporate sponsorship activities targeting core customer groups, corporate advocacy advertising in areas such as youth smoking, and corporate image advertising designed to highlight charitable work or create a new corporate brand identity.

Conclusions

1. Corporate sponsorship of events and social causes represents a key public relations strategy for major tobacco companies, which spent more than \$360 million on these efforts in 2003. Key targets included sporting events, antihunger organizations, and arts and minority organizations. These efforts have been used, in certain cases, to influence opinion leaders who benefit from such sponsorship.

2. Corporate image campaigns by tobacco companies have highlighted their charitable work in the community and have promoted their youth smoking prevention programs; at times, corporate spending on these campaigns has vastly exceeded the amount actually given to the charities. These campaigns have reduced perceptions among adolescents and adults that tobacco companies are dishonest and culpable for adolescent smoking, and among adults, have increased perceptions of responsible marketing practices and favorable ratings for the individual companies.
3. Tobacco industry youth smoking prevention campaigns have been generally ineffective in reducing youth smoking. Moreover, they may even have increased smoking in some subgroups of youth.
4. Tobacco industry public relations efforts such as corporate sponsorship and advertising may make audiences more resistant to criticism of the industry, may mitigate jurors' negative views toward the industry, and may weaken public or legislative support for tobacco control policies.
5. Systematic monitoring and descriptions of tobacco companies' activities and expenditures for corporate sponsorship and advertising are needed to better understand the impact of these activities on the public image of tobacco companies, on consumers' smoking intentions and behaviors, and on the image of sponsored events and causes.

Chapter 7. Influence of Tobacco Marketing on Smoking Behavior

This chapter examines the evidence base for how tobacco marketing efforts affect tobacco use by adolescents as well as tobacco consumption across the general population by using results from numerous studies

as well as findings from tobacco industry documents. Areas examined include the relationship between cigarette advertising and adolescent needs and self-image, the effects of marketing exposure on adolescent smoking, and the relationship between tobacco marketing expenditures and overall tobacco consumption.

Conclusions

1. Much tobacco advertising targets the psychological needs of adolescents, such as popularity, peer acceptance, and positive self-image. Advertising creates the perception that smoking will satisfy these needs.
2. Adolescents who believe that smoking can satisfy their psychological needs or whose desired image of themselves is similar to their image of smokers are more likely to smoke cigarettes.
3. Experimental studies show that even brief exposure to tobacco advertising influences adolescents' attitudes and perceptions about smoking and smokers, and adolescents' intentions to smoke.
4. The vast majority of cross-sectional studies find an association between exposure to cigarette advertising, measured in numerous ways, and adolescent smoking behavior, measured in numerous ways, indicating a robust association.
5. Strong and consistent evidence from longitudinal studies indicates that exposure to cigarette advertising influences nonsmoking adolescents to initiate smoking and to move toward regular smoking.
6. Many econometric studies have used national time-series data to examine the association between tobacco advertising expenditures and tobacco consumption. Some of these studies found a small positive effect of advertising on consumption. Other studies failed to find a positive effect, probably because the

data used had little variance and were measured at a high level of advertising expenditure at which changes in the volume of advertising have little or no marginal effect.

7. The evidence from three cross-sectional econometric studies using disaggregated local-level data indicates a positive effect of advertising on tobacco consumption.
8. The studies of tobacco advertising bans in various countries show that comprehensive bans reduce tobacco consumption. Noncomprehensive restrictions generally induce an increase in expenditures for advertising in "nonbanned" media and for other marketing activities, which offset the effect of the partial ban so that any net change in consumption is minimal or undetectable.
9. The total weight of evidence from multiple types of studies, conducted by investigators from different disciplines, using data from many countries, demonstrates a causal relationship between tobacco advertising and promotion and increased tobacco use, as manifested by increased smoking initiation and increased per capita tobacco consumption in the population.

Chapter 8. Legal and Constitutional Perspectives on Tobacco Marketing Restrictions

This chapter explores legal and constitutional issues surrounding regulation of tobacco promotion within the context of legislative efforts in the United States as well as WHO's Framework Convention on Tobacco Control.

Conclusions

1. The First Amendment to the U.S. Constitution, as the Supreme Court has interpreted it in recent years, grants broad protection for commercial

speech, including speech about tobacco products. The Court has precluded regulation of tobacco products by the U.S. Food and Drug Administration (FDA) on the basis of the Court's analysis of existing authorities under the FDA's governing statute and the complex balance that Congress has struck between protecting and promoting trade in tobacco products and informing consumers of their dangers.

2. The Federal Trade Commission has authority to prevent "unfair or deceptive acts or practices in or affecting commerce." However, the agency's efforts to prevent tobacco advertisements that are false or misleading have been limited.
3. Canada and the European Union have imposed limitations on tobacco advertising and promotion, but these policies were weakened as a result of legal challenges. Nevertheless, Canadian and European restrictions on tobacco marketing are stronger than those currently in place in the United States.
4. The Framework Convention on Tobacco Control (FCTC), the first treaty ever negotiated by the World Health Organization, calls on each party to the treaty to "undertake a comprehensive ban of all tobacco advertising, promotion and sponsorship ... in accordance with its constitution or constitutional principles." As of April 2008, 154 countries were parties to the FCTC. The United States signed the treaty in May 2004 but has yet to ratify it.

Part 3—Tobacco in News and Entertainment Media

Chapter 9. How the News Media Influence Tobacco Use

This chapter examines news media coverage of tobacco issues and its ultimate

relationship with both individual tobacco use outcomes and policy interventions. It looks at the nature and volume of tobacco issue coverage and provides a content analysis of news media items referring to tobacco. It also examines common framing issues for tobacco-related news items as well as relationships with outcome measures and tobacco industry efforts to influence media coverage.

Conclusions

1. The news media represent a key source of health information for the general public. More important, they serve as a framing mechanism for issues surrounding tobacco control. As a result, news coverage is a frequent aim of stakeholder activity on both sides of tobacco-related issues. However, only a small proportion of tobacco control research has been devoted to news media issues to date.
2. News coverage that supports tobacco control has been shown to set the agenda for further change at the community, state, and national levels. Despite this, organized media advocacy efforts on behalf of tobacco control issues remain an underutilized area of activity within public health.
3. Key issues covered as news stories include secondhand smoke, tobacco policies, and the health effects of smoking. Studies of tobacco-related news coverage often show that the majority of stories favor tobacco control progress, including opinion pieces. Other studies have shown the tobacco industry to be successful in gaining consistent coverage for selected issues.
4. Content analyses of tobacco-related news articles have revealed some trends that remain favorable to protobacco interests. These trends include the underrepresentation of tobacco farming diversification in the farming press,

a tendency of articles to challenge the science behind secondhand smoke issues, and positive coverage of the growth in cigar smoking.

5. Numerous factors can affect the volume and nature of tobacco news coverage. The American Stop Smoking Intervention Study found more support for tobacco control in letters to the editor in participating states, and editors largely support tobacco control efforts. However, news coverage often focuses on specific areas such as tobacco control policies, the outcomes of tobacco lawsuits, or the disbursement of Master Settlement Agreement funds.
6. Large-scale studies have yet to be undertaken investigating associations between tobacco-related news coverage and attitudes, behaviors, and outcomes related to tobacco use. These studies face challenges in separating the effects of news coverage from those of the interventions or policy changes they describe. Research shows potential evidence for such an impact, including a drop in per capita cigarette consumption after news coverage of the 1964 Surgeon General's report on smoking and health, a relationship between tobacco-related news coverage and cessation, and a link between news coverage of specific tobacco control efforts and lower adolescent smoking prevalence and consumption.
7. Paid tobacco advertising tends to suppress or reduce news coverage of tobacco-related issues, particularly in magazines. However, bans on tobacco advertising that accompany ratification of the World Health Organization's Framework Convention on Tobacco Control may impair the tobacco industry's ability to exert editorial control over published content.

Chapter 10. Role of Entertainment Media in Promoting or Discouraging Tobacco Use

This chapter looks at the impact of media channels for entertainment on attitudes and outcomes related to smoking in an environment in which American youth are exposed to more than five hours per day of media from television and other sources. It describes portrayals of tobacco products and tobacco use in the movies together with a discussion of other channels such as television, music, magazines, and the Internet. It also looks at the influence of such portrayals on social attitudes and behaviors related to smoking, as well as current strategies for reducing media exposure to tobacco products.

Conclusions

1. Children and adolescents in the United States have heavy exposure to entertainment media, with an average of 5.5 person-hours of media use per day. Tobacco use often is integrated into entertainment media programming, especially in movies.
2. Portrayals of tobacco in movies include images of tobacco use and images of tobacco product brand names and logos. Depictions of smoking are pervasive in movies, occurring in three-quarters or more of contemporary box-office hits. Cigar use also is commonly depicted in movies, but use of smokeless tobacco is not. Smoking is more common in movies rated for adults (i.e., R-rated), but depiction of smoking is not related to box-office success. Identifiable cigarette brands appeared in about one-third of movies released during the 1990s. In contrast to its frequent depiction in movies, tobacco use is found in about 20% of television shows and 25% of music videos.
3. Smoking prevalence among contemporary movie characters is approximately 25%,

- about twice what it was in the 1970s and 1980s. In contrast, smoking in the general population has declined since the 1970s. Smokers in movies differ from smokers in the general population: the former are more likely to be affluent and white. The health consequences of smoking are rarely depicted in movies.
4. Cross-sectional studies show that, among adolescents, exposure to smoking in movies is associated with initiation of smoking, independent of several other factors such as smoking by friends and family. Cross-sectional studies also indicate that among adolescent never smokers, exposure to smoking in movies is associated with more positive attitudes toward smoking.
 5. Two longitudinal studies demonstrate that adolescents with higher exposure to smoking in movies at baseline are 2.0 to 2.7 times more likely to try cigarette smoking in the future. More studies are needed on the role exposure to smoking in movies plays in adolescents' smoking beyond the initiation phase.
 6. Experimental studies show that images of cigarette smoking in film can influence adolescent and adult viewers' beliefs about social norms for smoking, beliefs about the function and consequences of smoking, and their personal intentions to smoke. Protobacco movie content (e.g., stars smoking, absence of health consequences portrayed) appears to promote prosmoking beliefs and intentions. The effects observed for experimental studies of smoking in movies on viewers' smoking-related beliefs are of a similar magnitude as those observed in experimental media research on other health topics (e.g., effects of media violence on viewers' aggression).
 7. Experimental studies indicate that antitobacco advertisements screened before films can partially counter the impact of tobacco portrayals in movies.
 8. The total weight of evidence from cross-sectional, longitudinal, and experimental studies, combined with the high theoretical plausibility from the perspective of social influences, indicates a causal relationship between exposure to movie smoking depictions and youth smoking initiation.
 9. One longitudinal study indicates that parental steps to reduce the exposure of never smokers (aged 10–14 years) to R-rated movies, which have higher numbers of smoking events, produced a corresponding reduction in their smoking initiation.
 10. Efforts to reduce media exposure to tobacco include restrictions on tobacco advertising and product placements, advocacy targeted to entertainment providers, media literacy interventions aimed at the general public, continued dialogue with key stakeholders in the entertainment industry, and proposed self-regulation by the movie industry (e.g., tobacco-related ratings).

Part 4—Tobacco Control Media Interventions

Chapter 11. An Overview of Media Interventions in Tobacco Control: Strategies and Themes

This chapter examines current and future trends in media interventions for tobacco control, including the evolution of media efforts from their start under the FCC's Fairness Doctrine for television advertising, to recent initiatives funded by state authorities and the 1998 Master Settlement Agreement. It also discusses examples of advertising themes used in tobacco control programs, research on factors in effective tobacco control advertising campaigns,

and the potential for “new-media” channels such as interactive health communications using the Internet.

Conclusions

1. From their beginnings with the successful 1967–70 application of the Fairness Doctrine to cigarette advertising in the broadcast media, media interventions for tobacco control have evolved to become a key component of tobacco control efforts. These interventions have been aided by funding from the 1998 Master Settlement Agreement.
2. Media channels commonly used for tobacco control advertising include television, radio, print, and billboards. Much research on tobacco control media interventions revolves around television, regarded as the most powerful medium.
3. Public-health-sponsored antitobacco advertising has included themes such as the health risks of smoking, exposure to secondhand smoke, questioning the accuracy of tobacco industry communications, and the declining social acceptability of smoking. Other forms of smoking-relevant advertising include advertisements for commercial smoking cessation products as well as the tobacco industry’s youth smoking prevention and adult cessation programs.
4. Numerous studies have shown consistently that advertising carrying strong negative messages about health consequences performs better in affecting target audience appraisals and indicators of message processing (such as recall of the advertisement, thinking more about it, discussing it) compared with other forms of advertising, such as humorous or emotionally neutral advertisements. Some of these negative advertisements also portray deception on the part of the tobacco industry. Advertisements for smoking cessation products and tobacco-industry-sponsored

smoking prevention advertising have been shown to elicit significantly poorer target audience appraisals than do advertisements based on negative health consequences.

5. Studies have shown that particular characteristics of advertisements (such as those eliciting negative emotion) are more important than demographic factors (such as race/ethnicity, nationality, and age group) in driving immediate advertising-related appraisals and indicators of message processing.
6. Because many smokers search the Internet for help to quit, interactive Web-based health communications may have potential for assisting smoking cessation. However, these services need to be informed by smoking cessation theory and research and structured to expose users to appropriate information.

Chapter 12. Assessing the Effectiveness of the Mass Media in Discouraging Smoking Behavior

This chapter studies the use of mass media in tobacco control and health promotion, and examines research results relative to changing smoking behavior in light of their methodological challenges. Specific areas covered include (1) controlled field experiments involving antismoking mass media campaigns aimed at youth and adults, often only one part of multicomponent interventions; and (2) population-level studies, including both longitudinal and cross-sectional evaluation studies of national- and state-level tobacco control mass media campaigns conducted either alone or as one component of a multicomponent tobacco control program.

Conclusions

1. Several evaluations of the antismoking public service announcements required

under the Fairness Doctrine between 1967 and 1970, the first large-scale U.S. national mass media campaign, indicate that there were discernible reductions in tobacco consumption, smoking prevalence, and smoking initiation. This natural experiment spurred research into the use of media to influence health behaviors.

2. Evidence from controlled field experiments suggests that antitobacco mass media campaigns conducted in conjunction with school- or community-based programming can be effective in curbing smoking initiation in youth and promoting smoking cessation in adults. This evidence has provided the impetus for antitobacco mass media campaigns to become important components of tobacco control programs.
3. The few population-based studies of antitobacco mass media campaigns, in which the media campaign was the only antitobacco program, demonstrate that the media campaigns were effective in reducing smoking in the youth and adult target populations.
4. Population-based studies of antitobacco mass media campaigns that were only one component of multicomponent tobacco control programs provide considerable evidence for reduced use of tobacco by youth and adults. The antitobacco mass media campaign and the other program components together may have reduced smoking more than did any single component alone. The relative contributions of various components to program effectiveness are difficult to determine, but some of the controlled field experiments showed a dose-response relationship between reduced smoking and an increased number of program components.
5. Evidence from controlled field experiments and population studies conducted by many investigators in many

countries shows that antitobacco mass media campaigns can reduce tobacco use.

Part 5—Media, Tobacco Control Interventions, and Tobacco Industry Mitigation Efforts

Chapter 13. Tobacco Industry Efforts to Influence Tobacco Control Media Interventions

This chapter examines how tobacco interests and their allies work to impede antitobacco media efforts by using techniques such as diverting funding to other causes, lobbying elected officials, restricting antitobacco media content through negotiated settlements, and filing legal challenges. Examples are given from state-level media campaigns in Minnesota, California, Arizona, and Florida.

Conclusions

1. Tobacco industry efforts to impede tobacco control media campaigns include attempts to prevent or reduce their funding. Examples include opposition to a tobacco tax increase intended to fund media campaigns in California and claims that a “budget crisis” precluded spending on tobacco control media campaigns in Minnesota.
2. Efforts to weaken the messages or reduce the size of the target audience in tobacco control media campaigns include restricting the scope of Arizona’s Proposition 200 initiative to address specific topics such as nicotine addiction and to target only children and pregnant women and, in the American Legacy Foundation’s “truth” campaign, disallowing public policy advocacy and vilification of the tobacco industry.
3. The tobacco industry has cited its own media campaigns—such as “Helping Youth Decide,” “Think. Don’t Smoke,”

and “Tobacco Is Whacko if You’re a Teen”—to argue that government-funded campaigns duplicate these efforts and waste taxpayer dollars. This strategy was seen first in Minnesota and leading up to and following the 1998 signing of the Master Settlement Agreement.

4. Increasing consumer awareness of tobacco industry activities to counteract public-health-sponsored campaigns designed to reduce tobacco use can be an important component of effective media interventions.

Chapter 14. Tobacco Industry Media Efforts to Defeat State Tobacco Control Ballot Initiatives and Referenda

This chapter examines tobacco industry efforts to use media to counter ballot initiatives and referenda for a sample of the 42 state-level tobacco control measures put before voters between 1988 and 2006. This chapter discusses media campaigns in several states, together with primary themes used by the tobacco industry in these efforts, such as unfair taxation, diversion of funds, personal choice, and wasteful government spending.

Conclusions

1. Within those states that allow these processes, ballot initiatives and referenda have served as an effective tool for enacting tobacco control legislation by direct vote. Tobacco industry interests frequently have used media channels (such as radio, television, print media, and direct mail) to defeat these ballot measures.
2. Despite the tobacco industry’s media efforts, it has generally not prevailed,

losing in 32 (76%) of 42 state initiatives and referenda from 1988 to 2006.

Given the industry’s lack of success in defeating tobacco control state initiatives and referenda at the state level, holding tobacco control initiatives or referenda is an important, though expensive, option if a state legislature has blocked tobacco control legislation.

3. The tobacco industry consistently has used several primary themes to defeat state tobacco tax increase initiatives. These include suggestions that the measures would impose unfair taxes and that tax revenues would not be spent on health care or tobacco control programs as intended. Secondary themes used consistently over an 18-year time span include that the measures would increase “big government” and wasteful spending, discriminate against smokers, and increase crime and smuggling. Other, less frequent themes were that the measures would be a tax cut for the rich, impede economic growth, fail to solve state budget problems, restrict personal choice, and violate antitrust laws.

Part 6—Future Directions

Chapter 15. Future Directions

This chapter examines the future of media as they relate to both tobacco promotion and tobacco control. Issues discussed relative to tobacco promotion include point-of-purchase marketing, packaging, the use of entertainment media, and public relations. Tobacco control media issues include news and media advocacy, measurement of news media effectiveness, media interventions, and the potential for newer alternate media channels.

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2

Theoretical Underpinnings of Media Research in Tobacco Control and Tobacco Promotion

The media have played a key role in historical trends in tobacco use and its impact on human health and are involved in subsequent efforts to promote health and control tobacco use. This chapter examines the theoretical base for media studies (both protobacco and antitobacco) within the context of three research frameworks.

- **Individual-level framework.** This includes the effects of media and mass communications on individuals, including expectancy-value theories of behavior change based on attitudes and beliefs, social cognitive theory and its related construct of modeling beliefs and behavior, and information-processing models.
- **Social network/organizational-level framework.** A higher system-level approach in which groups of actors, including the media, advertisers, and other stakeholders, interact with the defined and targeted characteristics of an audience, driven by feedback such as readership or ratings. Such models break down further into areas such as specific organizational roles within the media, the overall flow of information, and the larger political, economic, and cultural contexts.
- **Societal-level framework.** This approach envisions the media as a product of forces in society, serving in turn as agents for social conflict and social change or as advocates of emerging social movements. Concepts such as media advocacy, framing, and communications inequality all have their roots in this societal view of the role of the media.

Each of these three frameworks provides a backdrop to the theoretical assumptions informing the work reviewed throughout this monograph to study the media and tobacco, ranging from studies of individual message recall or attitude change, to the effect of protobacco and antitobacco media messages on tobacco use, to the social or political impact of media interventions. Each of these efforts, in turn, contributes to a broader and continually evolving understanding of the impact of media on smoking behavior and public health.

Introduction

This chapter presents an overview of the history of media-effects research, abiding issues and concerns that have driven the research, and three broad frameworks (levels of analysis) that inform communications science, discussed here in the context of their relevance to tobacco use and tobacco control.

Mass media are among the most powerful socializing agents of our time. The media influence how we think and what we think about. They daily shape our collective perceptions of “normative” and “normal,” of “important” and “insignificant,” of “good” and “bad,” of “success” and “failure,” of “cool” and “uncool,” and much more. The importance of media communications is woven deeply into the fabric of postindustrial societies such as the United States and, increasingly, the industrial and developing world. The media’s roles and functions have grown complex over time, reflecting the postindustrial world’s own growth and complexity as well as its paradoxes and contradictions. This is nowhere more evident than in the media’s variable impact on human health.¹

Although tobacco has been commercially exploited since the sixteenth century,² the convergence of historical forces that created the Industrial Revolution set the stage for tobacco’s global diffusion and its devastation of human health. The 20/20 hindsight of this century makes it possible to see that energy-harnessing technologies made mass production of tobacco and other products possible but also transformed economic models. Technology sped up production, reduced per unit production costs, and permitted the manufacture of mass supplies of products. While there must have been some demand for tobacco to start with, mass supply required mass demand, sales, and consumption to complete the equation. How did manufacturers drive demand leading to mass sales and consumption of tobacco?

The Industrial Revolution also provided a unique part of the answer: modern means of media communications. The combination of mass production and mass communications (e.g., advertising), in essence, created the modern market economy.³ In the case of tobacco and the instruments of communications, conditions converged, beginning in the nineteenth century, to create the “perfect storm” that has been affecting human health ever since.

Key to understanding the interaction of media communications and tobacco is the recognition that both are industries—that is, formal organizations with rationalized goals and objectives, differentiated functions, and established routines to accomplish their work. Arguably, the media are the more complex of the two, if only because they are not composed of a single industry with a single goal, but many industries with many goals. They also play multiple roles and functions in society that are frequently contradictory.

For example, while modern advertising, marketing, and communications are used every day to propel sales and consumption of tobacco and other products, the same strategies are used to promote health and prevention. While entertainment media intentionally or unwittingly shape youthful perceptions of smoking as cool and sexy, leading to increased initiation of teen smoking, the same media may be used to promote pro-health changes through powerful drama and narratives.⁴ Advocates of both tobacco control and the tobacco industry have dueled in the arena of the news media, attempting to interpret tobacco’s role in causing cancer and other illnesses.

These contradictions, coupled with the perceived power of the media, have endowed the study of media in tobacco promotion and tobacco control with the substantive interest of scholars, policymakers, tobacco

control advocates, and the tobacco industry. The controversy associated with mass media's role in tobacco has garnered funding to study media effects on tobacco use, with equally substantive interest in shaping the debate on media effects themselves. This voluminous body of work, while providing deep insights into the role of the media, has also created a fog of misunderstanding through both over- and underestimation of media effects.

The arrival of the digital information epoch, characterized by profound transformation in communications and biomedical innovation,¹ is a good time to take stock of the literature on the role of mass media in tobacco promotion and tobacco control, especially to define media impact with greater precision. A systematic and intensive examination, informed by research frameworks at multiple levels, may serve several functions for the future of tobacco control: identify lessons learned, discern gaps in research, call attention to implications for public communications, and highlight pointers for public health and communication policies. Finally, this examination may better prepare us to study and understand how new media technologies may be harnessed for tobacco control and the general improvement of public health.

History of Media-Effects Research

The history of communications research is rich in multiple perspectives and can be traced back at least 100 years to near the turn of the twentieth century. While space limitations prevent doing justice to this rich history, many erudite accounts of its development exist.⁵⁻⁹ Briefly, however, communications research has developed along five distinct dimensions:⁷ the study of communications in politics, political process, and institutions; communications in social life; psychology

and social psychology of communications; communications in education; and sponsored communications research.

A narrow reading of the history of mass communications research could convey the mistaken impression that it has emphasized media effects on individuals primarily to cater to the interests of the industry, such as audience research, and to the interests of the government for propaganda. Yet, earlier accounts⁷⁻⁹ have pointed out that mass communications research has been driven quite extensively by public concerns about media's power to promote certain ideas and world views and their impact on the social order, particularly on more vulnerable audiences such as children.⁹ Conventionally, such research has focused on three broad areas, though not necessarily with the same degree of emphasis: (1) media effects on public opinion, public attitudes, beliefs, knowledge, and behavior; (2) the roles of the press in society, including immigrant socialization and community integration; and (3) media production processes, including organizational determinants and professional practices of reporters and producers.

The research literature on mass media and children, including effects of mass communications (e.g., advertising and television among others), may also be applicable to adults. The literature suggests the following:⁹

- The appearance of each new mass medium triggered similar research questions on media effects.
- The primary interest has been the effects of media on the moral development and behavior of children.
- The research questions were shaped by public controversies and debates about the new media.
- Most research programs, in general, concluded that the effects of media are

subject to the influence of a number of conditions, including interpersonal influences, and are mediated by a set of individual, situational, parental, and societal factors.

- Earlier programs of research have set the agenda for subsequent programs of research on media effects.
- Some of the media research, especially on youth, was influenced by the social reform movements of the twentieth century, such as women's rights, civil rights, and the peace movements, among others.

The relevance of this history for the study of media effects in tobacco-related communications is important given the driving concern about the impact of tobacco-related content in media. This history includes media such as advertising and movies; the impact on the public in general and children in particular; and the use of mass media to reduce, if not eliminate, tobacco use among the American public through education and policy advocacy campaigns. The extensive body of work in tobacco-related communications research spans the spectrum of tobacco industry and tobacco control advocates' influence on the production of media messages in advertising, news, and entertainment and the effects of such messages on individuals, groups, institutions, and policymakers.

The context of tobacco-related communications research is critical to understanding this work. Typical of earlier stages in the history of communications research, both the tobacco industry and the government took an abiding interest in examining the impact of communications on tobacco use, though for different reasons. Each new finding was subject to different interpretation—social action and policymaking thus generating fodder for continuing controversy. This charged context provides the backdrop for this monograph,

which examines the theory, evidence, and significance of communications research for tobacco use and control.

Levels of Theory and Analysis

Media studies in tobacco may be organized along three broad levels of analysis: individual, social network/organizational, and societal.¹⁰

This framework is not intended to be fully comprehensive of media studies; it is a way of organizing the vast body of research that is relevant to tobacco use and tobacco control. At the same time, this framework is not without consequences. A researcher's selection of a unit and level of analysis conveys the importance of understanding a problem at that particular level. More critically, perhaps, the level of analysis is consequential to how findings are used to shape social action for prevention and control or, for that matter, how best to market tobacco and smoking to particular audiences. Invariably, the level of analysis in all research determines the framing and importance of the problem of interest, in this case, tobacco.

Some research cuts across levels of analysis. For example, a particular study may focus on how mass communication campaigns change social norms associated with secondhand smoke among individuals. The study may discover subsequent changes, not only in social norms among individuals, but also in social policies, such as restriction of smoking in public places (e.g., in bars and restaurants). In other words, communications focused on changes in social norms around tobacco among individuals may either directly or indirectly contribute to social policies on restricting tobacco use in public places. From this example, it could be argued that organizing tobacco-related communications research

along levels of analysis could provide a more holistic understanding of the impact of communications on tobacco use and control for individuals, groups, institutions, and the broader society. Similarly, tobacco companies may promote the idea that any restrictions on smoking in public are an infringement on individual rights and potentially reduce support for public policies to regulate smoking. In the interpretation of research, findings seldom divide neatly and exclusively along discrete levels.

In the sections that follow, research in media studies is discussed along the three levels of analysis/frameworks: individual, social network/organizational,* and societal. Examples are drawn from tobacco-related research.

Individual-Level Analyses and Tobacco-Related Communications

Understanding the effects of communications on individuals has been the most common and dominant level of analysis in media studies. Analysis at this level has been dominant because two of the earliest and longest-sustained contributions to communications research emerged from (1) work on the study of the negative effects of propaganda during World War II and subsequent work carried out at Yale University in the 1950s that led to a focus on the study of a persuasion approach in communication studies^{8,11} and (2) work on the negative effects of communications on children.⁹ Both approaches have influenced subsequent work in tobacco-related communications.

This work had considerable influence on understanding the mechanisms that could explain the effects of media in promoting

or preventing tobacco use through commercial advertising or public health communication campaigns or tobacco-related content in mass media. For example, tobacco advertising and the presence of tobacco in movies may frame the use of tobacco as “cool” and “liberating,” and tobacco use as “satisfying,” thus focusing on the individual’s affect (see part 2, especially chapters 3–5). Similarly, most mass media interventions in tobacco control also focused on changing the cognitions, affect, and behaviors of individuals (chapters 11 and 12). Media interventions can promote smoking cessation by either increasing smokers’ motivation to quit or increasing their chance of success on any given attempt.^{12,13} Media interventions can also promote adoption of policies such as clean air legislation that reduces both the population’s exposure to secondhand smoke and the visibility of smokers.¹⁴ Media campaigns can reduce smoking initiation among youth by deglamorizing smoking and framing it as a deviant and undesirable behavior.¹⁵ Specifying the psychological mechanisms by which mass media can contribute to tobacco promotion or tobacco control depends on the theory of attitude and behavior change as well as on how media messages are processed and retained in the minds of the audience.

Early persuasion models that focused on individual effects suggested that advertisements brought about behavior changes through a hierarchy or chain of contingent conditions.¹⁶ For example, McGuire¹⁷ suggests that to be influenced by a message, an audience must be exposed to it, pay attention to and understand it, and develop a cognitive or affective response. These models assume that a break in the chain of contingency or a reduced outcome at any of the steps will lead to little or no response to the advertising. Many of

*Another approach is to examine the social-network and organizational levels separately. They are combined here for the sake of simplicity.

these models also assume that attitudes and behaviors in response to persuasive messages are developed consciously and rationally,¹⁸ though it is equally conceivable that the processes that McGuire and others postulate operate at an automatic or unconscious level.

Expectancy-Value Theories of Attitude and Behavior Change

Like these early models, expectancy-value models implicitly assume that individuals have control over their choices and that they base their choices on information available to them. The expectancy-value models include two components as predictors of attitudes, or in the case of decision models, behavioral choice. The two components are an *expectancy*—the likelihood that the decision is associated with a particular outcome—and a *value*, that is, the positive or negative valence associated with that outcome. Introduced in various forms but dating back to early psychological research (e.g., behavioral decision theory¹⁹ and subjective probability theory²⁰), the core assumption of expectancy-value models is that people strive to maximize the perceived benefits and minimize the perceived costs associated with performing a behavior. In health behavior research, a number of these expectancy-value models (and variants) have been popular.

One of the more influential models in the health area is the Health Belief Model (HBM), which proposes that the cognitive activities in response to messages pertain to formulating beliefs about health risks and the health-protective qualities of certain behaviors. To preserve one's health, modification of behavior may take place.^{21,22} The HBM assumes that self-destructive behavior, such as smoking, occurs when individuals (1) do not have adequate information about the health risks posed by their behavior, (2) fail to

understand their vulnerability to the consequences of their behavior, (3) fail to understand that avoiding the behavior will reduce health risks, or (4) encounter other informational barriers to behavior change. To promote smoking cessation, for example, the HBM, and expectancy-value models in general, suggest strengthening the individual's perception of the risk and severity of the consequences of smoking and of their physical vulnerability to those consequences. At the same time, a persuasive message should try to reduce the perceived benefits of continued smoking as well as the barriers to changing the behavior, perhaps by increasing necessary skills to quit or perceived self-efficacy that quitting is possible and beneficial.

Like the HBM, the theory of reasoned action (TRA)^{23,24} and the theory of planned behavior (TPB)²⁵ both argue that health behavior choices are reasoned and are based on the information available to the individual who is making the behavioral choice. According to these theories, an individual's intention to act is the single best predictor of behavior (TRA), as long as the individual perceives that he or she has volitional control over the behavior (TPB). This intention to act is, in turn, influenced by one or both of two components: (1) attitudes toward performing the behavior, or one's overall feeling of favorability toward performing the behavior, and/or (2) subjective norms, or the degree to which salient important referents are perceived to endorse (or not endorse) the behavior. Attitudes and norms are, in turn, influenced by underlying beliefs driving those attitudes and norms. For different groups of people, different consequences of performing the behavior may be salient and may be held with different belief strengths. As a result, the consequences driving the behavior for one group (e.g., teens) may differ considerably for another group (e.g., adults). Similarly, health communications may increase the salience and the strength of a belief

that drives behavior. An assessment of the American Legacy Foundation's "truth" campaign found that exposure to anti-industry messaging resulted in negative beliefs about industry practices and, accordingly, negative attitudes toward the tobacco industry. The increase in negative attitudes is linked to decreased progression toward intention to smoke and actual smoking behavior.¹⁵

Fishbein and colleagues^{26,27} extended the TRA and TPB by bringing together a number of different theoretical perspectives. They proposed the Integrative Model of Behavior (Integrative Model), arguing that there are only a finite number of determinants that lead to behavior change. The Integrative Model incorporates the construct of self-efficacy, originally proposed by Bandura in his social cognitive theory.²⁸ Self-efficacy is the feeling of confidence one has in performing a recommended action. In the Integrative Model, the role of environmental factors, as well as skills and abilities of the individual to perform the behavior, are described as influencing the extent to which an individual's intentions to perform the behavior will predict behavior. Intentions, in turn, are determined by attitudes toward the behavior, the perceived norms concerning the behavior, and self-efficacy in performing the behavior. Attitudes, perceived norms, and self-efficacy are functions of underlying beliefs associated with each of them. According to the Integrative Model, media messages should primarily target those beliefs that are associated strongly with behavioral intentions and determined by formative research. For example, an adolescent's perceived norms toward smoking (e.g., whether friends or family think he or she should smoke) may influence the intention to smoke, in which case campaign messages may aim to change those norms. On the other hand, a smoker could have intentions to quit smoking but may lack the self-efficacy that would enable such

behavior. Campaigns, in turn, may target self-efficacy.

Another theory that focuses on the individual's perceptions of health consequences and self-efficacy is the protection motivation theory.²² This model emphasizes that whether one will change a health-damaging behavior such as smoking depends on the perceived severity of a threatened event (e.g., heart disease, lung cancer, emphysema), the perceived probability of the event, the efficacy of the recommended preventive behavior (the perceived response efficacy), and the perceived self-efficacy (i.e., the level of confidence in one's ability to undertake the recommended preventive behavior). A 2006 study²⁹ based on this theory found that adolescents' intention to smoke decreased more as a result of advertising that showed the disease and suffering of tobacco users than by anti-industry advertising. The key finding was that evoking empathy for those suffering from health problems caused by tobacco was an effective driver of reduced intention to smoke.²⁹

Programs and strategies that encourage and support people to quit or not to initiate smoking, including antitobacco advertising, reflect many aspects of these expectancy-value models of health behavior change. For example, advertising may seek to highlight the increased risks posed by smoking, to stress the severity of conditions caused by tobacco or the personal probability of being affected, to communicate the health and other benefits of quitting smoking, to alert smokers of smoking cessation services that may help them quit, or to build smokers' confidence to make quit attempts and keep trying to quit (trial behavior). According to the Integrative Model, provision of new message information can increase the salience of a new belief underlying attitudes, thereby affecting attitude change. Also, if intentions are determined by subjective

norms, then making salient key referents would be useful.

Another important theoretical framework for understanding individual behavior change, particularly regarding tobacco, is the Transtheoretical Model (TTM).³⁰ As the name suggests, this model is the result of a review and synthesis of leading behavior change theories and focuses on the idea that behavior change is a process that occurs in stages. The concept of stages of change (individuals need different information and face different barriers while in different stages) is extremely popular and is often used for matching participants to intervention components. The TTM was developed with a focus on understanding smoking cessation patterns and has been used often in this context. A 2002 review of 148 studies revealed that the evidence for use of the TTM with smoking was growing but not conclusive.³¹

Social Cognitive Theory

Social cognitive theory²⁸ provides a dynamic model of learning in which people are viewed as engaging in proactive and self-regulating processes that enable them to adapt and change to their environment. Human behavior is viewed as a dynamic interplay among personal factors, behavioral factors, and environmental influences. One of the core methods for acquiring knowledge and skills, according to this theory, is by learning through observation and imitation of others. Learning is facilitated when individuals observe the behavior of others who are similar along key dimensions. Particularly relevant to the area of health communications is the role of *symbolic modeling*, in which the medium of observation is through mass media (such as television or movies) rather than face-to-face observation (such as parent and child). In fact, symbolic modeling has potential for magnified impact because of the number of people that it can reach in diverse regions

and because the attributes of certain role models (e.g., celebrities) may render them especially persuasive.

While social cognitive theory accords an influential role for mass media, audiences are conceived of as complex and active agents in the person-media relationship. People will not automatically mimic whatever is modeled. The prevalence, salience, accessibility, and functional value of modeled behavior are predicted to influence the audience's attention. Model characteristics such as prestige or similarity to the audience member may also attract attention. The audience members may then retain knowledge and thoughts about the modeled behavior, or they may forget them. They may then go on to carry out modeled behaviors, or they may not. Motivational processes may play a role in reinforcing or averting the behavior. If the person receives material, social, or self-evaluative incentives for the behavior, or observes others benefiting from the behavior, he or she may be motivated to engage in similar conduct in the future. If negative consequences are observed to occur in response to modeled behaviors, the observer will be reluctant to follow suit. Learning is also a function of whether the individual feels capable of performing a behavior (self-efficacy).

A review of how social cognitive theory may help explain the impact of depiction of smoking in movies on adolescent experimentation is discussed in chapter 10.

Dual Process Models of Attitude and Persuasion

Increasingly, researchers have recognized that in making health choices, consumers do not always conduct a systematic review of relevant information. Psychological models of persuasion called *dual process models* argue that one route to persuasion is effortful, systematic, and focused on

persuasive arguments, but that a different route to persuasion is not effortful, and instead, is based on heuristics, peripheral cues, and experiential or affective processing. Early dual process models, and the ones most influential in psychology, marketing, and health communications during the past 20 years, include the Elaboration Likelihood Model (ELM) and the Heuristic-Systematic Model (HSM).^{32,33} The ELM suggests that attitude change can occur via a central route (based on purposeful information-processing activity aimed at uncovering the central merits of an issue) or via a peripheral route (based on low-effort attitude change). The route used depends on level of motivation and ability to assess the central merits of a message. Thus, when motivation or ability to process a message is low, attitudes are more likely to be changed by relatively simple associations, such as classical conditioning or heuristics retrieved from memory. Attitudes formed by this route are hypothesized to be less enduring and less likely to lead to long-term behavior change. As shown by Petty and Cacioppo,³³ people exposed under low-motivation conditions agree with a message more if there are more arguments, whereas people under high-motivation conditions agree with a message more if the arguments are more compelling. Thus, at the low-motivation end of the elaboration continuum, it is the quantity and/or type of cues that affects the degree of persuasion; at the high motivation end of the continuum, it is the quality of the message arguments and the relevance of other cues to the message that affect persuasion.

Other dual process models focus more explicitly on affective, sensory cues (such as visual imagery) and/or experiential processes as the alternative to the systematic, effortful route to persuasion. These cues are relevant in the present context, as tobacco promotions often use symbolic imagery that could be highly persuasive under low-motivation conditions (chapters 3 and 4).

For example, in observing how individuals respond to advertising messages and other information in the environment, Hibbard and Peters³⁴ describe two modes of thinking that can determine judgments and decision making: one is analytic and logical; the other is emotional and intuitive. The former, termed *rational*, is a conscious mode that takes a relatively longer time to occur and, the authors argue, has developed rather late in human evolutionary development. The latter mode, termed *experiential*, is less than conscious, occurs rapidly, and is hardwired because of its survival value. The role of emotion, mood, and other affective and experiential responses in decision making has increased in research importance over the past decade. Emotional states guide both decisions and perception of information³⁵ and can function as information in and of themselves (i.e., if it feels good, it is probably good for me; if it feels bad, I should stay away).

Using multiple pathways to changing attitudes was also emphasized in research in social and consumer psychology³⁶ published in 2006. While the traditional view of attitudes is that an attitude is an enduring evaluative summary that guides behavioral choices (an assumption underlying many expectancy-value models), later evidence suggests that attitudes are less stable across time, situations, and environmental contexts than previously thought.³⁷ The enduring nature of attitudes may depend on whether they have been formed as a result of “central” or peripheral reasoning. Attitudes may be constructed on the spot on the basis of the information available in the context in which the attitude is reported.³⁷ Furthermore, researchers have argued that individuals may have two types of attitudes: an explicit attitude based on reported cognitions and an implicit attitude based on more automatic stored affective responses.^{38–40} An individual may also experience ambivalent attitudes,⁴¹ such that, for example, a teenager’s former (implicit)

attitude toward smoking may have been positive, but with increasing antismoking messages received, two types of attitudes (one positive implicit attitude and one negative explicit attitude) may form. Over time, if the positive (but not the negative) associations with smoking are rejected, the formerly positive implicit attitude may be replaced with a negative implicit attitude.

Media, Message Structure, and Information Processing

Studies in the psychology of communication may draw on physiological and biological processes that mediate audience reactions to mass media communications.⁴²⁻⁴⁵ According to this approach, people's reactions to media messages, a form of environmental stimuli, are subject to both their capacity and their motivation to process the information. For example, the Limited Capacity Model of Motivated Mediated Message Processing argues that people have a limited capacity to process information and allocate cognitive resources selectively to encode, store, and retrieve information.⁴⁵ Drawing on an evolutionary approach, these studies suggest that the mechanisms for encoding, storage, and retrieval of information depend on motivation for either survival or avoiding danger. In fact, the relationship between mass mediated messages and underlying cognitive and motivational systems is dynamic and interactive and is subject to the nature of the medium and the structure of the message. This means that some media and certain messages elicit different responses in different individuals, phenomena that must be taken into account in designing persuasive communications. Messages can be designed so they are novel (sensation seeking),⁴⁶ indicate importance, or are motivationally salient, and to reassure the audience in its motivation for survival or to avoid danger. These theories have been applied to examine campaign effects on stemming illicit drug use and smoking.

Media-Message Effects, Information Processing, and Behavior Change

The effects of mass media on health outcomes such as tobacco use are influenced by both the channels in which the media messages are placed, as well as the construction of the message, including its format and content. The theories discussed so far address (1) the routes to behavior change by identifying determinants of behavioral intentions or behaviors by focusing on beliefs, affect, and/or experiential processes that need to be targeted to promote change and (2) information processing theories that examine the psychological processes that influence exposure, attention, encoding, and acceptance of messages.⁴⁷ Work on message-effects theories adds to the understanding of the impact of mass mediated messages on health outcomes by addressing more explicitly executional elements of a message. Message-effects theories explain which features of the messages are likely to lead to certain health outcomes, and in combination with information processing and behavior change theories, connect media messages with behavioral outcomes.⁴⁷ Message-effects theories provide a way to understand how mass media messages could break through the clutter of the information environment to reach and influence the target audience.⁴⁸

Researchers have identified numerous message features and executional approaches that may be important in advertising and persuasive communications: emotional appeals,⁴⁹ tailoring,⁵⁰ narratives,⁵¹ frames,⁵² and exemplars,⁵³ to name just a few. Like dual process models,³³ these characteristics of messages are postulated to work through the motivation and ability of the intended audience; affect their exposure, attention, and recall; and finally, determine if the audience member has accepted the message or not. As Viswanath and Emmons⁴⁸ point out, these individual-level cognitive and

affective factors that mediate message effects with behavior change are also influenced by social determinants such as culture, class, race, and ethnicity.

Media Messages and Neural Marketing

An emerging practice of using brain imaging through functional magnetic resonance imaging or positron emission tomography scanning to understand people's responses to external stimuli such as advertising messages has begun to attract the attention of advertisers and marketers, bioethicists, and consumer advocates. This practice, sometimes called *neural marketing*, draws from the latest developments in cognitive neuroscience⁵⁴ and the growing availability of neural imaging facilities. Neural marketing claims that a person's response to favorite commercial brands or images and responses to stimuli such as advertising messages can be mapped through brain imaging.⁵⁵

Advertisers and marketers are reported to have spent an estimated \$6.8 billion in 2002 on such market research tools as focus groups and surveys to understand audience perceptions of and reactions to product promotions.⁵⁵ Brain imaging technology offers yet another tool, with a scientific imprimatur, to understand how audiences react to marketing communications. Despite debate over its utility in communications practice, proponents of this approach argue that imaging of neural activity in the brain reveals unconscious preferences or underlying predilections of the audience when exposed to stimuli.⁵⁶

For example, when subjects in an experiment viewed their favorite brands, the parts of the brain associated with rewards were activated compared with portions of the brain that deal with reasoning.⁵⁷ In other words, seeing favorite brands may reduce more-conscious

reasoning, a possible effect of exposure to years of advertising. Schaefer and Rotte⁵⁸ speculate that such unconscious associations could potentially influence behavior by biasing product choice based on brands.

The reliance on neurocognitive science is a response, in part, to the dual process theories discussed earlier. For example, research has shown that attitude change as a result of messages that engender central or systematic processing is effective when consumers' attitudes are strong and enduring, relative to messages that rely on more superficial or peripheral cues.^{32,33} Work is now under way to understand if these different routes of persuasion could lead to neural activities in different parts of the brain. In addition to understanding persuasion to promote product use, work in neurocognitive science may also be helpful in understanding how different messages and images could lead to more systematic processing by observing neural activities in the brain. The field of neural marketing is just beginning to attract attention by scholars and practitioners alike and bears watching.

Mass Media and Addiction

While the literature suggests that media have a strong role to play in tobacco prevention, the role of media in cessation is also critical (chapters 11 and 12). Highly arousing media messages could result in central processing and lead to quitting smoking as Biener and colleagues report in their study.⁵⁹ More research is needed to determine how the impact of media on tobacco prevention and cessation may vary among persons at different levels of tobacco dependence.

Mass Media Messages and Interpersonal Communication

Most media-effects theories focus on psychological or intra-individual factors associated with message or campaign

effectiveness. In contrast, diffusion of innovations theory⁶⁰ has also incorporated interpersonal and sociological factors such as cultural compatibility, interpersonal persuasion, and social networks. Few researchers have attempted to combine studies of media influence with studies of interpersonal influence on behavior. The lack of research on this topic stems from a long-standing divide in the field of communications between interpersonal communication scholars, typically located in departments of speech communication, and those interested in media effects, who are typically trained in many other disciplines (e.g., psychology, sociology, political science) but housed in departments of communications and/or journalism.^{61,62} Yet, mass media and campaign influences do not happen in a vacuum; they are filtered by peer networks, peer groups, and cultural attitudes.

The one model developed from communication studies that combined media and peer influence is the two-step flow hypothesis. This hypothesis of communication effects proposes that the media influence opinion leaders, and these leaders in turn influence others in their community or social networks.^{63,64} To be effective, the media need influence only leaders, who are expected to spread the media's messages to other members of the community. Research on the two-step flow hypothesis has been scant in the past few decades. This is partly because few scholars study both mass and interpersonal sources of influence on behavior and partly because sophisticated tools for the study of social network analysis have been slow in developing. There is some evidence to support the two-step flow model,⁶⁵ and researchers have proposed variants and extensions that broaden its theoretical contribution.⁶⁶

While this review of individual-level processes is necessarily brief and cannot

capture all of the numerous theories of health cognition, affect, and behavior, it shows the range of psychological processes that have been studied to understand the effects of mass media on an individual's health choices. They also provide an idea on how to understand the effects of media on tobacco control and tobacco promotion. The next section discusses the structure of communication organizations and how organizational processes and the occupational practices of professional communicators influence both the production of media products and the effects of media on different target audiences.

Organization-Level Analyses and Tobacco-Related Communications

Ettema and Whitney⁶⁷ argue for an institutional conception of mass media in contrast to earlier approaches that focused on direct transfer of messages between the sender and the receiver. In this conception, the media, including the people who work within them, are a part of the larger industrial and cultural systems wherein audiences are one element of many agencies, groups, companies, and professionals who interact with each other.

For example, a market research agency may collect data on the readership of a local newspaper, including the consumer products that readers use. Tobacco products could be an example: data may be gathered on use patterns or the potential for tobacco use among newspaper readers, and those data may, in turn, be shared with advertisers (tobacco companies) and advertising agencies for the tobacco companies. Agencies may then construct and disseminate messages promoting tobacco use targeted at readers of the newspaper.

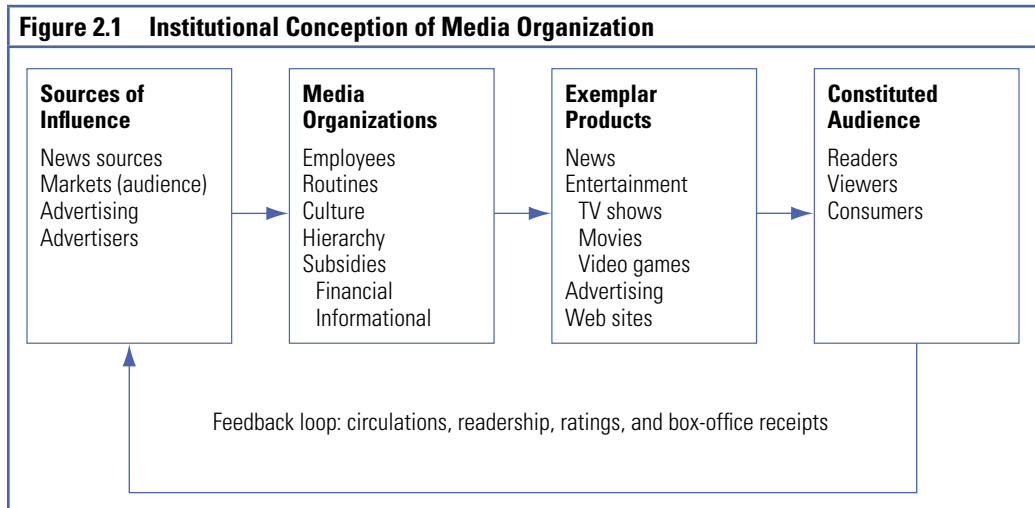
In this conception, the clients (advertisers), the advertising agency, and the media

“constitute” the audience in that they have economic or some other meaning to the industry, a process that Ettema and Whitney⁶⁷ term *audience-making*. In this process, audience tastes, interests, user styles, and preferences are tracked, measured, packaged, and used to offer services and products. In short, the media production process occurs within the context of complex organizations set in larger social, cultural, and economic milieus. The advantage of such a conception of media organizations is that the focus goes beyond the exchange of messages between the sender and the receiver to a view of components of a broader ecology of media: producers, advertisers, agencies, and sources of news, among others (figure 2.1). Such a conception may also influence how an audience is viewed.⁶⁷ The tobacco companies may visualize the audience for its advertising and promotions as “consumers,” whereas tobacco control advocates may see the audience in this case as “victims.” While the audience may try to influence the medium through subscription or viewership, there is, in general, asymmetry in power between the medium and audience, given the complex media ecology. More specifically, an action such as the cancellation of a subscription by an individual audience

member is unlikely to have an influence on a medium that is in complex relationship with other media organizations such as public relations and advertising agencies.

The structure and organization of the media industry, therefore, are critical to understanding the functions of mass media and their products. The products that emanate from mass media—news, advertising, and entertainment—are very much influenced by how the media industry is structured, the competing sources of influence, and the nature of subsidy that sustains media organizations. Mass media institutions are bureaucracies in which organizational functions, hierarchy, roles, and culture are well defined (figure 2.1).

Given this description, even though there are differences among media industries on how message and media production are organized, there are several commonalities that characterize the contemporary media industry. These may be discussed along the following lines: (1) specialization of structure, functions, and content; (2) a methodical approach to occupational practices; (3) a demand for information and a reliance on information subsidies; and (4) reliance on social science.



Specialization of Structure, Function, and Content

As proposed earlier, media organizations are typical of many complex organizations. Even though the nature of a product—advertisement, news story, movie, television show, or music—may involve creativity and symbol manipulation, media institutions are structured and organized to generate their products efficiently, predictably, and routinely. The degree of specialization depends on the size of the organization, but there are similarities in organizational structures of the media.

Newspapers, for example, are organized along editorial and business lines with separation of functions and reporting authority. The news side, for example, is usually protected from the advertising side to foster a sense of independence and objectivity, though there are always tensions between the two.^{68–70}

Television separates its entertainment, news, and business functions. Strategic communications agencies such as public relations and advertising have departments that oversee client services, media planning, and message development.

This separation of functions and structure does not mean that there are not occasional breaches or, in some cases, greater interaction among different departments. The degree of separation varies by medium, with the editorial side of a news medium enjoying greater autonomy compared with departments in a typical advertising or public relations agency.

Systematic Approach to Occupational Practices

The media production process is systematic and organized even though it may appear random to an untrained eye.

The occupational practices of professional communicators are structured to generate the product efficiently and expeditiously.

Journalism, for example, is divided along two broad lines: editorial and reporting. The editorial side usually oversees the selection, presentation, and placement of news stories. The editorial side may also present different positions on a subject to reflect broader opinion among significant publics. Thus, the editorial/opinion side of the newspaper may present contrasting positions on regulating secondhand smoke in public places and may even take a formal position on supporting or opposing such regulations.

Reporters follow a well-designed set of informal rules, occupational practices, and news values in selecting and reporting stories. For example, to structure the world to make news gathering efficient, media organizations often organize news gathering into “beats.”^{71,72} Beats may be organized along geopolitical lines such as the activities of various governmental bodies; along topics or subjects such as business, health, entertainment, or the environment; or along a combination of both geopolitical and topical lines such as Wall Street. Reporters and editors also follow a set of well-defined news values⁷³ in selecting, developing, and writing stories. News sources—human contacts such as legislators, policymakers, spokespersons, public relations personnel, and activists, among others—often influence reporters and editors in this enterprise.

Tobacco companies and tobacco control advocates, respectively, have been able to use this knowledge to aggressively promote tobacco use or frame news to communicate the risk associated with tobacco use (chapters 4 and 9).

A similar systematic approach is also practiced in other media industries, such as public relations and advertising, as has

been well investigated in the case of tobacco (see chapters 4 and 6).

A Demand for Information and Reliance on Information Subsidies

It is trite but true that professional communicators are in the business of information. They gather, process, and disseminate information to different audiences. Public relations practitioners and spokespeople for agencies gather information from their “clients” either within their organization or outside the organization, massage it to make it suitable for presentation in the form of either a news release or a story idea, and pitch it to reporters or other stakeholders (see detailed discussion of the tobacco industry’s public relations efforts in chapter 6). Advertisers draw extensively on market and consumer research to produce messages. Journalists rely on their sources, such as press spokespersons, the person on the street, or anonymous sources, or on nonhuman sources such as press releases,⁷³ databases, or Web sites to develop their stories. Such mutual reliance spawns a symbiotic relationship, particularly between the press and public relations, despite tensions between the two. The “information subsidy” provided by the sources can influence whether a story will be covered and, potentially, how it will be covered.^{71,74} While reporters may rely on sources, particularly for story ideas and in developing stories, they also have some autonomy in selecting the sources and framing the stories.^{75,76}

Social Science and Professional Communications

The evolution of the social sciences, particularly in the area of measurement, has had considerable influence on the development of professional communications.⁸ Sophisticated audience measurement techniques, such as Nielsen’s

people’s meters, allow for segmentation of the audience and specialization of media content that can be more effectively used by advertisers to sell their wares and by programmers to offer programs.⁷⁷ Market research has enabled advertisers to identify, assess, target, and even create markets for various products. Audience and media-effects research has enabled strategic communicators to promote causes, ideas, and services for both public good and ill. Reporters rely on such strategies as “objectivity” to distance themselves, and they communicate that distance to the audience. While objectivity is not a strict social science technique, the idea of presenting different sides to verify a story uses social science principles to achieve objectivity. Public opinion data, for example, are routinely used in news stories.

Organization-Level Analyses: Summary

Although the early history of media studies, particularly the sociology of journalism, focused on studying communications with a narrow emphasis on senders and receivers, some later research took a more institutional approach in examining the media industry within a larger political, economic, and cultural context.⁶⁷ Such an institutional approach does not ignore or deny lessons learned from earlier approaches but broadens our understanding of how media work. This approach provides a useful framework for

- Examining not only the contemporary structure of media industries but also tracking their future trajectory as media industries evolve.
- Providing a wider lens within which to examine media effects without limiting them to one genre or medium. For example, when tobacco advertisements were banned from U.S. television and radio in 1971, the tobacco industry successfully shifted its tactics to billboards, product placements,

and sponsorship. Billboards seen on sports telecasts, for example, allowed the industry to overcome the ban and still display protobacco messages and images in broadcast media.

- Exhibiting more clearly the asymmetry in power between the audience and the media industry.
- Identifying clearly the nexus of interdependence as well as conflict among different segments of the industry, providing a more dynamic view of that relationship.
- Providing a means to follow the trajectory of the evolving media industry and business models that shape the creation of demand and markets for products and behaviors.

Societal-Level Theories in Tobacco-Related Communications

Although the individual has been the most visible and dominant unit of analysis in media studies, social and societal-level concerns over the role of the media have been a subject of abiding interest among scholars. As Hardt and Carey⁷⁸ write, the sociological conceptions of mass communications emerged out of scholars' need to explain emerging social changes and growing inequalities. Social theorists including Marx, Weber, Robert Park, and others, Hardt and Carey elaborate, focused attention on the "social production of consciousness"—that is, communications or agencies that produced the consciousness. Mass communication was the essence of modern social organization and integration, Hardt and Carey opine, as the circulation and exchange of ideas were made possible by modern means of communications—books, pamphlets, and newspapers. Subsequently, the "Chicago school" of sociology, represented primarily in the work of Robert Park and his students, examined

the role of community and immigrant presses in social and community integration.

This early commitment to social theories of communications became less visible because a concern stemming from resistance to World War II propaganda shifted attention to the study of attitude formation and change. This research was pursued more vigorously at Yale University after World War II.

Work at the societal level of analysis, however, was continued by such scholars as Janowitz.⁷⁹ Two developments in the 1960s and 1970s are germane to tracking the evolution of societal-level analysis and to tobacco control: (1) the evolution of the structural model with its focus on the community press, social conflict, and social change and (2) the cognitive revolution.

Social Conflict, Social Change, and the Media

The 1970s and 1980s saw the emergence of a vigorous body of work that examined (1) the role of the media as agents of social control^{60,80–82} and agents of social change⁸³ and (2) the media's role in social movements and social conflicts.^{84,85} This body of work offered considerable insight into how different institutions in the larger society interact with the mass media industry, leading to certain kinds of media content, and hence, media effects.

While individual programs of research and scholars working at this level may differ in details, in general a structural approach proposes the following:⁸¹

- Mass media, more often than not, are responsive to the more powerful forces in the system; that is, in general, the interests of the elite may take precedence over the interests of the less powerful. In fact, media and other powerful groups are interdependent. For example, news media may rely on advertising as a

source of revenue and are organized to meet those interests. The division of a newspaper into sections such as metro, sports, and business is a way to provide advertisers with segmented audience subgroups who have common interests, while maintaining and satisfying the interests of the readers.

- Media messages reinforce dominant values and support existing social arrangements, that is, social control. The social norm regarding smoking is a reflection of this principle in practice. Smoking has evolved from a widely accepted and even highly encouraged phenomenon to the norm that it is unacceptable to smoke given its deleterious consequences for smokers and those exposed to secondhand smoke.
- Though they are highly responsive to the common power arrangements, the media are neither “lapdogs” nor completely independent “attack dogs.” They play more of a “guard dog” function wherein they may protect the system though punish individual actors who abuse or threaten it.⁸⁶
- Media may also advance the interests of social movements such as women’s rights or civil rights,⁸² challenging the status quo under the right conditions. The success of the tobacco control movement that led to its evolution from margins to mainstream is a good exemplar of how media can amplify the voices of those who challenge the status quo under the right conditions,⁸⁷ often using a “media advocacy” approach.⁸⁸

The tobacco control movement has used media advocacy quite effectively in a number of situations. One effect was seen when the impact of the American Stop Smoking Intervention Study (ASSIST) project was assessed. Major goals of ASSIST were to use media advocacy techniques to increase media coverage of tobacco control activities

and encourage comprehensive tobacco control as well as increase public discussion and debate regarding tobacco control. Program affiliates interacted with newspaper editorial boards to encourage pro-health messages; they developed relationships with community members and key reporters, used paid advertising and unpaid public service announcements, and relied on their knowledge of media outlets to increase the presence of pro-health messages. When researchers assessed the impact of the ASSIST program, they found that compared with states without the program, the states with the ASSIST program had significantly more local newspaper articles that supported tobacco control as well as pro-health letters to the editor.⁸⁹

An effective and inexpensive media advocacy strategy used in Australia was to issue media releases about newsworthy research regarding debates on tobacco control so that newspapers would increase tobacco control coverage. In one metropolitan area, six media releases were linked to 58 of 283 (20.5%) news reports on tobacco control during the study period.⁹⁰

Media Effects at the Societal Level

Some have argued that the 1960s also saw a shift in communications research, from focusing on media effects on attitude change or reinforcement to a focus on cognitions: knowledge, public opinion, and social reality. In communications research, this has been called the cognitive revolution. Several major hypotheses predicting media effects were formalized during this era, including the knowledge-gap hypothesis,⁹¹ the agenda-setting hypothesis,⁹² the spiral of silence,⁹³ and the cultivation hypothesis.⁹⁴

The knowledge-gap hypothesis proposes that the flow of information on a topic will be taken advantage of more quickly by people from higher socioeconomic status

(SES) compared with people from lower SES, thereby widening the knowledge gaps between them.^{91,95} For example, despite four decades of sustained attention in media, health, and policy circles, those with higher education and income were much more likely to know that tobacco use could lead to lung cancer compared to those with less education and lower income.⁹⁶ The agenda-setting hypothesis posits that the news media, through selective coverage and amplification of certain topics, govern the importance the public assigns to those topics as opposed to issues that do not receive any, or minimal, coverage. In fact, some have suggested that media effects exceed setting priorities to include shaping audience perceptions through “framing,”^{75,97–99} thereby communicating the impression that one view is more acceptable than others. Over time, this may lead to silencing alternative viewpoints—a spiral of silence—even though a majority may share them.^{93,100}

An example of agenda setting can be found in terms of framing the debate over tobacco. A content analysis of newspaper coverage during the U.S. tobacco settlement deliberations in 1997–98 demonstrated that tobacco was portrayed as an issue of adolescent smoking rather than as a deadly behavior and public health hazard. Similarly, revenue generation and advertising restrictions, rather than the health consequences of smoking, were major themes of discussion. The key conclusion from the study was that public health professionals must take better advantage of these opportunities to frame the discussion in a manner favorable to public health.¹⁰¹ Similarly, an analysis of U.S. newspaper articles that focused on adolescents suggests that the articles framed the concept that tobacco issues should be resolved via individual-level education as opposed to structural or policy changes.¹⁰²

The cultivation hypothesis suggests that persistent and sustained exposure to media

content cultivates a stilted worldview that is congruent with the media content to which the audience is exposed.^{94,103} Exposure to smoking in movies and other media, for example, can lead viewers to a perception that smoking is common and normative even if this is not so in the real world.¹⁰⁴ In fact, the role of entertainment media in shaping popular conceptions of social mores and lifestyles—including knowledge, beliefs, and behaviors in health—has been a subject of intense interest and debate throughout the history of communications research as discussed earlier in this chapter. The influence of entertainment media, particularly movies, on tobacco use is well documented (see chapter 10). The power of the narratives stems from a process in which the viewer becomes immersed in, or “transported” by, the story and, consequently, is less likely to argue against the message. The narratives provide role models for behaviors, create attitudes and beliefs consistent with the message, and generate empathy.⁵¹ Not surprisingly, movies have been found to have a powerful influence on adolescent smoking (see chapter 10).

Evidence (and the conditions under which the hypotheses hold true) varies, but macrolevel theories of media effects have been successful in spawning systematic programs of research and shifting attention to effects of media on large populations, social classes, social organizations, social movements, and institutions.

Communication Inequalities

U.S. smoking rates have steadily declined since the publication of Surgeon General Luther Terry’s 1964 report on the harmful effects of smoking, aided by scientists, grass-roots social movements advocating policies to stem tobacco use, and the reactions and response of policymakers. Yet the decline in smoking has not been uniform across social groups. Research has extensively documented that smoking is

higher among those with less education, low income, or blue-collar jobs; among those without jobs; and among people of specific ethnic and racial backgrounds.¹⁰⁵ Morbidity and mortality caused by smoking also disproportionately affect lower SES groups. These disparities in smoking prevalence and tobacco-attributable disease are similar to the disproportionate burden faced by lower SES and certain ethnic and racial minority groups for chronic diseases such as cancer, cardiovascular disease, diabetes, high blood pressure, and asthma.

Reasons for these disparities are many: lack of access to health services or a usual source of care, lack of insurance, living in poor neighborhoods with limited amenities and an unhealthy environment, and racism and racist social policies, among others.^{106–109}

In addition, studies have suggested that inequalities in communications contribute to health disparities. *Communications inequality* may be defined as differences among social classes in the generation, manipulation, and distribution of information at the group level and differences in access to and ability to take advantage of information at the individual level.^{1,96}

Disparities in tobacco-use prevalence and disease outcomes can partially be explained by communication inequalities. Tobacco companies have been powerful social actors with resources and institutional structures to generate and distribute information favorable to their point of view, as is documented in several chapters in this monograph. The sophisticated public relations and strategic communication operations, either within the company or through outside agencies, have facilitated the dissemination of information counter to tobacco control. Scientists, think tanks, and editorialists sponsored by the tobacco industry have worked strenuously to cast doubts on the links between smoking and disease and on the health effects of

secondhand smoke and have argued that tobacco control poses a threat to the personal liberty of smokers. Analysis of internal tobacco company documents demonstrates the extent to which tobacco companies were able to influence journalists' reports regarding scientific findings on tobacco and undermine the credibility of the Environmental Protection Agency.^{110,111} The federal government, supported by tobacco control organizations and scientists, has attempted (with some success) to counter the tobacco industry's efforts.

Inequalities in communications have also been demonstrated at the individual level. Studies have documented knowledge gaps between social groups on the harmful effects of smoking^{96,112} and the effects of secondhand smoke.¹¹³ Knowledge gaps have also been found in framing tobacco control policies as curbs on individual liberties. Persistent advocacy in the media through news and advertising casting doubts on the evidence of injurious effects of smoking may also deter information processing among those from lower SES groups.

Attempts to explain disparities in outcomes caused by tobacco have proceeded slowly. The contribution of communication inequalities to these disparities is ripe for further research.

Societal-Level Theories: Summary

The macrolevel approach in media studies has provided insights into how the media act and interact with other major social institutions, thus shifting the attention of scholars and policymakers to the population level of the impact of mass media. This shift from the individual to society has laid bare the asymmetric power structure between the audience and the media, the difficulties individuals may face in bringing about change in media practices, and the conditions and strategies with which the media can promote social change against established

interests. With tobacco being consumed all over the world, this approach is particularly useful to tobacco control proponents, given the global scale, reach, and organization of the tobacco industry and the global burden resulting from tobacco use.

Summary

The study of media in tobacco use can be seen not only as a multilevel process but as an evolutionary one as well, which in fact parallels the path of tobacco control itself over time. In the early days surrounding the release of the 1964 Surgeon General's report on smoking and health, tobacco control was often seen as an issue of educating individuals, leading to media interventions such as antismoking television advertising under the Federal Communications Commission's Fairness Doctrine in the 1960s.^{114,115} Over time, both tobacco control and its concomitant media efforts evolved to a much broader social context of community-level interventions such as the Community Intervention Trial for Smoking Cessation. Eventually, these efforts extended to broader policy interventions, such as today's clean indoor air laws, tobacco taxes, and industry agreements such as the 1998 Master Settlement Agreement, and included

global efforts such as the World Health Organization's Framework Convention on Tobacco Control.^{116–118} The evolution across individual, organizational, and societal levels of media research reflects how we have come to view not only tobacco control efforts but also larger issues of public health and social change.

Today, we realize that the media, tobacco use, and tobacco control efforts all interact at multiple levels of a system, each of which may affect stakeholders ranging from individuals to society itself. In the process, fields ranging from public health to cognitive psychology have become essential parts in a growing transdisciplinary science of smoking and health, supported by research frameworks such as the ones outlined here. We have already seen the fruits of many of these efforts in the form of reducing per capita cigarette consumption rates by approximately one-half in the United States since their peak in the 1960s¹¹⁹ along with more fundamental changes in social attitudes toward tobacco use. These changes give hope that today's media, whose history is intertwined with the widespread emergence of tobacco use over the past century, can continue to serve as a critical tool in addressing what remains as the nation's leading cause of preventable death.

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Tobacco Marketing

As with any consumer product in modern history, mass media have proven to be highly effective tools for marketing tobacco products, while global tobacco control efforts increasingly seek to restrict such marketing channels. The landscape of tobacco promotion has changed substantially, with increasing legislative and policy constraints on traditional media promotion for tobacco and a concomitant shift in marketing toward areas ranging from point-of-sale displays to modern viral marketing techniques.

This part examines the advertising and promotion of tobacco through the media and the legislative and policy issues surrounding limits on such marketing. Basic principles of market segmentation and the creation of brand identities for tobacco products are explored, along with their evolution in an increasingly restrictive direct marketing environment. As new communications channels emerge, ranging from the Internet to stealth marketing, trends in promotional expenditures for tobacco change. These developments are discussed along with indirect promotional activities such as corporate image advertising.

A subsequent chapter examines current research findings linking tobacco promotion to actual smoking behavior, focusing on the relationship between advertising exposure and adolescent smoking initiation, and the relationship between industry expenditures for tobacco advertising and promotions and tobacco use. This part closes with a discussion of the regulatory and constitutional issues involved in limiting tobacco marketing.

3

Key Principles of Tobacco Promotion and Rationales for Regulation

The promotion of tobacco products represents an important part of tobacco industry efforts to create demand for its products. Tobacco advertising campaigns are often held up as leading examples of product marketing. This chapter explores the key principles of tobacco advertising and promotion and reviews important developments in regulating this promotion. Specific areas discussed here include

- *Use of market segmentation by tobacco firms to target consumers by demographics, geographic region, behavioral factors, and the psychographics of specific population groups*
- *Tools and strategies used by tobacco firms in communicating a consistent brand image, including brand logos, taglines, pictorial elements, and color, as well as the development and repetition of a consistent brand message*
- *Arguments for the regulation of tobacco promotion, including the health consequences of tobacco use, the use of deceptive or misleading promotional tactics, the failure of tobacco industry efforts to self-regulate, and the ineffectiveness of partial restrictions on tobacco advertising and promotion*

Introduction

This chapter examines the promotion of tobacco products from two perspectives: its economic importance to the tobacco industry and the growing argument for its regulation as part of global tobacco control efforts. First, the chapter gives an overview of tobacco company efforts to build strong brands with an identity, a market position, and an execution aimed consistently over time at well-defined target audiences. The second part of the chapter describes the fundamental determinants that led the World Health Organization (WHO) to make a case for a comprehensive ban on all forms of tobacco promotion as part of the Framework Convention on Tobacco Control (FCTC).

Tobacco advertising and promotion efforts have been remarkably effective in the eyes of both consumers and the advertising industry, as evidenced by the consistent high rankings of cigarette advertising campaigns among lists of leading twentieth-century advertising campaigns reported by advertising and marketing trade publications. For *Advertising Age*, the Marlboro Man was the top advertising icon of the century, reflecting that this image had the most powerful resonance in the marketplace with respect to effectiveness, longevity, recognition, and cultural impact. Furthermore, Marlboro was ranked as the third-best advertising campaign of the century, surpassed only by Volkswagen and Coca-Cola. Advertising campaigns for Benson & Hedges, Winston, Camel, and Lucky Strike were also on the *Advertising Age* top 100 list.¹ During 2003, *Business Week* regarded Marlboro as the world's ninth most valuable global brand.^{2,3} These honors speak to the pervasiveness of tobacco advertising as well as the strength of cigarette brand imagery. The value of these tobacco trademarks has been quite durable, persisting despite growing awareness

of the health consequences of cigarette use, an increasingly stringent regulatory environment, and ongoing litigation against the industry.

In response to the global health impact of these promotional efforts, combined with the failure of industry self-regulation and the ineffectiveness of partial bans on marketing—discussed in detail later in this chapter in the section, “A Rationale for Regulating Tobacco Promotion”—the WHO FCTC has called for countries to undertake a comprehensive ban of all tobacco promotion directed toward consumers (see chapter 8). As a global public health issue that is now being addressed through international law and treaty, important developments and illustrative examples from outside the United States are reviewed to lay out the broader context in which tobacco marketing—and efforts to restrict this marketing—are occurring. However, the focus of this chapter, like that of the monograph as a whole, is on the promotion of tobacco products in the United States, within the context of its corresponding legal environment.

Key Principles of Tobacco Advertising and Promotion

The development of a *marketing strategy* involves specifying a target market and establishing a related marketing mix, which is commonly broken down into four classes known as the 4Ps—product, price, place (i.e., distribution), and promotion. The fourth P, *promotion*, pertains to the seller communicating information and lifestyle dimensions to a potential buyer, in an attempt to influence the buyer's attitudes and behavior.

The primary purposes of promotion are to inform, persuade, and remind. *Informing* is

considered particularly essential for newly developed or “introduced” products, and related communications efforts are meant to tell potential customers something about the product. Promotions with an aim of *persuading* often focus on the reasons that one brand is better than competing brands. The promoter seeks to develop a favorable set of brand beliefs and attitudes among customers so that they will buy and keep buying the product⁴ (see chapter 2 for a discussion of persuasion-based processes and expectancy-value models of attitude change). In addition to focusing on brand beliefs and attitudes, persuasion-based promotions also commonly link products with desirable images (such as lifestyle imagery) and identities (such as slogans, jingles, or brand symbols). The aim is for consumers to associate the brand or product use with either positive emotions or the reduction of negative emotions. Persuasion strategies that focus on desirable image and identity characteristics are particularly important for product categories such as cigarettes, because differences among various brands are often very subtle or intangible. Finally, promotions with the goal of *reminding* are typically directed toward buyers who already have positive, well-established attitudes about a product, including its price, features, availability, or image.⁴

Defining the Target Market: Market Segmentation

Promotion planning starts with a clear target market. The audience may consist of potential buyers, current users, those who make the buying decision, or those who influence it. *Segmentation* is a commonly used approach for defining the target market, in which specific audiences are identified for a product by dividing a mass market into subsets on the basis of variables such as demographics, geography, preference for product benefits, consumption patterns, and psychographics.

Few products are promoted in an undifferentiated manner, with the total potential market treated as a whole. Rather, promotions tend to be directed toward well-defined consumer groups according to dimensions such as age, gender, ethnicity, income, occupation, religion, family life cycle, place of residence, lifestyles, interests, and values. Chapter 5 discusses several population groups defined by these dimensions that have been targeted by tobacco companies.

The message in a segmented marketing campaign typically has reasonably broad appeal (i.e., referring to popular culture) yet at the same time will be most salient and resonant to a specific cluster or segment. The target audience will heavily affect communication decisions regarding *what* will be said, *how* it will be said, *when* it will be said, *where* it will be said, and *who* will say it.⁴ The objective is to meet the needs typified by a specific group of consumers in an efficient manner, whereby the product’s characteristics and promoted attributes can clearly match what is desired by the user(s).^{5,6}

Demographic Segmentation

Positioning is defined as the place a product, brand, or group of products occupies in consumers’ minds (with respect to brand identity and value) relative to competing offerings.^{4,7} The positioning of various cigarette brands to appeal to a specific group of consumers, on the basis of demographics, is easily illustrated with concrete examples from the advertising world.

Gender

Tobacco marketing aimed at women dates back to the 1920s, when American Tobacco urged women to “Reach for a Lucky instead of a sweet,” playing directly to concerns about body weight^{8,9} (chapter 5). In more recent times, Virginia Slims and Eve exemplify U.S. cigarette brands that

are promoted as “feminine” and explicitly targeted toward women (chapter 5 also includes discussion about cigarette brands targeted toward men). During the late 1960s, initial advertising campaigns for Virginia Slims included the claims, “Now there’s even a cigarette for women only,” and, “This is the slim cigarette made just for women.... Tailored slimmer than the fat cigarettes men smoke.” John Landry, vice president of tobacco products marketing at Philip Morris USA, indicated in 1969 that early ideas of a thin-circumference cigarette did not gain a positive response among market research respondents, but “it worked beautifully when we added the idea of female orientation.”^{10(p.76)} The Virginia Slims tagline, “You’ve come a long way, baby,” implied that women had become liberated.¹¹ In an analysis of competition in female-oriented cigarette advertising during the early 1970s that included Virginia Slims, the Lorillard Tobacco Company stated, “The campaign line ‘You’ve come a long way, baby’ hit the cigarette market in 1968, just as women’s lib was entering the national consciousness. The cigarette is positioned specifically for today’s liberated woman with a unique, swinging image.”^{12(Bates no. 03375510)} Reflecting the specified target audience, Virginia Slims’ advertising was circulated in magazines such as *Cosmopolitan*, *New Woman*,

Vanity Fair, *Harper’s Bazaar*, *Woman’s Day*, *Ladies’ Home Journal*, and *Vogue*.

Liggett & Myers’s Eve serves as a second example of a cigarette brand that is explicitly targeted to women. Eve, featuring a feminine floral design on the filter, was introduced to the U.S. marketplace in 1971.¹³ Early advertising for Eve included the following advertising copy: “The lady has taste. Farewell to the ugly cigarette. Smoke pretty. Eve.” Wernick, who provides a semiotic analysis of advertising for Eve cigarettes, states, “Eves are shown as the embodiment of a certain—mid-1970s, socially independent but safely fashionable and ideologically compromising—conception of femininity.”^{14(p.29)} Other U.S. cigarette brands with ultrafeminine positioning include Lorillard’s *Satin* and Brown & Williamson’s *Capri* and *Misty*. Brands explicitly targeted at women account for roughly 5%–10% of the U.S. cigarette market.¹³ In contrast, *Marlboro* and *Winston* exemplify brands with rugged and masculine brand images, yet these brands have proven popular among both men and women.

Race/Ethnicity

Roughly three-fourths of African-American smokers consume mentholated cigarettes, with *Newport*, *Kool*, and *Salem* representing the most popular brands.¹⁵ Mentholated

Gender and Cigarette Branding

Features of tobacco products and their promoted images largely determine the masculine-feminine dichotomy of U.S. cigarette brands. For example,

- Brands offering relatively high tar content and strong flavors are promoted as “masculine,” often corresponding with appeals that have an action, excitement, and adventure orientation.
- Conversely, low tar, mild taste, longer length, and slimness of cigarettes are considered “feminine” product characteristics, which often carry image platforms related to relaxation, stress relief, self-indulgence, and women’s independence.

Gender positioning takes place within a broader context of market segmentation and targeting, such as the tendency to promote mentholated cigarette brands to African-American audiences. Brands with cross-gender positioning often use promotional appeals designed to attract both sexes, such as messages about upward status and being upscale.

brands are commonly depicted in cigarette advertising that is targeted toward African Americans. As documented by Balbach and colleagues,¹⁶ internal tobacco industry documents show that advertising for menthol brands was designed around lifestyle appeals relating to “fantasy and escapism,” “expensive objects,” and “nightlife, entertainment, and music” themes. Appeals designed around concepts of “youthfulness, silliness, and fun” were also aimed at African Americans, as well as messages conveying the refreshing and medicinal aspects of menthol.^{17,18} Advertising campaigns meant to reach African Americans are likely to feature models or celebrities who are African American.¹⁹ During the mid-1980s, for example, marketing research for Kool stipulated, “Generic media will contain only White models and Black media, Black models... An exception can be mixed groups.”²⁰(Bates no. 670249931) Similarly, the 1984 Kool Operational Plan stated, “One campaign should be continued for all ethnic groups with Black musicians only in Black media and White musicians only in generic media.”²⁰(Bates no. 670249938) Targeted advertising in black media would be placed in magazines such as *Ebony*, *Essence*, and *Vibe*, as well as weekly newspapers that circulate where the largest African-American populations are located (i.e., New York, Los Angeles, Chicago, Houston, and Philadelphia). Detroit, Baltimore, Washington, Memphis, Birmingham, Jackson, and New Orleans are other U.S. cities that have populations with a notably high percentage of African Americans.²¹

Age

The tobacco industry’s use of age segmentation has been well documented. Reviews of internal tobacco industry documents reveal that cigarette trademarks are successfully marketed to youth, including consumers who are classified as “starters” or “new smokers” (chapters 5 and 7). The rationale for directing promotions toward youth is that the pivotal period for smoking initiation in the United States is early

adolescence. Smokers are also known to be extremely brand loyal, so the brand choice of consumers during the early stages of their smoking “careers” becomes crucial. In the United States, less than 10% of smokers switch brands annually, with less than 8% switching companies.²²

Tobacco industry representatives have publicly denied that they market their products to youth, but internal documents indicate otherwise. Several investigators have examined U.S. tobacco industry documents that were obtained through whistleblowers and tobacco litigation and found that youth are a target of tobacco marketing activities^{23–27} (also see below and chapter 5). Researchers who examined tobacco industry documents that are accessible primarily as a result of two sets of court proceedings in Canada—the 1989 federal trial to decide the constitutionality of the Tobacco Products Control Act and the 2002 Quebec Superior Court trial to determine the constitutionality of the Tobacco Act—have reached similar conclusions.^{28–35} Furthermore, internal documents from both the British and Australian tobacco industries and their leading advertising agencies reveal that youth constitute a key group for marketing purposes.^{36,37} Below are some specific examples from the U.S. tobacco industry.

Philip Morris’s Myron Johnston explained in 1981, “It is important to know as much as possible about teenage smoking patterns and attitudes. Today’s teenager is tomorrow’s potential regular customer, and the overwhelming majority of smokers first begin to smoke while still in their teens.... The smoking patterns of teenagers are particularly important to Philip Morris.”³⁸(Bates no. 1000390808) The Philip Morris report monitored smokers as young as 12 years old. Market research for Lorillard Tobacco revealed, “The success of Newport has been fantastic during the past few years. Our profile taken locally

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shows this brand being purchased by black people (all ages), young adults (usually college age), but the base of our business is the high school student.”³⁹(Bates no. 03537131) Regarding Kool, a menthol brand directly competing with Newport, Brown & Williamson’s market research stated that the “Kool media target audience principle remains the same. Most valuable prospect is young adult male and female *new smoker* and switcher.... Promotion philosophy of trial generation and meeting competition approved”²⁰(Bates no. 670249932) (*italics added*). According to an advertising agency advising the R.J. Reynolds marketing department, “Many manufacturers have ‘studied’ the 14–20 market in hopes of uncovering the ‘secret’ of the instant popularity some brands enjoy to the almost complete exclusion of others.... Creating a ‘fad’ in this market can be a great bonanza.”⁴⁰(Bates no. 501167050)

Although it has been demonstrated that the tobacco industry has an interest in the attitudes and behaviors of preteens and

adolescents, researchers have also called attention to the importance of young adults as a target of tobacco industry marketing strategies.^{41–44} The importance of this segment reflects its relatively high prevalence of smoking—23.9% of 18- to 24-year-olds in 2003.⁴⁵ Although adolescents are the main group that initiates smoking, it is during the period of young adulthood that more established and committed cigarette use begins to take place. Cigarette advertising that is targeted at 18- to 24-year-olds often can appeal simultaneously to young adults and adolescents because many teenagers start smoking as a way to propel themselves into maturity (i.e., smoking serves as a tool for attempts to look older).³⁴ Furthermore, as advertising restrictions become increasingly stringent, licensed (age of majority) venues become a key setting for tobacco promotion.^{46–50}

Geographic Segmentation

Geographic segmentation, which involves accounting for market density,

Joe Camel—When a Cartoon Character Becomes a Brand Identity

During the late 1980s and much of the 1990s, R J. Reynolds underwent particular scrutiny for its Camel advertising campaign, in which a cartoon camel (Old Joe) was the central figure, with the theme “smooth character.” Many company documents about the origins and aims of the “Joe Camel” campaign and its effects on youth were disclosed publicly as a result of the *Mangini v. R.J. Reynolds Tobacco Company* lawsuit.^a The “Joe Camel” advertising campaign, which is discussed in further detail in chapters 5 and 7, was later the subject of a 1997 Federal Trade Commission complaint^{b,c,d} that was an important antecedent for the curbs imposed on youth-oriented advertising through the Master Settlement Agreement between the attorneys general of 46 states and the major tobacco companies.

^aCoughlin, P. J., and F. Janacek, Jr. 1998. A review of R.J. Reynolds’ internal documents produced in *Mangini vs. R.J. Reynolds Tobacco Company*, Civil Number 939359: The case that rid California and the American landscape of “Joe Camel.” http://legacy.library.ucsf.edu/mangini_report.html.

^bFederal Trade Commission. 1997. In the matter of R.J. Reynolds Tobacco Company. www.ftc.gov/os/199705/d9285cmp.pdf.

^cCohen, J. B. 2000. Playing to win: Marketing and public policy at odds over Joe Camel. *Journal of Public Policy and Marketing* 19 (2): 155–67.

^dEtzioni, A. 2004. Symposium: Do children have the same First Amendment rights as adults? On protecting children from speech. *Chicago-Kent Law Review* 79:3, 23.

regional differences within a domestic or international market, and climate, may also play a role in the development of promotional strategies for various brands. For example, during the early 1980s, market research for Philip Morris distinguished smoking trends among four U.S. regions: Northeast, North Central/Midwest, South, and West.³⁸ It was observed that teenage smoking was most pronounced in the Northeast and smoking prevalence was lowest in the West (this pattern was described by the Philip Morris researcher as consistent with data collected from 1968 through 1980). More recent marketing efforts for new “niche” cigarette brands, such as Camel’s special “exotic” blends or Moonlight Tobacco, have largely focused on urban centers. Within this strategy, there is an apparent selectivity for cosmopolitan cities. It is not clear whether such a distribution indicates a long-term strategy or whether these cities are meant to act as test markets. New cigarette products, including line extensions, are commonly test-marketed on a geographically limited basis. In 2004, Phoenix served as the test market for Brown & Williamson’s Advance cigarette brand. Advance is targeted at “health conscious” smokers with a campaign that includes the following advertising copy: “Great taste—less toxins,” “Advance the way you smoke,” and “Everyone knows quitting is the best thing. But for those who continue to smoke, now there’s Advance.”⁵¹

Ethnic targeting of Asian Americans, Hispanics, or African Americans ultimately generates media plans and distribution patterns that are regionally focused on locations where the ethnic populations are most densely situated. U.S. census data pertaining to the geographic distribution of the Asian population reveal that more than one-half (51%) reside in just three states: California, New York, and Hawaii.⁵² The Hispanic population is most concentrated in the western (44%) and southern (33%) regions of the

United States, with California and Texas representing the top two states. Notably, more than 4 million Hispanics reside in Los Angeles County, California.⁵³ When cigarette billboard advertising was still permitted, before the 1998 U.S. Master Settlement Agreement (MSA) stipulations took effect, a disproportionate number of tobacco promotions in San Francisco and Chicago were found in neighborhoods that were predominantly African American.^{54,55} When media buys increased for local markets, this was traditionally done by using billboard or newspaper advertising.

Although geographic segmentation plays a role in the development of advertising strategies and media buys, for the most part it is national brands that dominate the U.S. marketplace. These brands are sold on a national basis by using national media. Regional variations in cigarette brand success do not seem nearly as pronounced in the United States relative to other markets such as Canada and Australia. Marketing research for Imperial Tobacco Ltd., Canada’s largest tobacco manufacturer, has identified that “Quebec and the Atlantic continue to be full-flavoured markets; British Columbia and Ontario tend to be milder markets,”^{56(p.47)} indicating which line extensions are most favorably received in various regions of Canada. A review of internal tobacco industry documents reveals that the Australian cigarette market is also decidedly regionalized. Escort is a popular brand in South Australia, while Winfield has been a brand leader in Western Australia, New South Wales, and Victoria. During the mid-1980s, Sydney, the most populated city in Australia, was identified as a largely image-based market, while consumers in Melbourne, Australia’s second most populated city, were recognized as considerably more responsive to discounting. Melbourne was thus classified as a value-based market.⁵⁷

Climate—in relation to seasonal variation and geographic or regional setting—can

3. Key Principles of Promotion and Rationales for Regulation

play a role in the development of product and related promotional strategies. Camel Exotic Blends includes flavors such as Kauai Kolada and Twista Lime, which are identified as “summer” blends.^{58,59} The Kauai Kolada and Twista Lime line extensions, with hints of coconut, pineapple, and citrus, are limited-edition offerings.⁵⁸ In addition, promotions circulating during the summer months are expected to commonly depict summer settings (e.g., beaches, baseball games); those during the winter months more often portray activities such as skiing and skating.⁶⁰

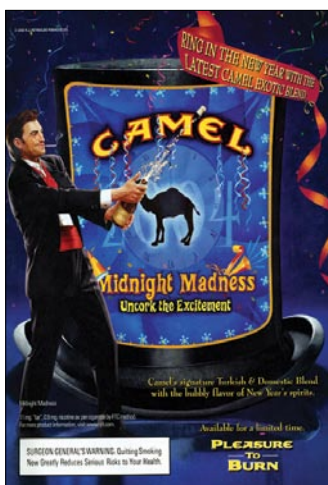
Behavioral Segmentation

Behavioral segmentation involves dividing consumers into groups according to occasions of use, usage situation, extent of use, user status, and benefits sought.⁶¹ Some cigarette promotions are designed to link cigarette brands or smoking with specific occasions such as Christmas, Halloween, or Independence Day. Philip Morris’s market research reveals that during the 1970s and 1980s, the Marlboro Resort Program included promotional activities during the Christmas holiday period at vacation settings such as Daytona Beach and Fort Lauderdale, Florida.²⁶ In the early 1990s, Kool ads featuring the

“Willy the Penguin” cartoon character had themes associated with Thanksgiving and Christmas.⁶² Camel’s more recent “Pleasure to Burn” advertising campaign featured occasion-themed pictorials.

With respect to occasions of use as a segmentation variable, marketers assess whether consumers are likely to use a product primarily on special occasions or more regularly. Product consumption patterns often fluctuate from month to month (described in management and marketing as “the rhythm of the business”), and cigarettes are no exception. In the United States, cigarette sales peak during the summer months, June through August.⁶³ Moreover, this summer period represents the time when youth smoking onset is most likely to happen.^{64,65} A higher instance of cigarette consumption during the summer months may reflect that time is less structured for adults and youth alike. The warmer weather during the summer months may also prompt smokers to more frequently go outside to smoke in locales where indoor smoking laws have been enacted. The seasonal smoking rates also correspond with alcohol consumption patterns.

The situation in which products are used can be considered as a market segmentation variable.⁶⁶ Tobacco firms recognize which products are often used concurrently with cigarettes. Smoking is frequently done in conjunction with the consumption of alcohol or coffee, and cigarette promotions may include pictorials that encourage the co-use of these products. The statement “Complements Your Cocktail” is found on the packaging of Camel Izmir Stinger, which is one of the Exotic Blends line extensions. Reflecting the synergy between smoking and drinking alcohol, as well as a similar target consumer, several examples of industry efforts co-promote cigarette brands with particular liquor and beer brands whose cultural identity



Camel’s “Pleasure to Burn” occasion-themed advertisement

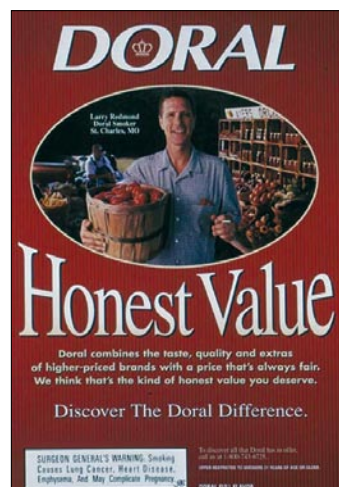
and status are complementary.^{34,67} Kool and Jim Beam, for example, were both sponsors of a Champ Car auto racing team, whereas in 2003, Molson Canadian “bubbas” (i.e., minikegs) depicted the Player’s Champ Car racing uniforms. Player’s Light and Molson Canadian are leading brands in Canada in cigarettes and beer product categories, respectively.

In terms of the usage situation, from a marketer’s perspective, products such as alcohol and cigarettes should be complementary on the basis of function (i.e., the products are often used together), symbolic imagery, and quality. As cultural anthropologist Grant McCracken explains, “The meaning of a good is best (and sometimes only) communicated when this good is surrounded by a complement of goods that carry the same significance. Within this complement, there is sufficient redundancy to allow the observer to identify the meaning of the good.”^{68(p.121)} Thus, it might be expected that an upscale cigarette brand such as Dunhill would be depicted with a martini, whereas Marlboro and Budweiser are likely to be seen by marketers as more suitable product complements. Conversely, Winston cigarettes combined with a bottle of fine wine would seem inappropriate.

When segmenting a market, marketers also account for user status, which may involve classifying groups of consumers into nonusers, ex-users, potential users, first-time users, sporadic users, and heavy users of a product.⁶¹ Thus, some smokers might be best described as “social smokers” or “chippers,” whereas others would be clustered as “committed smokers.” On the basis of a review of internal tobacco industry documents, Pollay³³ concludes that two key typologies of cigarette consumers used by cigarette firms are “new users” (young starters) and “latent quitters” (concerned smokers who need reassurance). An appearance of healthfulness and

reassurance is particularly likely to be seen in the advertising of cigarette brands such as Carlton and Merit Ultra Lights, which are promoted with messages about their low-tar yields.⁶⁹ Despite the demonstrated seasonality of cigarette sales, it is during the first few months of the year that the frequency of cigarette advertising tends to be higher. These advertisements may be more likely to target “health-concerned” smokers and to counter the common New Year’s resolution to quit smoking.^{60,70}

It is also common for marketers to cluster a market according to the various benefits that consumers seek from a product. Basic, GPC, and Doral exemplify “value” brands and are positioned to appeal to consumers who are looking for discount prices or getting a “bang for their buck.” Doral advertising that circulated in 1998 included the following advertising copy: “Doral combines the taste, quality, and extras of higher-priced brands with a price that’s always fair. We think that’s the kind of honest value you deserve. Discover the Doral difference.” During 1999, the tagline “Imagine Getting More” was used for Doral with the implication that the tobacco was “slow burning” relative to other brands. Meanwhile, cigarette brands such as Marlboro and Camel are both classified



“Value” brand advertisement for Doral cigarettes

and promoted as “premium” brands. The “premium” moniker conveys that the product is of high quality and a market leader, suggesting status redemption for its user.

Tobacco advertisements are also used to link smoking with a variety of other supposed benefits such as affording pleasure, improving social confidence, advancing relaxation, reducing stress, aiding concentration, and helping in weight reduction⁷¹ (chapter 5). According to internal documentation of R.J. Reynolds that detailed an assessment of various product designs, consumer benefits can include “prestige,” “cost,” “time management,” “social interaction,” “mood enhancement,” “health,” “implied health,” and “taste burnout.”⁷²(Bates no. 504663481/3484) Tobacco industry documents also reveal that many consumers seek a cigarette brand that will deliver reduced irritation to their throats, although it has been documented that several supposedly harm-reduced products that were launched in the marketplace did not in fact meet this desired consumer benefit.⁷³

Psychographic Segmentation

Psychographics, also referred to as *lifestyle analysis*, is another commonly used segmentation approach in which the personality, activities, interests, and opinions of the target market are considered. According to Kapferer,⁷⁴(p.23) one primary consumer benefit served by brands is “to have confirmation of your self-image or the image that you present to others.” Brands can help provide an identity for consumers, making them feel as though they belong to a special group.^{75–77} When selecting a particular brand of cigarettes, consumers engage in an act of distinction (i.e., the brand says something about them, much like the clothes they are wearing, the music they listen to, or the car they drive). Several content analysis studies reveal that health and vitality,

risk and adventure, independence, status redemption, romance, recreation, and relaxation are common themes associated with cigarette products in advertising^{78,79} (chapter 5 presents an overview of the content analysis literature that pertains to cigarette advertising).

Tobacco companies, and the market research firms that do contract work for them, extensively study the personality characteristics of smokers. Personality characteristics identified by Lorillard during the mid-1980s included the rugged man, pleasure seekers, unsettled dreamers, outdoor individualists, refined ladies, satisfied secures, and social strivers.⁷¹ Labels used by Philip Morris during the early 1990s to describe the psychographics of men included macho hedonists, ‘50s throwbacks, enlightened go-getters, and new age men, whereas women were classified as ‘90s traditionalists, uptown girls, mavericks, and wallflowers.⁸⁰

Importance of Communicating Brand Image

Promotional planning, therefore, involves establishing advertising objectives and determining the target audience. As discussed in chapter 4, there are several ways to communicate with consumers, including advertising, event sponsorship, celebrity endorsements, packaging, coupons, personal selling, sampling, contests, publicity, product placement, and public relations. For conventional advertising, the copy platform entails the formation of creative promises (i.e., communicating what benefits the product will provide or, alternatively, what problems the product will solve), supported by reasons why the customer should buy the product rather than a competing offering (i.e., focus is often placed on one or two key points of differentiation).

Communicating brand image is considered particularly crucial for product categories

such as cigarettes and beer; several brands possess minimal product differentiation, yet have a high degree of social visibility. Such characteristics are the basis for these goods sometimes being coined *badge products*. Particular brands are depicted as expressions of success, sophistication, femininity, rebellion, and so on.⁷ Marlboro, for example, represents masculine, rugged, tough, and no-nonsense qualities, while Virginia Slims typifies feminine, sexy, and glamorous.

Cornerstones for Effectively Communicating Brand Image

Brand equity is defined as “a set of assets (and liabilities) linked to a brand’s name and symbol that adds to (or subtracts from) the value provided by a product or service to a firm and/or that firm’s customers.”^{7(pp.7-8)} These assets include brand loyalty, brand name awareness, perceived quality, and brand associations. A cigarette brand’s identity or image is collectively constructed through the use of brand names, logos, taglines, typography, pictorials, and primary and secondary colors.⁸¹ Several principles are considered as cornerstones for effectively communicating brand identity or image. Effective media messages are typically

repetitive, consistent across various media contexts and across brand elements over time, and relevant to a contemporary market of consumers.

Branding

The use of a name, term, symbol, or design to identify a product is known as *branding*.⁷ Effective brand names are often short and simple; easy to spell, read, and pronounce; distinctive and memorable (easy to recognize and remember); pleasant sounding (not offensive, obscene, or negative); applicable for multinational use; timely (unlikely to become out-of-date); and legally available for use (not in use by another firm).⁸² Moreover, a good brand name commonly suggests something about the product’s benefits, is adaptable to packaging and labeling needs, and is appropriate to new products that may be added as line extensions at a later date.⁸³

The *logo*, meanwhile, is the visual element used to define a firm or brand.⁸² Common objectives when designing logos are (1) having a style that is highly memorable (e.g., a logo with a totally unique shape); (2) helping identify the company’s product; and (3) being bold, simple, and easily readable.⁸³ Lucky Strike’s target motif,

Tobacco Branding: What’s in a Name?

Tobacco product brand names spring from a wide range of sources, from product-positioning factors to company history. Virginia Slims, for example, is a brand name that is rich in meaning for U.S. consumers. Virginia conveys a woman’s name as well as the name of a U.S. state well known for tobacco farming and production. Slims, meanwhile, refers to a reduced-circumference cigarette; this product feature was innovative when the brand was launched in 1968.^a Slims may also be intended to refer implicitly to the weight-controlling effects of smoking.

The Winston and Salem cigarette brand names reflect that the head office of producer R.J. Reynolds is based in Winston-Salem, North Carolina; Kent, launched in 1952 by Lorillard, was named after the company’s president, Herbert A. Kent.^b

^aKluger, R. 1997. *Ashes to ashes: America’s hundred-year cigarette war, the public health, and the unabashed triumph of Philip Morris*. New York: Vintage Books.

^bWhite, L. C. 1988. *Merchants of death: The American tobacco industry*. New York: Beech Tree Books, William Morrow and Company.

for example, is legendary. Raymond Loewy, widely considered to be the father of industrial design and well known for designing several celebrated brand icons, including the Exxon and Shell Oil logos and the U.S. Postal Service seal, produced the modern package design of Lucky Strike in 1941. He was paid \$50,000 for the design, in which he replaced the green background with white (the brand's advertising campaigns, meanwhile, included the advertising copy "Lucky Strike Green has gone to war! So here's the smart new uniform for fine tobacco"), sharpened the typography, and made both sides of the package identical by depicting the circular motif or "target" on the front and back.⁸⁴ Loewy's design remains largely unchanged more than 60 years later.

Taglines and Slogans

Taglines (or slogans) are another integral part of a promotional campaign and are commonly developed with the objective of being understandable and memorable as well as linking benefits or positive images to a brand.⁸² According to Andrew Stodart, president of the Toronto-based consulting company Brand Builders, "A slogan that works can offer constant reinforcement for a product. It can be money well spent if it is created in a way that consumers identify with it immediately.... A tag line becomes shorthand for your company's message."⁸⁵(p.B11) Enduring cigarette advertising taglines include "I'd walk a mile for a Camel" and "Come to Marlboro Country"; Virginia Slims' "You've come a long way, baby"; Benson & Hedges' "The length you go to for pleasure"; and Newport's "Alive with Pleasure!" The slogan, "Winston tastes good like a cigarette should," was named as one of the top 10 jingles of the twentieth century in *Advertising Age*.¹

Pictorials

In pursuit of effective communication, advertisers attempt to create a message

that is simple, familiar, easily recognized, comprehensible, and distinctive. Acknowledging that many advertisements attract limited and indirect attention from the viewer amid all of the "clutter," advertisers often design messages that draw attention or stand out but do not require large amounts of time and effort to understand. This is facilitated through the visual imagery predominating in many advertisements, with its function illustrated by the aphorisms, "A picture is worth a thousand words," and "Seeing is believing." Market research is typically conducted that both informs (i.e., pretesting) and validates (i.e., posttesting) promotional planning efforts.

Brand imagery is further reinforced or enhanced in advertising visuals through the use of lifestyle portrayals, which do not necessarily require depictions of people. Cobranding, event sponsorship, and endorsements exemplify three ways of enriching the symbolic value of brands or trademarks.⁸² Distinct trademark meanings (and implied product users) will be communicated if one advertisement features tickets for an opera performance on the dashboard of a Mercedes while another depicts tickets for a stock car race on the dashboard of a Chevy pickup truck. Product endorsement from an Olympic gold medalist would potentially associate a trademark with qualities of nationalism, leadership, and high performance. The personality of the particular athlete might also be transferred to the endorsed brand. Clearly, associating a brand or trademark with other objects, settings, and people that are rich in meaning can effectively convey lifestyle imagery and brand personality.⁸⁶⁻⁸⁸

Use of Color

Tobacco promotions are commonly dominated by visual imagery, with color playing an important role in distinguishing trademarks and communicating both

imagery and product characteristics.⁸⁹ Generally, red evokes strong feelings related to passion, danger, anger, love, sex, strength, and power, whereas gold is the conventional color of money and can bring to mind feelings of security, wealth, and abundance. Blue is frequently associated with calmness, coolness, introspection, wisdom, and solitude, and green suggests nature, renewal, new beginnings, healing, health, and harmony.⁹⁰ Some brands have used colors as main features of marketing campaigns, such as the “What can brown do for you?” advertising campaign for the UPS package delivery company,⁹¹ and the promotions for the Orange Savings Account marketed by the Internet bank ING Direct.^{92,93}

With respect to the marketing of cigarettes, red normally communicates strong flavor, blue commonly symbolizes a “mild” brand extension, and green usually conveys that a brand is mentholated.⁹⁴ Moreover, industry documents and trade sources indicate that the color and imagery used in advertising executions and packaging are meant to imply product “lightness.”^{95(pp.217–219),94(pp.i76–i77)} Promotions for brands with supposedly low-tar yields often use lighter color shades or white-on-white executions, which may signify cleanliness or a less harmful product and dissociate cigarettes from unpleasant aromas. According to British American Tobacco, “‘light-lighter-lightest’ were achieved by insistence [*sic*] on lighter presentations - product story imagery - white packs - pale colours - mildness dominated copy.”^{95(p.14)} Colors have also been associated with specific cigarette brands, such as red for Marlboro and purple for Silk Cut, as described below in the section on surreal advertising in the United Kingdom.

Repetition, Consistency, and Relevance

Repetition of a promotional message or brand identity, over time, across multiple media, and across advertising executions

leads to familiarity and increased advertising effectiveness.^{96–99} A dense environment of cigarette promotion and imagery gives the impression that tobacco use is socially acceptable, desirable, and prevalent.¹⁰⁰ The large promotional budgets that are apparent for leading cigarette brands reinforce and elevate consumer perceptions about the popularity of those brands, and popularity is considered to be a crucial factor in brand desirability among youth.¹⁰¹ The persistence and pervasiveness of tobacco promotion are notable. The major cigarette manufacturers in the United States spent \$13.1 billion in 2005 on advertising and promoting cigarettes¹⁰² (chapter 4). Repeating a basic promotional message with a variety of advertising executions requires a considerable advertising budget. Firms often spend a large proportion of advertising expenditures on one or two leading brands (i.e., those that have demonstrated popularity).

It is considered important among marketers to have promotional messages that are consistent with the overall image and characteristics of the brand.^{7,75,82,103} Companies are diligent about protecting their brands from negative effects related to inconsistent brand associations.^{104,105} According to Wells and colleagues,

Because the effects of image advertising build up over time, consistency is critical to the process. You can't say one thing today and something different tomorrow ... every ad contributes to the image. The message must focus on what the image is supposed to be, and should be consistent over a long time.^{106(p.207)}

When a promotional message is consistently portrayed across different media contexts (i.e., accounting for the setting of media consumption, such as New York City's Times Square compared to the living room of one's home) and across different elements of the brand (e.g., logos, slogans, product

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package, product message, characters, brand community events), it is generally more effective.^{76,107-110}

Marlboro serves as a good example of a brand or trademark that has been successfully linked to consistent imagery over a long time. Wernick explains that

the meaning of any single message is modified by, and depends on, the ones that came before. The same is true for sub-campaigns, where even the launching of a new product may build on meanings previously achieved. During the 1980s, for example, ads for Marlboro Lights projected a soft focus version of the leathered cowboy which had already become ultra-familiar in previous advertising for its parent brand.^{14(p.92)}

Yet, while the image(s) communicated may remain the same, different symbols can be used to help the brand remain relevant, contemporary, and appealing to an ever-changing audience.^{75,82}

Marketing practitioners are mindful that the target market is likely to evolve; that is, even though the target age group (e.g., 18–24 years) may remain unchanged, the individuals receiving the message will vary over several years. For promotional campaigns to remain effective over time, practitioners need to maintain message salience for a contemporary audience, including those not yet affected by a particular campaign, and account for a cohort effect (i.e. with an age segment of 18–24 years, for example, a set of people will move in and out of the target market each year).

Ellen Merlo, Philip Morris's vice president of marketing services, makes clear why the company makes such a heavy investment in Marlboro's being an auto-racing sponsor:

Everything we do at Philip Morris is an extension of our overall brand positioning

and brand imagery. We perceive Formula One and Indy car racing as adding, if you will, a modern-day dimension to the Marlboro Man. The image of Marlboro is very rugged, individualistic, heroic. And so is this style of auto racing. From an image standpoint, the fit is good.¹¹¹

Thus, the Marlboro brand image of rugged masculinity has been communicated consistently over a considerable period of time, yet modified over the years. Thus, ways of communicating rugged masculinity may be adjusted over time, including activities and celebrities depicted.

Integrated Marketing Communications: Marlboro as a Case Study

The importance of the cornerstones for effectively communicating brand image, such as repetition, consistency, and relevance to a contemporary or modern audience, are well illustrated in a case study of Marlboro and Philip Morris's use of integrated marketing communications (IMC). A brief case study of Marlboro and IMC is presented below.

IMC involves "the intentional coordination of every communication from a firm to a target customer to convey a consistent and complete message."^{4(p.433)} The market dominance of Marlboro, for example, is in part explained by Philip Morris's well-integrated marketing communication efforts (relative to competitors' trademarks) and the firm's ability to appeal to the all-important youth market (for examples of IMC efforts that are substantiated by Philip Morris's internal documentation, see the written direct testimony of Krugman.¹¹² Dewhirst and Davis¹¹³ provide a case study of brand strategy and IMC for Player's, which is a leading cigarette brand in Canada with a positioning similar to Marlboro's).

Philip Morris has communicated a consistent, complementary message to the

target consumer over time and through different elements of the promotional mix. “Marlboro Country” conjures up visual images of the American West, including cowboys on horseback, the herding of beef cattle, and vistas of mountains, tree-lined streams, high rock faces, and canyons. A cowboy has been used as a Marlboro symbol since 1954. Earlier, Marlboro had been targeted to women “as the essence of femininity,”⁸ with advertising slogans such as “Mild as May.”^{13(p.493)} However, the Marlboro brand was reissued and repositioned in 1954 and featured, in addition to the cowboy character, other rugged, ultramasculine figures, typically with tattoos. By 1964, Marlboro had become linked nearly exclusively with a cowboy, considered an ideal symbol of rugged masculinity, freedom, escapism, adventure, independence, simple pleasures, and heroism.^{31,114} Legendary ad maker Leo Burnett conceived the initial idea of using a cowboy.¹¹⁵ To this day, the Leo Burnett advertising agency, which is based in Chicago, handles the Marlboro account.

Marlboro’s brand image is also consistently conveyed through various elements of the communications mix. Marlboro cigarettes are offered in a flip-top package, which is publicized as solid and “crush-proof.”¹¹⁴ Philip Morris has launched a lifestyle magazine titled *Unlimited*, which is distributed by direct mail to those in the firm’s database. The magazine content—hailed as “Action, Adventure, and Good Times”—closely matches the psychographics of the target market for the Marlboro brand. Labels for the Marlboro Classics clothing line point to the garments’ combination of “strength” and “endurance,” implying that the garments can endure harsh outdoor activities like those expected of a cowboy. Marlboro Unlimited Gear, which includes branded items such as trail watches,



Marlboro advertisements featuring a cowboy character

transportable gas grills, and gear bags, is promoted as durable, “without limits,” and “built for adventure.” During the late 1990s, promotional initiatives dubbed “Party at the Marlboro Ranch” provided sweepstakes winners with vacation opportunities to ranches located in Montana and Arizona. These advertising campaigns were preceded by “Marlboro Adventure Team” holiday promotions, which stipulated that

a hand-picked team of ten will meet in Grand Junction, Colorado, to take a journey down white water and rock walls, across deserts and over trails that lead to places that aren’t even considered places yet. Hell Canyon, Lizard Rock,



Advertisement for the “Marlboro Adventure Team”

Thunder Pass. This is the West—where you find your adventure, you don't wait for it to find you ... for eleven days, experience Marlboro's unforgettable world of freedom and adventure.^{116(p.43)}

During the 11-day vacation, contest winners were engaged in activities such as white-water rafting, dirt biking, 4 × 4 automobile driving, and horseback riding.

The key sponsorship properties of Marlboro are automobile racing and motorcycle racing. During the early 2000s, Philip Morris, in its Formula One partnership with Ferrari, spent roughly \$23 million each year toward race-car driver Michael Schumacher's salary and about \$65 million each year to have Marlboro placed in multiple locations on the race car, helmet, and overalls of Schumacher and his teammate Rubens Barrichello.^{117,118} Schumacher's performance has been unprecedented; he holds numerous Formula One records such as most wins in a single season, winner of the longest string of races within a season, and seven overall drivers' titles.¹¹⁹ With Schumacher often a race leader, Marlboro received considerable television coverage during Formula One events, compounded by the fact that the winning driver often appears in magazines, newspapers, and television newscasts worldwide. It is estimated that 300 million people watch each Formula One race on television.¹²⁰ Similarly, during a 94-minute broadcast of the 1989 Marlboro Grand Prix, the Marlboro brand name was shown or mentioned 5,933 times, and the name was seen for a total of 46.2 minutes, or about one-half of the total broadcast time.¹²¹ For viewers, it was easy to make the link between Schumacher as a leader in the auto-racing field and the Marlboro brand as the market leader in the cigarette product category. In addition, it is easy to see that the various Marlboro promotional efforts collectively communicate a cohesive and powerful message.

Nowak and Phelps¹²² note a trend in greater usage of databases and new expectations from marketing communication suppliers such as sponsorships (e.g., staging contests at event sites that require contestants to submit their demographic profiles and correspondence details) to assist in database development. Duncan has defined IMC as “a cross-functional process for creating and nourishing profitable relationships with customers and other stakeholders by strategically controlling or influencing all messages sent to these groups and encouraging data-driven, purposeful *dialogue* with them.”^{123(p.8)} Several tobacco firms, such as Philip Morris, have demonstrated their strong commitment to IMC, moving away from traditional mass media promotion to integrated forms of communications such as sponsorship, public relations, direct marketing, and sales promotion. For tobacco companies such as Philip Morris, regulated restrictions on access to different media further compelled seeking a variety of nontraditional media (making use of emerging technologies and new media). A greater use of databases and new expectations from marketing communication suppliers to provide database-building capabilities indicate an IMC approach. A highly targeted customer-focused strategy and a strategically consistent brand positioning, which are key tenets of an IMC mindset, have contributed to Marlboro becoming the best-selling and dominant brand in the U.S. market.

“Surreal Advertising” in the United Kingdom as a Case Study

“Surreal advertising” for cigarettes in the United Kingdom provides another powerful illustration of the cornerstones for effectively communicating brand image that are discussed above—especially branding, pictorials, use of color, and repetition. A case study of this advertising genre is presented below.

The Tobacco Advertising and Promotion Act in the United Kingdom prohibits tobacco advertising in the print media and on billboards as well as by direct mail and other promotions, effective in 2003. The act also banned tobacco sponsorship of sporting events (other than international events) in July of that year, and tobacco sponsorship of Formula One motor racing ended in July 2005. Regulations on *indirect advertising* (i.e., the use of tobacco product brand names on nontobacco products and services) and point-of-sale advertising were issued in 2003.¹²⁴

Before passage of this act, tobacco advertising in the print media and tobacco sponsorship of sporting events in the United Kingdom were governed by two voluntary agreements periodically negotiated between the tobacco industry and the government.¹²⁴ One of these agreements required, among other things, adherence to the Cigarette Code.¹²⁵ The code, which was developed jointly by the U.K. Department of Health, cigarette manufacturers and importers, and the Advertising Standards Authority (ASA), promulgated rules on the content of tobacco advertising. The ASA, which was responsible for certifying advertisements as acceptable before they were published, described the rules as follows:

The essence of the Code was that advertisements were not to encourage people to start smoking nor were they to entice smokers to smoke more or to excess.

As with every other part of the Codes, the Cigarette Code's rules were applied in the spirit as well as the letter. Broadly, they included the following requirements:

Youth: Advertisements were not to be designed or presented in a way which had a greater appeal to those under 18 than to the general public. Anyone shown

smoking was required to be clearly over the age of twenty-five. Advertisements were not to play on the susceptibilities of the immature or vulnerable nor were they to feature heroic, cult or fashionable figures in a way that might appeal to the young. In the 1995 edition of the Codes, the rules were tightened to prohibit humour being used to attract young people.

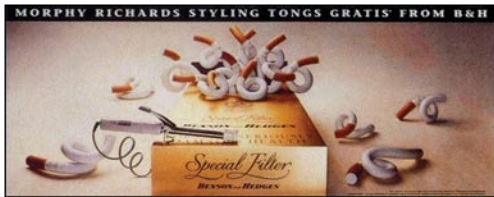
Health, context and environment: Advertisements were not to suggest that smoking was safe, popular, natural, healthy or necessary for relaxation and concentration. Cigarettes were not to be shown in the mouth and smoking was not to be associated with healthy eating or a wholesome life-style.

Social success: Advertisements were not to link smoking with people who were evidently wealthy, successful or fashionable or who possessed other qualities that might command admiration or encourage emulation. They were not to claim or imply that smoking was a sign of masculinity or that it enhanced feminine charm. Nor were they to imply a link between smoking and social, sexual, romantic or business success. The attractions of smoking were not to be exaggerated.

Promotions: Advertisements for coupon brands were not to feature products unless those products could be obtained through the redemption of coupons collected over a reasonable period of average consumption.¹²⁶

Advertising for several cigarette brands appeared in British media, demonstrating creative and often bizarre uses of color, symbols, and imagery that were still permitted under the code. Silk Cut and Benson & Hedges (sold in the United Kingdom by Gallaher Group Plc), as well as Marlboro, were the most notable brands employing surreal advertising. In most of these advertisements, the only indication

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Surreal advertisements for Benson & Hedges showing cigarettes curled by a curling iron (above) and an oversized cigarette box buried on a rocky beach (right)

that cigarettes were being promoted was the government-mandated health warning shown at the bottom of the ad.

According to the *Wall Street Journal*,¹²⁷ Benson & Hedges (B&H) “pioneered the genre” of surreal advertising with a series of ads showing the brand’s gold box in strange ways:

One [ad in 1977] showed the box in front of a mouse hole—likening it to a trap. Another [ad in 1980] showed it being carried away by ants as if it were something dead. A recent ad shows someone being hypnotized by a gold watch.

Other advertisements showed the B&H box floating on blue water, looking like a can of sardines, partially opened to reveal the cigarettes; a pack of B&H in a bird cage; a giant B&H box floating on a pond, next to a flock of ducks being fed by an elderly woman; a large B&H box on top of which rested a curling iron, with many curled cigarettes strewn about; and yet another oversized box buried on a rocky beach, reminiscent of the image of the Statue of Liberty buried in the sand at the end of the original *Planet of the Apes* movie. A B&H ad in the 1990s showed “a dentist with a perverse grin who has just pulled a gold tooth.”¹²⁸ A cinema commercial

showed a giant B&H packet swinging from a helicopter above the Arizona desert, watched by bug-eyed iguanas and then dropped into a swimming pool.... It was, they said, the most expensive cinema

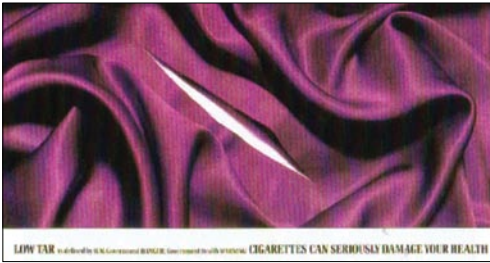


commercial ever produced. And almost certainly the best-remembered.¹²⁹

The advertising campaign for Silk Cut, which was launched in 1983, used a series of images showing purple silk that had been cut, or purple silk with something sharp (the brand’s package is purple and white). The first advertisement in this series “showed a pool of silk gathered in a dreamy haphazard way—and cut with a significant slit.”¹²⁹ A similar ad showed the silk with a bandage on it, presumably covering a tear. Other ads in the campaign were described in the *Wall Street Journal* as follows:

One award-winning ad shows a row of scissors dancing the cancan in purple silk skirts. Another shows a rhinoceros whose horn protrudes through a purple silk cap. In an obscure twist on the theme, one ad simply showed a purple shower curtain. The implication was that the silk curtain would be slashed as in Alfred Hitchcock’s “Psycho.”¹²⁷

Many Silk Cut advertisements included images of scissors, knives, and other cutting instruments. One showed strips of purple silk falling from the holes of giant, building-like cheese graters, resembling a ticker-tape parade. Another featured a purple brassiere, cupping two round and spiny cacti.



Surreal advertisements for Silk Cut cigarettes (above and right)

Surreal advertisements for Marlboro cigarettes also appeared in the United Kingdom, typically showing one prominent item in red within an otherwise black-and-white scene that one might expect to find in “Marlboro Country” (i.e., the American West). As in the case of many of the surreal ads for Silk Cut and B&H, many of these Marlboro ads did not show cigarettes or depict smoking. Although some of the ads proclaimed “Welcome to Marlboro Country,”¹²⁷ other ads had no obvious connection to cigarettes, except for the health warning at the bottom of the ads. The red color—the only feature identifying the brand being advertised—was a link to the color of the well-known Marlboro chevron used in the brand’s logo and on its packaging. One surreal Marlboro ad, for example, showed a red river flowing through the valley of a broad and desolate canyon. Another showed a bright red motorcycle alongside a bleak and deserted country road. McIntosh¹²⁸ has described other ads in this campaign.

What are these surreal advertisements attempting to accomplish? They may have been designed to achieve one or more of the following goals: (1) to get noticed in a “noisy” marketing environment; (2) to engage the viewer in attempting to discern the meaning of the ad; (3) to affirm the intelligence of the viewer who solves the riddle of the ad; (4) to evoke humor; (5) to elicit feelings of eroticism, violence, or death; and (6) to influence smoking behavior and attitudes toward smoking while navigating through or around the provisions of the Cigarette Code.



These purposes are addressed below in greater detail.

To be successful, an advertisement must break through the cluttered sensory environment in modern society to get noticed. The average consumer is exposed to about 2 million brand messages each year across all media channels.¹³⁰ No matter how well an advertisement is constructed, it will be ineffective if it is not noticed. Unusual or bizarre images in advertising are more likely than is traditional imagery to capture the attention of a reader perusing a magazine or a person walking or driving by a billboard. A related objective is that atypical advertising is more likely to garner publicity or “buzz” (see chapter 4 for a discussion of “viral” marketing).

Another likely purpose of surreal advertisements is to engage the viewer in attempting to discern their meaning. Academic research finds that such advertisements not only attract attention



Surreal advertisement to link the color red with the red Marlboro chevron

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but also engage consumers in more thought.¹⁰⁷ According to Goldman,^{131(p.171)}

ads which are unpredictable and whose meanings are opaque, if not impenetrable ... arrest the attention of the viewers.... If viewers spend more time pondering the meaning of an advert, if they make more of an investment in interpreting it,... then perhaps they will be more likely to recall the product name.

Product name recognition is another key element of effective marketing campaigns.

A third purpose of these advertisements may be to have viewers feel good about themselves for having figured out the meaning of an advertisement or an advertising campaign. Viewers who experience a sense of accomplishment after solving the riddle of an ad¹³² are likely to have more favorable views toward the product being advertised (and toward the manufacturer of the product). In reference to the Silk Cut “shower curtain ad” mentioned above, a creative executive at M&C Saatchi (the ad agency that produced many of the Silk Cut ads) said,

People recognize the connection between the advertisement and Psycho, the thriller, so people think they're quite clever. It's smart arse. It affirms their intelligence and their wittiness. It strikes a chord with them.¹²⁸

Many of the surreal ads attempt to evoke humor. The M&C Saatchi creative executive asserted that,

The primary motivating factor in my culture, in my advertising culture, is an attempt to get humour into the advertisement.... [They] work if it's funny, if people find it engaging.¹²⁸

As noted above, the Cigarette Code was tightened in 1995 to prohibit the use of humor in advertising as a means to attract

young people. The driving force for this modification of the code was not the surreal ads, but evidence that a baldheaded man named Reg, used in an advertising campaign for Imperial Tobacco's Embassy Regal brand, appealed to youth, partly through humor.^{133,134}

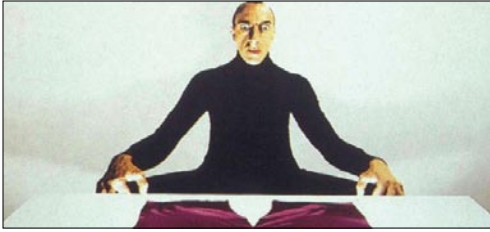
These last two aims may overlap when a viewer is challenged to understand the humor in an advertisement. As York explains,

both campaigns [Benson & Hedges and Silk Cut] confirmed the audience's cleverness and visual literacy in recognizing the elegance of the jokes. Clever advertising driven by puns on intrinsic properties—the box, the brand name—made for clever, memorable brands; brands with an assurance that made the older cigarette advertising approaches look decidedly klutzy.¹²⁹

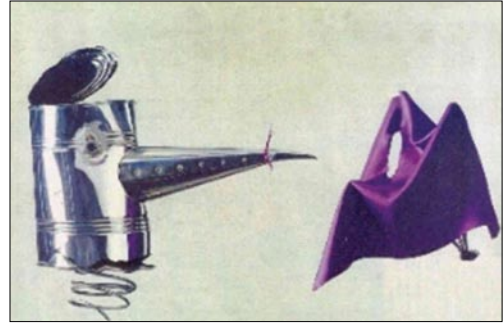
An example is an ad showing a short branch with two purple, silken leaves; the pun is that the plant is a cutting.¹³⁵

In an essay titled “From Eros to Thanatos,”¹²⁸ McIntosh argues that several of the Silk Cut advertisements have imagery suggestive of sexual organs, sexual violence, and death. During a discussion of the semiotics of a Silk Cut ad in the novel *Nice Work*,¹³⁶ the female protagonist maintained that the ad “appeals to both sensual and sadistic impulses....” Sexual symbolism—whether subliminal or perceptible—is not confined to surreal cigarette ads. Pollay has identified many examples in conventional cigarette ads.¹³⁷

Suggestions of sexual violence and death are in some Silk Cut advertisements. Many of the Silk Cut advertisements, as noted above, feature scissors, knives, and other cutting instruments, including saws, axes, and meat cleavers. Gallaher's last U.K. campaign for Silk Cut cigarettes included two ads showing a woman holding a cutting instrument in



Sexual imagery used in surreal advertisements for Silk Cut cigarettes (above and right)



a scene with an undercurrent of violence. In one, a woman is holding garden shears, seemingly upset that her husband is talking with the buxom woman next door (who is hanging her purple undergarments on a clothes line). In the other, a man is working on a newspaper crossword puzzle and ignoring his food at the dinner table, while his wife is gripping a knife in a menacing way. McIntosh argues that the imagery suggesting sexual violence and death is tapping into “rape fantasy” and what Sigmund Freud called the “death instinct.”¹²⁸

Finally, the potent imagery in surreal advertisements can be seen as a strategy to affect smoking behavior while circumventing the provisions of the Cigarette Code. The general manager of corporate affairs for Gallaher seemed to acknowledge as much when he said, “One of the reasons we have

the most creative advertising in the world is because we’ve had the toughest rules for so long.¹²⁷ Others have recognized the same connection. Langan¹³⁵ commented as follows:

Silk Cut has managed to allude to sensual and sexual desire, thus demonstrating one way in which [an] advertiser can attempt to covertly allude to qualities, or suggest reasons for buying their product which, because of the strict laws in the case of cigarette advertisements, they are not able to do overtly.

Similarly, Lindstrom has noted,

The Silk Cut campaign was wordlessly articulate and negotiated the newly introduced, mid-’80s bans on cigarette advertising with such elegance, the brand’s image and message remained intact without the slightest reference to the product.

You don’t need too much creativity to imagine how a range of beautiful, silk-filled wallpaper could work for Silk Cut. Instead of advertising, a branding tool stands as a work of art. Any brand communication that achieves this level of sophistication is a brand-building victory. Such a campaign could integrate its message across channels, even conquering those channels in which advertising is restricted, as is the case with tobacco and other products.¹³⁰

Lindstrom’s allusion to “silk-filled wallpaper” as an extension of Silk Cut’s advertising is not necessarily far-fetched. As Langan explains,



Silk Cut cigarette advertisements suggesting violence

The repetition of this metaphor [cut silk] for the brand Silk Cut has produced an important effect. The signifier, the purple colour, has become just as important as the brand name. It now works to anchor the picture, ... [in ads] where the silken sheet is absent (i.e., through recognition of the colour the viewers are steered towards the correct interpretation of the advertisements). It is mainly the colour which has become the symbolic tool with which the viewer can approach and “correctly” discover the preferred reading of the adverts. This becomes important in later advertisements where the silken object and the cut are even less apparent.¹³⁵

Once a color has become strongly associated with a brand (e.g., purple for Silk Cut, red for Marlboro, gold for Benson & Hedges), it is possible that the color by itself may serve to promote the associated product. This raises the question of whether cigarette companies strive to develop strong color associations for their leading brands to allow the companies to continue color-based brand promotions under severe marketing rules anticipated to exist in the future. Indeed, in Papua New Guinea, “the entire exteriors of shopping centres and small trading posts are not uncommonly painted in the colours of a major cigarette brand ... and sporting a large number of posters and point-of-sale displays for cigarettes.”¹³⁸ If legislation were to ban the posters and point-of-sale displays, the cigarette colors on the store exteriors might remain, along with their attendant associations with specific cigarette brands.

A Rationale for Regulating Tobacco Promotion

Regulation, according to C. Lloyd Brown-John, is defined as “any constraint imposed upon the normal freedom of individuals by

the legitimate activity of government.”^{139(p.7)} Because regulation involves government activities that limit the choices available to individuals, it is often controversial.¹⁴⁰ The regulation of tobacco promotion is no exception. To what extent can and should the government intervene in the lives of citizens? Moreover, which government activities should be regarded as legitimate?

The key rationales for implementing a comprehensive ban on tobacco advertising and promotion include (1) the health consequences of tobacco use (including addiction); (2) the deceptive or misleading nature of several tobacco promotional campaigns; (3) the unavoidable exposure of youth to these campaigns; (4) the role of tobacco advertising and promotion in increasing tobacco use in the population, especially among youth; (5) the targeting of “at-risk” populations through advertising and promotion, including youth, women, and ethnic and racial minorities; (6) the failure of the tobacco industry to effectively self-regulate; and (7) the ineffectiveness of partial advertising bans. The third, fourth, and fifth rationales are reviewed in detail in chapters 4, 5, and 7; the others are discussed below. The call, by the WHO FCTC and others, for a comprehensive ban on tobacco advertising and promotion requires discussion of whether this policy would violate federal statute or the First Amendment to the U.S. Constitution (see chapter 8).

Health Consequences of Tobacco Use

A government regulatory role in the creation of tobacco control policies is largely justified because cigarette smoking represents the single most important cause of preventable illness and premature death in the United States. Smoking has been linked to a number of health problems, including chronic bronchitis and emphysema; strokes and heart disease; and cancer of the lung, lip, oral cavity, pharynx, larynx, esophagus,

pancreas, bladder, and kidney. It is estimated that roughly 440,000 Americans die prematurely each year as a result of smoking. Tobacco use is responsible for a greater number of deaths among Americans than the total number of deaths caused by motor-vehicle crashes, suicides, murders, AIDS, and illicit drug use combined.¹⁴¹

An important element in the harm caused by tobacco is the addictiveness of smoking and other forms of tobacco use.¹⁴² Because most tobacco users develop dependence during childhood and adolescence,⁷⁸ many tobacco control programs and policies (including bans on advertising and promotion) are intended to prevent the initiation of tobacco use among youth.

The health effects of smoking extend beyond the smoker. Secondhand smoke is the combination of smoke produced by the burning of tobacco (sidestream smoke) and the exhaled smoke from a smoker. Secondhand smoke consists of gases and particles that contain more than 4,000 chemicals, more than 50 of which are cancer-causing agents.¹⁴³ An estimated 50,000 deaths per year in the United States—from lung cancer, ischemic heart disease, and sudden infant death syndrome—have been attributed to exposure to secondhand smoke.¹⁴⁴

The health consequences of smoking may act as an important factor in government deliberations about the role that health care costs can and will play in the reduction of the federal deficit. A reduction in overall tobacco consumption levels is regarded as a valuable objective toward health care reform efforts and offsetting ever-increasing health care costs. The social and economic costs of tobacco are noteworthy. Cost-benefit analyses (see the 2004 Surgeon General's report on smoking and health for a thorough literature review) reveal that while government tax revenues from tobacco sales are substantial, they are largely outweighed

by the costs attributable to smoking. In the United States, it is estimated that the economic costs attributable to smoking are \$157 billion each year, including \$75.5 billion spent on direct medical care among adults, \$81.9 billion attributed to lost productivity, and \$366 million for neonatal care. During 2001, the states alone spent roughly \$12 billion toward the treatment of smoking-attributable diseases.¹⁴¹

Deceptive or Misleading Promotion

Deceptive advertising has been described as marketing communications that likely result in consumers having information or beliefs that are incorrect or cannot be substantiated.¹⁴⁵ The Lanham Act, which contains the federal statutes governing trademark law in the United States, defines false advertising as “any advertising or promotion that misrepresents the nature, characteristics, qualities or geographic origin of ... goods, services, or commercial activities.”¹⁴⁶ In addition to misrepresentation (e.g., a company makes a claim that has no validity), deceptive advertising may occur as a result of omitted information.^{145,147}

In a 1,742-page decision issued on August 17, 2006, U.S. District Judge Gladys Kessler ruled that the major U.S. cigarette manufacturers violated civil (i.e., noncriminal) provisions of the Racketeer Influenced and Corrupt Organizations (RICO) Act. She wrote,

For several decades, Defendants have marketed and promoted their low tar brands as being less harmful than conventional cigarettes. That claim is false, as these Findings of Fact demonstrate. By making these false claims, Defendants have given smokers an acceptable alternative to quitting smoking, as well as an excuse for not quitting.^{148(p.740)}

3. Key Principles of Promotion and Rationales for Regulation

As demonstrated by Kessler's judgment, tobacco firms have undergone particular scrutiny for the marketing of filtered and low-tar cigarette brands, in which product descriptors, such as mild, light, ultra low tar, slim, smooth, and natural, have commonly been used. More than 30 countries have now banned the use of "light" and "mild" as cigarette product descriptors.^{149(p.4)}

During the 1930s, Camel promotions claimed, "More doctors smoke Camels than any other cigarette," and the tagline for Old Gold was, "Not a cough in a carload." During the early 1950s, however, articles in scientific and lay publications reported research findings about the link between smoking and lung cancer, leading smokers to become increasingly concerned about the dangers of smoking, and initiating what the tobacco industry referred to as a "health scare." The American Cancer Society, for example, released a major study linking smoking with lung cancer in 1950, and *Reader's Digest* articles in 1952 and 1953 discussed the relationship between smoking and cancer.¹⁵⁰ Tobacco firms became increasingly concerned about the negative publicity, which prompted the industry to hire Hill and Knowlton, a renowned public relations firm, in 1953. Recommendations by Hill and Knowlton led to the formation of the New York-based Tobacco Industry Research Committee (TIRC) in 1954. On January 4, 1954, a full-page advocacy advertisement, using the headline "A Frank Statement to Cigarette Smokers," circulated in 448 newspapers in 258 U.S. cities, reaching an estimated readership of more than 43 million. The advertisement announced that the TIRC was being established with a mandate to support scientific research on the health effects of tobacco use.^{23,151} The promotion cast doubt on unfavorable research findings and included the statements: "We [the tobacco industry] accept an interest in people's health as a basic responsibility, paramount to every other consideration in our business. We believe

the products we make are not injurious to health. We always have and always will cooperate closely with those whose task it is to safeguard the public health."

Filtered cigarettes became prominent in the U.S. market during the 1950s; in 1950, the market share of filtered cigarettes was negligible, yet by the end of the decade, the majority of cigarette sales were for brands with filters.¹⁵² Filtered cigarettes offered reassurance to consumers about the "safety" of smoking (many promotions portrayed filters as the technological fix to health concerns); they were also more profitable because they contained roughly one-third less tobacco than did nonfiltered brands as a consequence of a shorter column, a new freeze-dry "puffing" process, and greater use of reconstituted tobacco sheet.^{69,153} Cigarette promotions commonly featured taglines that implied health, such as Viceroy's "Double-Barreled Health Protection," Pall Mall's "Guard Against Throat-Scratch," and L&M's "Just What the Dr. Ordered."

In 1964, the first Surgeon General's report on smoking and health was released, and tobacco manufacturers recognized the competitive value of introducing brands that offered further reassurance to consumers concerned about the health risks of smoking. The 1970s marked the launch of several cigarette brands that were promoted with lower (machine measured) tar deliveries. Some of the product launches were line extensions of familiar trademarks (e.g., Marlboro Lights was introduced by Philip Morris in 1971); others were new, stand-alone trademarks (e.g., Merit was introduced by Philip Morris in 1976). Several virtuous-sounding brand names such as Merit, Fact, True, and Life are inherently misleading for a product such as cigarettes. According to Pollay and Dewhirst,

the product development process for Merit® was as much focused on consumer and market testing as on product technologies,

per se. The final market launch strategies used in 1976 gave particular emphasis to the choice of the name Merit,[®] obviously communicating apparent virtue, and used an advertising style that made this product development seem eminently scientific and newsworthy and less like an ad.^{69(p.213)}

Consumers likely assumed that governmental agencies would not permit the use of deceptive health claims, yet U.S. tobacco manufacturers used Federal Trade Commission (FTC) test results for tar and nicotine yields in advertising copy in attempts to gain a competitive advantage. For example, during the mid-1980s, when tobacco industry promotional spending was overrepresented among brands with supposedly low-tar yields, Brown & Williamson advertisements asserted that among all cigarettes, “Carlton is lowest” by referring to the U.S. Government laboratory test current at that time.^{69,154} Consumers were likely to perceive the FTC-attributed tar and nicotine ratings as precise even though tobacco manufacturers acknowledged within internal corporate documents that the FTC testing procedures were inaccurate.^{148(p.571),155,156} Cigarette papers and filters were developed that enabled smoke to be “air-conditioned” and the smoke column to be diluted through the entry of sidestream air. These vents were placed in locations of the cigarette commonly obstructed by a person’s fingers or lips while the cigarette was being smoked.¹⁵⁷ Thus, tar and nicotine yields generated for cigarettes smoked by machines during FTC testing were appreciably lower than yields delivered by cigarettes smoked by actual people.^{158–160} FTC test results were inconsistent with actual tar and nicotine yields because the machines did not initially account for the compensatory behavior demonstrated by people. To satisfy their addiction, smokers often compensate when smoking lower-yield cigarettes.^{142,160,161} Compensatory behavior includes smoking

the cigarette closer to the butt, taking deeper puffs, increasing the number of puffs, and smoking more cigarettes per day.

Internal British American Tobacco documentation claimed, “opportunities exist for filter and cigarette designs which offer the image of ‘health re-assurance’.”^{162(Bates no. 110069979)} Moreover, a Lorillard document assessed whether consumers perceived their Kent brand to have the best filter, stating that, “‘best filter’ is undoubtedly considered in terms of many different benefits including the taste the filter delivers, ease of drawing, mild taste, as well as health.”^{163(Bates no. 01140947)} Another document, expressing the thoughts of cigarette-company research directors at a Hilton Head meeting on February 14–16, 1968, stated, “the increasing popularity of filters and acceptability of low delivery brands indicate people are worrying about the problem [the health implications of smoking].”^{164(Bates no. 1005106316)} Under the subtitle *Attitudes Toward the Effects of Smoking on Health*, a Brown & Williamson document acknowledged that “in discussing how a smoker can limit the risks of serious disease without actually giving up smoking, the respondents clearly recognized the role of high filtration cigarettes.”^{165(Bates no. 680109289)}

Similarly, trade sources and internal tobacco industry documents acknowledge that mildness claims communicate health-related messages to consumers. For example, a marketing consultancy firm, the Institute for Analytical Research Inc., in its submission of motivation research findings to Imperial Tobacco Ltd. (Canada’s largest tobacco manufacturer), stated that “the majority of respondents indicate that they see ‘mildness’ as synonymous with a ‘safer’ product and reveal that mildness is a criterion for brand selection which takes on additional significance in the present smoking climate.”^{166(p.104)} According to a 1977 British American Tobacco document, communication strategies

should be directed towards providing consumer reassurance about cigarettes and the smoking habit. This can be provided in different ways, e.g. by claimed low deliveries, by the perception of low deliveries and by the perception of “mildness.” Furthermore, advertising for low delivery or traditional brands should be constructed in ways so as not to provoke anxiety about health, but to alleviate it, and enable the smoker to feel assured about the habit and confident in maintaining it over time ^{167(p.3)} (emphasis in original)

Meanwhile, market research prepared for Philip Morris revealed that “smoking an ultra low tar cigarette seems to relieve some of the guilt of smoking and provide an excuse not to quit.”^{168(p.11, Bates no. 2040066754)} Similarly, internal documentation from British American Tobacco⁹⁵ shows that “it is useful to consider lights more as a third alternative to quitting and cutting down—a branded hybrid of smokers’ unsuccessful attempts to modify their habit on their own.”^{95(Bates no. 400459922)} These industry views are consistent with research by Tindle and colleagues,¹⁶⁹ who found that smokers using “light” cigarettes had lower odds of smoking cessation; these investigators concluded that smokers may still be using “light” cigarettes as an alternative to quitting.

For many consumers, cigarettes with the “slim” product descriptor may imply that the product is “risk reduced.” When Philip Morris conducted market research of a competitor’s ultraslim brand, it found that several consumers consider reduced-circumference cigarettes to be a safer alternative relative to those brands with traditional physical dimensions. Under the subtitle “Health Implications,” interoffice correspondence included a summary of findings gleaned from consumer testing:

Overriding the perception of its stylishness is an impression that this cigarette has potential health advantages because there

is so much less tobacco being consumed. For many of the women, the idea that they would be “getting less” was a huge advantage.... This is an illusion, in a sense, for it is the actual tar and nicotine delivery which is the main factor of a health attribute, but most people ignored this. What they wanted and liked was a visible cue that they were smoking less.... Perception is more important than reality, and in this case the perception is of reduced tobacco consumption. It would be easy to substantiate such a claim.^{170(Bates no. 2057762567)}

Meanwhile, executive testimony and internal Imperial Tobacco Ltd. documents, which were released during Canadian court proceedings, revealed that the “smooth” product descriptor is meant to convey reduced irritation to the smoker’s throat or lungs.⁷³

Failure of Self-Regulation

Another rationale for regulating tobacco promotion is the demonstrated inability of the tobacco industry to self-regulate effectively. Self-regulation should ensure that advertisements are not false, misleading, in poor taste, unfair, or socially irresponsible. It is a process by which there is “voluntary control of business conduct and performance by business itself. It is control exercised by an advertiser’s *peers*, including those in the agencies and media used.”^{171(p.5)} Media, advertising, and trade organizations are common proponents of self-regulation, including the International Advertising Association, American Advertising Federation, American Association of Advertising Agencies, Association of National Advertisers, Outdoor Advertising Association of America, Motion Picture Association of America, National Association of Broadcasters, Direct Selling Association, Direct Marketing Association, Council of Better Business Bureaus, and International Chamber of Commerce.

What Is a “Natural” Cigarette?

During the late 1990s, Winston’s “No Additives, 100% Tobacco, True Taste” campaign underwent considerable scrutiny for the apparent deceptiveness of the claim, whereby the FTC required R.J. Reynolds to include the disclaimer, “No additives in our tobacco does NOT mean a safer cigarette.” The Winston campaign ran for nearly two years before the disclaimer was mandated, however, and the brand experienced market share growth in the interim.^{a,b,c} During 2004, promotions for Natural American Spirit cigarettes asserted that the product consists of “100% additive-free natural tobacco” and that it is “the only brand that offers products made with both natural and 100% certified organic tobacco.” The promotions do not specify, however, that the American Spirit offerings have higher nicotine levels and tar deliveries than do conventional cigarettes. “Natural,” synonymous with untreated and unprocessed, is seemingly ambiguous for the American Spirit mentholated line extensions or for the “Pow Wow Blend,” which combines tobacco with herbs such as red willow bark and sage.^d



^aShatenstein, S. 1998. Thank you for not smoking additives. *Tobacco Control* 7 (2): 187–88.

^bArnett, J. J. 1999. Winston’s “no additives” campaign: “Straight up”? “No bull”? *Public Health Reports* 114 (6): 522–27.

^cSchwartz, J. 1999. FTC has a beef with ‘no bull’ ads: Cigarette maker to add health disclaimer for ‘no additives’ Winstons. *The Washington Post*, March 4.

^dKezwer, G. 1998. Organic cigarettes new fad for “health-conscious” smokers. *Canadian Medical Association Journal* 158 (1): 13.

Self-regulation is often viewed as a means for the industry in question to avoid government regulation and an attempt at restoring the public’s faith in business practices.¹⁷¹ Boddewyn,¹⁷² an advocate of self-regulation and a paid consultant for the tobacco industry, presents several advantages and disadvantages of self-regulation. First, self-regulation can assist and complement statutory regulation given that the codes and guidelines of self-regulation are often more stringent than those imposed by law. Second, when advertising practices are questioned, there is typically less animosity because of self-regulation by the industry. Statutory regulation, on the other hand, relies heavily on the judicial system for enforcement. Third, self-regulation is typically seen as a more efficient and less expensive

mechanism for handling complaints compared with government regulation. Industry representatives, it is argued, are more knowledgeable about their field than are government officials. Finally, when justifiable complaints surface, the noncomplier is likely to adhere to the resulting decisions because the standards that were breached had previously been accepted voluntarily.

Self-regulation has several disadvantages, however, that lead many to consider it improbable that private interests can self-regulate in the public interest. Even if it is demonstrated that self-regulation can produce responsible advertisements, the voluntary standards of self-regulation may be purposely loose to ensure greater participation of the industry members.

3. Key Principles of Promotion and Rationales for Regulation

Furthermore, enforcement of and compliance with voluntary codes may be deficient, and participation in the self-regulation of the industry may not be compulsory. This has serious implications in a free-market economy. What does the tobacco industry do, for example, with those competitors that refuse to comply with the self-regulatory standards? Consumers may also be unaware of self-regulatory mechanisms, how to submit a complaint, or to whom the complaint should be submitted. The activities of self-regulation primarily involve industry-selected representatives, whereas the general public may be considered “token” outsiders.

An examination of the history of regulation of tobacco advertising makes it apparent that the tobacco industry does not effectively self-regulate. Pollay,¹⁷³ for example, assessed the efficacy of the U.S. cigarette industry’s self-regulation of 1963 broadcast advertising, in which each of the major firms (with the exception of Brown & Williamson) agreed to Tobacco Institute guidelines that specify that programs directed at youthful audiences should not be sponsored. Despite the tobacco industry’s voluntary course of action, American Research Bureau data (accessible from an FTC report on cigarette advertising) combined with census information and trade data on spot television advertising revealed that children and adolescents still represented 26% of the audiences for purchased network television programming. Winston, for example, was the sponsor of *The Beverly Hillbillies* and *The Flintstones* programs on television.

In 1964, American tobacco manufacturers voluntarily adopted the Cigarette Advertising Code, yet it was allowable for individual cigarette firms to withdraw from the code and then later rejoin at their own volition. By 1967, American Tobacco and Lorillard had both withdrawn; thus, advertising for

the product launches of both Carlton and True was no longer required to adhere to the regulations of the advertising code that had been established.^{174–176} Moreover, Richards and colleagues¹⁷⁶ demonstrate that the key tenets of the code were not respected by those remaining as participants. The code, for example, stipulated that cigarette advertising should not depict smoking as essential to social prominence, distinction, success, or sexual attraction, even though Vantage advertisements using the tagline “The Taste of Success” (typified by pictorials of a couple with their classic automobile) were permitted to circulate.¹⁷⁷ Similarly, Barbeau and colleagues¹⁷⁸ found that cigarette print advertising for Camel, Marlboro, Newport, and Virginia Slims violated the fundamental tenets of the code. Their study revealed that a sizable percentage of U.S. students, 10 to 15 years old, perceived dimensions related to social prominence, distinction, success, or sexual attraction to be apparent in the cigarette advertising shown. A majority of students believed that cigarette advertising linked product use with popularity (ranging from 50% for Marlboro to 80% for Virginia Slims) and appearing to be “cool” (ranging from 72% for Marlboro to 84% for Camel). While the code also stated that cigarette advertising should not depict smokers who had obviously just participated in a physical activity requiring stamina or athletic conditioning beyond that of normal recreation, 78% of the students indicated that Marlboro advertising did so.

Another provision of the code reads,

Natural persons depicted as smokers in cigarette advertising shall be at least twenty-five years of age and shall not be dressed or otherwise made to appear to be less than twenty-five years of age.¹⁷⁹

Mazis and colleagues¹⁸⁰ examined how more than 500 respondents perceived the ages of models in a sample of cigarette

advertisements. The percentage of respondents who perceived the models to be younger than 25 years old reached as high as 76% for a Kool Milds model, 89% for a Lucky Strike Lights model, 79% for a Virginia Slims Ultra Lights model, and 91% for a Winston Lights model.

The code prohibited advertising “in school, college, or university media (including athletic, theatrical and other programs)” and the distribution of sample cigarettes to persons under the age of 21 years. In addition, it stated that “no sample cigarettes shall be distributed or promotional efforts conducted on school, college, or university campuses, or in their facilities, or in fraternity or sorority houses.”¹⁷⁹ Nevertheless, in a survey of 10,904 students enrolled in 119 nationally representative four-year colleges and universities during the 2000–2001 school year, Rigotti and colleagues⁵⁰ found that 8.5% of respondents had attended a bar, nightclub, or campus social event where free cigarettes were distributed.

Additional examples of violations of these provisions of the code are cited in chapter 5. The introduction to that chapter mentions that these provisions of the code were highlighted in congressional testimony in 1969 by Joseph F. Cullman III, president of Philip Morris and chairman of the Tobacco Institute, who promised that cigarette manufacturers would comply with the provisions after cigarette advertising was banned from the broadcast media.

The practice of *product placement*, which involves contractual agreements that stipulate on-screen exposures of brand-name goods and services in exchange for fees or services being provided¹⁸¹ (chapters 4 and 10), serves as another example of the failure of self-regulation. U.S. tobacco manufacturers amended the Cigarette Advertising Code in 1990 (renamed as Cigarette Advertising and Promotion Code)

and agreed to no longer “place” their products in movies. A review of internal tobacco industry documents by Mekemson and Glantz,¹⁸² however, revealed that product placement initiatives remained active at least three years after the code was amended.

Another flaw in tobacco industry self-regulation is the inconsistency in policy and behavior between the cigarette and smokeless tobacco manufacturers. For example, the cigarette companies had a voluntary code on the distribution of cigarette samples that prohibited distribution of free samples to persons under the age of 21. The smokeless tobacco industry had a similar voluntary code, but it banned distribution of smokeless tobacco samples to persons under the age of 18.¹⁸³ This younger age cutoff allowed smokeless tobacco manufacturers to conduct aggressive promotional campaigns, including free sampling, on college campuses and at vacation venues attended by large numbers of college students.¹⁸⁴ In addition, the cigarette industry code prohibited the use of testimonials by athletes and other celebrities perceived to appeal to the young, but smokeless tobacco advertising has prominently featured well-known sports figures such as Walt Garrison (football/Dallas Cowboys), Terry Bradshaw (football/Pittsburgh Steelers), George Brett (baseball/Kansas City Royals), Sparky Lyle (baseball/Texas Rangers), and Tom Seaver (baseball/Cincinnati Reds), and other celebrities such as musician Charlie Daniels.¹⁸⁵

Another inconsistency in tobacco industry self-regulation is that advertising and promotions for American brand-name products in foreign countries may not always comply with the industry’s code. For example, despite the code’s ban on the use of celebrities in cigarette advertising, actor James Coburn appeared in a youth-oriented Japanese television commercial for

Lark cigarettes.¹⁸⁵ In some cases, American brand-name cigarettes are distributed in foreign countries by foreign corporations; however, the sales and licensing agreements that allow such arrangements could require compliance with the American company's advertising code.

The 1998 MSA between 46 attorneys general and the major cigarette firms imposed bans on product placement, cigarette billboard advertising, the use of cartoon characters, merchandise displaying brand logos, and any promotions that target youth. One can view this agreement as occupying a middle ground between purely voluntary self-regulation and regulation or legislation. Yet even with its added "teeth" (compared with purely voluntary codes), the MSA has suffered violations. As noted by Goldberg and colleagues,²⁷ the California attorney general has had four successful prosecutions of R.J. Reynolds (RJR) for violations of the MSA and state legislation on the sale and marketing of tobacco products. A San Diego court ruled in June 2002 that RJR unlawfully placed cigarette advertisements in magazines with a large percentage of readers aged 12–17 years.¹⁸⁶ In his ruling, the judge ordered the company to pay \$20 million in fines and commented as follows:

The evidence reveals that after it entered into the MSA, RJR made absolutely no changes to its advertising campaigns, failed to include the goal of reducing Youth exposure to tobacco advertising in its marketing plans and failed to take any actions to track whether or not it was meeting its professed goal of reducing Youth smoking.... [S]ince the MSA was signed, RJR has exposed Youth to its tobacco advertising at levels very similar to those of targeted groups of adult smokers.¹⁸⁷

The U.S. experience with tobacco industry self-regulation is not unique. Cunningham³⁰ and Dewhirst,³⁵ for

example, discuss breaches of voluntary advertising codes that occurred in Canada. At least four studies^{125,188–190} assess the U.K. experience, which is also addressed above in the section on surreal advertising in the United Kingdom. Chapman¹⁹¹ and Winstanley and colleagues¹⁹² provide an Australian perspective. There are numerous examples from multiple jurisdictions in which tobacco companies have not abided by the principles of self-regulatory advertising codes.

Ineffectiveness of Partial Advertising Bans

Partial advertising bans have commonly proven ineffective because even though the tobacco industry faces fewer viable options in the promotional mix, the total amount of promotional spending persists. The \$15.1 billion spent on cigarette advertising and promotion in the United States during 2003 was a record-setting level.¹⁹³ Once one form of promotion has been banned, tobacco firms have tended to use other marketing strategies to continue communicating messages and imagery for their respective trademarks. The late 1960s and early 1970s, for example, marked a period in which U.S. cigarette advertising expenditures largely shifted from broadcast media to print. The tobacco industry's shift in promotional spending reflected that, in accordance with the Public Health Cigarette Smoking Act, U.S. broadcast advertisements for cigarettes were no longer permissible, effective January 2, 1971. U.S. cigarette advertising expenditures doubled for magazines and increased more than fourfold for newspapers during one year alone (from 1970 to 1971).^{102,194} Several content analyses confirm that, largely as the result of the broadcast ban, the number of cigarette advertisements found in U.S. magazines increased dramatically during the 1970s.^{195–199} (See chapter 7 for a discussion of advertising bans as related to the influence of tobacco marketing on smoking behavior.)

Removing cigarette advertising from the broadcast media first appeared to the tobacco control and public health communities to be a victory; over time, however, the desired results were not realized from this policy.^{194,200} Contrary to expectation, cigarette consumption initially increased following the broadcast ban. From 1968 to 1970, Fairness Doctrine antismoking messages were shown prominently on television and radio, but these spots were discontinued following the ban.^{201(pp.496-500)} Furthermore, important changes in print advertising were observed as tobacco manufacturers shifted their advertising resources. According to King and colleagues,¹⁹⁹ who analyzed visual aspects of cigarette magazine advertising from 1954 to 1986, pictures—as opposed to words—became the predominant means of communicating information to consumers. Their content analysis also revealed that models were increasingly engaged in activities, which suggests that the advertisements became increasingly lifestyle oriented. Weinberger and colleagues,¹⁹⁶ meanwhile, found that U.S. tobacco manufacturers responded to the broadcast media ban by directing more resources toward print media advertising, evident by more frequent use of special positioning, color, and full-page or double-page advertisements. Advertisements were typically placed on right-side pages and, during the observed period (1957 to 1977), were increasingly located on the back covers of magazines. They noted, however, that some of the observed changes, such as the increased use of color, could reflect innovations being used by magazine advertisers in general.

An additional consequence of the U.S. ban on broadcast advertising was that tobacco companies increasingly directed their resources toward sponsorship marketing. In fact, the tobacco industry's involvement in sport and cultural sponsorships during the 1970s and 1980s largely contributed to

the general development of sponsorship as a marketing discipline.²⁰²⁻²⁰⁴ Individual tobacco companies turned to sponsoring broadcast sports events as a means to compensate for lost broadcast advertising exposure, yet the promotional messages were not required to be accompanied by health warnings or countervailing communications.^{200,205,206} Even though cigarette advertising is not permitted on television in the United States, tobacco companies continue to receive millions of dollars' worth of national television exposure for their brands through sponsoring sports events such as auto racing.^{121,207-209}

The MSA's 1998 ban on cigarette billboard advertising has prompted an increase in the prevalence of both interior and exterior tobacco advertising at retail outlets. Between February and June of 1999, Wakefield and colleagues conducted observations of cigarette advertising and promotion at the point of sale in 3,464 tobacco-selling retail stores in a total of 191 communities in the United States.²¹⁰ They found that after the MSA ban on tobacco billboards took effect in April of that year, increases occurred in the presence of tobacco sales promotions (e.g., multipack discount offers, gift-with-purchase offers), the presence and extent of functional objects bearing cigarette brand names (e.g., clocks, change mats, shopping baskets), the prevalence and extent of exterior store advertising for tobacco, and the prevalence of interior advertising of tobacco products. According to the authors, the findings suggest that the cigarette manufacturers shifted at least some of their expenditures previously spent on billboard advertising to point-of-purchase marketing following the ban on billboard advertising imposed by the MSA.

Celebucki and Diskin²¹¹ studied the amount of cigarette advertising visible from outside of over-the-counter tobacco retailers in Massachusetts before and after the MSA. For the 556 tobacco retailers in the study,

they found significant increases after the MSA in the prevalence of exterior cigarette advertising on the buildings, windows, and doors of gas stations and gas mini-marts. They also found that a greater amount of cigarette advertising visible from outside these retail establishments was associated with a higher occurrence of illegal sales of cigarettes to minors.

Point-of-purchase retail settings, as well as bars and nightclubs, have become important sites of promotion for U.S. tobacco manufacturers.^{46,47,212–214} The tobacco industry has also directed further resources toward public relations activities, personal selling, direct marketing campaigns, Internet advertising, package design, and trademark diversification.^{215–217} Pollay, a marketing professor at the University of British Columbia, remarks, “It’s like squeezing a balloon. You can shut down one media, but the problem just moves somewhere else.”^{218(p.2)} This point is echoed by Saffer and Chaloupka,²¹⁹ who argue that a limited set of advertising bans does not slow down advertising output but leads instead to shifts in media spending by the tobacco industry. In other words, when one media form is prohibited, the tobacco industry finds media “substitutes” (chapters 4 and 7).

Tobacco companies may change the types and targets of advertising within media as a way to mitigate the effects of rules that limit advertising and promotion. For example, three studies described below provide evidence that youth were exposed to higher levels of tobacco advertising in magazines after implementation of settlement agreements, even though these agreements sought to reduce such exposure. Hamilton and colleagues studied cigarette advertising in 19 magazines in which at least 15% of readers are youth under the age of 18 years. They found that cigarette advertising expenditures in these magazines increased dramatically after implementation of the

MSA and then fell dramatically after the increase was reported prominently in the news media.²²⁰

King and Siegel²²¹ reported data on advertising expenditures for 15 cigarette brands advertised in a total of 38 magazines, both before and after the MSA. They classified cigarette brands as “youth brands” if they were smoked by more than 5% of the smokers in the 8th, 10th, and 12th grades in 1998. They classified magazines as “youth oriented” if at least 15% of their readers or at least two million of their readers were 12 to 17 years old. The investigators found that expenditures on advertising of youth brands in youth-oriented magazines increased by 3.7% between 1995 (\$56.4 million) and 1998 (\$58.5 million)—that is, before the MSA—but increased by 15.2% to \$67.4 million in 1999 (after the MSA). Expenditures then fell to a level slightly higher than the pre-MSA level in 2000 (\$59.6 million).

The Massachusetts Department of Public Health studied advertising before and after the Smokeless Tobacco Master Settlement Agreement (STMSA) for smokeless tobacco products in 12 “youth magazines” (those with at least 15% youth readership or more than two million youth readers).²²² The agency found that smokeless tobacco manufacturers increased their advertising in youth magazines by 136% after the STMSA, from \$4.7 million in 1997 to \$11.1 million in 2001. The increase was 161% (from \$3.6 million to \$9.4 million) for the largest smokeless tobacco manufacturer, United States Smokeless Tobacco Company, which is the only smokeless tobacco manufacturer to have signed the STMSA (which contains the same prohibition against youth-targeted promotions as the MSA signed by cigarette manufacturers). Youth exposed to smokeless tobacco ads included 7.2 million adolescents aged 12–17 years who are readers of *Sports Illustrated* (a magazine

that received an average of \$2.5 million each year in advertising revenue from the United States Smokeless Tobacco Company during the postsettlement period).

Companies frequently apply their brand names to new and different product categories (e.g., Ralph Lauren paint), and this trend has been increasing over the past decade. In the case of tobacco companies, this indirect advertising, also called *brand extension* or *brand stretching*, refers to the application of tobacco brand names, logos, or other distinctive elements of tobacco product brands (and their ads) to nontobacco products. Examples and citations are provided in chapter 4.

Colors and symbols associated with cigarette brands can be used in ways that facilitate the circumvention of tobacco advertising restrictions. For example, as noted above in the section on surreal cigarette advertising in the United Kingdom, the associations in advertisements between purple and Silk Cut cigarettes, and between red and Marlboro cigarettes, may be intended to allow cigarette companies to continue color-based brand promotions under severe marketing rules anticipated to exist in the future. In addition, B&H has been the sponsor of music concerts in Nigeria at which the brand's gold color and the ampersand (&) in the brand's name have been prominently featured. At one of these concerts, a large gold curtain, whose only imagery was three giant ampersands, hung behind the band and dominated the scene. This type of promotion, with sufficient repetition, could lay the groundwork for using a freestanding ampersand to market the cigarette brand at a future time when legislation might prohibit direct advertising and less subtle forms of indirect advertising. Indeed, Finn²²³ describes ads for B&H in the *Far Eastern Economic Review* in which images of birds, lights, a helicopter, a monorail, and a banner were used to construct an abstract depiction of the brand's package. Finn comments that these ads,

if they omitted the brand name and images of cigarettes and smoking, "could fall within the rules of poorly constructed legislation ... and point out the care that governments need to take in the formulation and wording of tobacco advertising legislation if it is to be watertight."^{223(p.187)}

Another reason why the impact of partial advertising bans has been limited is that they allow tobacco companies to avail themselves of imprecise language in the law to maintain or create channels of communications. For example, a seemingly comprehensive advertising ban passed in New Zealand exempted "price lists" and "price notices." Tobacco companies then produced large, colorful ads with barely discernible prices shown in one corner, for prominent display in retail outlets.²²⁴ The state of New South Wales, Australia, banned most forms of tobacco advertising at the point of sale in 1993, including "dummy stock" jumbo-sized cigarette packs. In response, cigarette companies gave retailers large Perspex (acrylic plastic) display cabinets housing many cigarette cartons; the cartons were not easily accessible for purchase, but as "live stock" their display apparently did not breach the new law.²²⁵ The Tobacco Products Control Act adopted in Canada in 1988 prohibited event sponsorships using tobacco product brand names but permitted sponsorships using corporate names. In response, as documented by Dewhirst, all three major Canadian tobacco companies quickly registered several of their cigarette brands as corporate entities so that these "shell" companies—named for cigarette brands—could sponsor events such as Export 'A' Inc. extreme sports and the Craven "A" Ltd. "Just for Laughs" comedy festival.²²⁶

Chapter 4 describes other communication channels and strategies through which tobacco marketers can overcome laws that restrict only traditional forms of tobacco advertising. These methods include the depiction of advertising imagery on the

cigarette pack itself, Internet marketing, and the use of “viral” or “stealth” marketing (e.g., the “Lucky Strike Force, attractive couples working trendy neighborhoods ... proffering hot coffee and cell-phone calls to shivering smokers in winter or iced coffee and lounge chairs in spring and summer”).²²⁷

Facing an increasingly stringent regulatory environment, the tobacco industry has largely shifted its promotional spending from traditional mass media to integrated forms of communications. Similarly, the trend of moving away from traditional mass media promotion to sponsorship, public relations, direct marketing, relationship marketing, and sales promotion has been demonstrated increasingly by nontobacco firms that do not face nearly the same regulatory considerations. With audience fragmentation and a decline in the perceived effectiveness of television advertising, many firms have diverted resources to a variety of other media.^{228–230} Technology, including a greater use of databases, is another factor in explaining why marketing communication campaigns span more media for many firms.¹²² These broader trends in the marketing environment, along with the tobacco industry’s history of overcoming partial advertising bans, are reasons why bans on tobacco advertising and promotion must be comprehensive in order to be effective. The call for a comprehensive ban of tobacco advertising and promotion, by the WHO FCTC and others, requires discussion of whether this policy would violate federal statute or the First Amendment to the U.S. Constitution (see chapter 8).

Summary

The promotion of tobacco products during the past century has been a key factor in the success of the tobacco industry, to the point where the efforts of tobacco firms have long been held up by the advertising industry and others as exemplars for

effective product marketing. Such efforts involve sophisticated targeting of population groups in specific market segments, as well as the development and promotion of a clear and consistent brand identity for individual tobacco products. In an environment in which marketing channels for tobacco have become increasingly restricted by legislation, the ability of tobacco firms to adapt their promotional strategies and maintain their brand images in the public eye serves as a testament to the power of their marketing activities.

Tobacco advertising, promotion, and sponsorship have increasingly come under scrutiny by public health officials and other health advocates. Such promotional efforts are seen as encouraging the continued use of an addictive product, resulting in substantial morbidity and premature mortality, and as being misleading or deceptive in presenting a brand image that obscures the health risks inherent in tobacco use. These factors, along with the tobacco industry’s failure to regulate itself in this area, have motivated ongoing attempts within the public health community to ban all forms of tobacco promotion.

Conclusions

1. The promotion of tobacco products involves sophisticated targeting and market segmentation of potential customers. Common market segmentation dimensions include demographics (e.g., age, gender, race/ethnicity), geography (e.g., market density, regional differences within a domestic or international market), behavioral characteristics (e.g., occasions of cigarette use, extent of use, user’s smoking status), and psychographics (lifestyle analysis).
2. Internal tobacco company documents reveal that two key typologies of cigarette consumers used by cigarette

- firms are “starters” (who frequently initiate smoking during adolescence) and “pre-quitters” (i.e., existing smokers who need reassurance).
3. The brand image of most tobacco products represents the end result of a multifaceted marketing effort involving brand identity, logos, taglines and slogans, pictorial elements, and the use of color. The development, enhancement, and reinforcement of this brand imagery are primary objectives of tobacco promotion.
 4. Tobacco companies have designed their communications of brand image to use principles relating to message repetition, consistency, and relevance to a contemporary audience. The brand’s image is built slowly and collectively by all of the accumulated associations and images of the communications strategy, such as social status, sophistication and social acceptance, athleticism and healthfulness, glamour and fashion, rewarded risk-taking and adventure, and masculinity or femininity.
 5. The key rationales cited for implementing a comprehensive ban on tobacco advertising and promotion include (1) the health consequences of tobacco use (including addiction); (2) the deceptive or misleading nature of several tobacco promotional campaigns; (3) the unavoidable exposure of youth to these campaigns; (4) the role of tobacco advertising and promotion in increasing tobacco use in the population, especially among youth; (5) the targeting of “at-risk” populations, including youth, women, and ethnic and racial minorities, through advertising and promotion; (6) the failure of the tobacco industry to effectively self-regulate its marketing practices; and (7) the ineffectiveness of partial advertising bans.
 6. Substantial evidence exists from the United States and several other countries that the tobacco industry does not effectively self-regulate its marketing practices.
 7. Substantial evidence exists from the United States and several other countries that tobacco companies typically respond to partial advertising bans in ways that undermine the ban’s effectiveness. These responses include shifting promotional expenditures from “banned” media to “permitted” media (which may include emerging technologies and “new” media), changing the types and targets of advertising in permitted media, using tobacco-product brand names for nontobacco products and services, and availing themselves of imprecise clauses in the legislative text of the bans that allow them to continue to promote their products.

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4

Types and Extent of Tobacco Advertising and Promotion

This chapter examines the types and extent of tobacco advertising and promotion in the United States and their evolution over time. Areas discussed include

- *A taxonomy of past and present channels used in advertising and promoting tobacco products*
- *A review of emerging promotional channels, such as packaging, viral marketing, and the Internet*
- *Expenditures for advertising and promotion, and trends over time, for cigarettes, cigars, and smokeless tobacco, using data from the Federal Trade Commission, the advertising trade press, and other sources as available*

Despite restrictions on cigarette advertising from federal legislation adopted in 1969 and from the 1998 Master Settlement Agreement, cigarette marketing expenditures have increased substantially, peaking at \$16.7 billion (in 2006 dollars) in 2003 and then dropping in 2005 (the latest year for which figures are available) to \$13.5 billion (in 2006 dollars). Over time, expenditures have shifted dramatically from traditional print advertising to promotional activities, primarily price discounting. These trends have had a major impact on the milieu of media messages that affect tobacco-related attitudes and behaviors.

Introduction

For at least 50 years, cigarettes have been one of the most heavily marketed consumer products in the United States. This chapter reviews the types and extent of tobacco advertising and promotion as well as how the scope and nature of tobacco marketing have changed over time. The first part of the chapter addresses the types of tobacco advertising and promotion used, including emerging marketing practices. The second part of the chapter reviews the extent of tobacco advertising and promotion and long-term trends in marketing expenditures. This chapter, like the monograph as a whole, focuses on the United States, but developments in other countries are occasionally mentioned for illustrative purposes.

In 2005, the U.S. tobacco industry spent \$13.5 billion (in 2006 dollars) on tobacco advertising and promotion. Since 1981, as cigarette consumption and sales in the United States have declined, tobacco industry expenditures on advertising and promotion have grown 10 times greater.¹ The tobacco industry has mastered and dominated nearly all forms of communications media during the past 100 years. In the early 1900s, these included promotional items such as trading cards (often included with a pack of cigarettes). In the 1920s and 1930s, these forms of communications included print media such as magazine and newspaper advertising. In the 1940s and early 1950s, the tobacco industry was one of the prime sponsors of radio. In the 1950s and 1960s, the tobacco industry was predominant in television advertising.^{2,3} In the 1970s and 1980s, tobacco manufacturers dominated sports and event sponsorships, billboards, and magazine advertising. In the 1980s and 1990s, point-of-sale advertising, direct mail advertising, sponsorships, and promotions on the Internet became major marketing tools for cigarette manufacturers. Today,

in response to factors such as restrictions on tobacco advertising, the mix of promotional channels has evolved further into areas such as promotional allowances and viral marketing techniques.

Information on the extent of tobacco advertising and promotion is important for several reasons. First, the pervasiveness of tobacco advertising and promotion determines the level of consumers' exposure to marketing messages and images. The "dose" of exposure, in turn, is likely to correlate with the impact of media communications. (Impact might be measured using outcomes such as brand recognition, attitudes toward smoking, and smoking behavior.) However, susceptibility to smoking and receptivity to advertising and promotion vary among individuals and population subgroups (chapters 5 and 7), and it is important to measure relative exposure levels among them.

Second, widely dispersed tobacco advertising and promotion are likely to affect social norms concerning tobacco use. In outlining direct and indirect mechanisms by which advertising might increase tobacco consumption, the 1989 Surgeon General's report points out this indirect effect: "the ubiquity and familiarity of tobacco advertising and promotion may contribute to an environment in which tobacco use is perceived by users to be socially acceptable, or at least less socially objectionable and less hazardous than it is in fact."⁴(p.502)

Third, heavy spending for cigarette advertising in a particular media outlet tends to suppress coverage of smoking-and-health issues in that medium⁵ (chapter 9). Similarly, heavy spending for cigarette promotion, sponsorships, philanthropy, and public relations targeting certain sporting activities, cultural institutions, or community organizations (e.g., groups representing women or minorities) "may create political support for, or mute

opposition to, the industry's marketing and policy objectives."^{4(p.502)} These two effects provide additional indirect mechanisms by which tobacco advertising and promotion may increase tobacco consumption.^{4(p.502)}

Fourth, "saturation" advertising facilitates the penetration of marketing messages into communities where more populations are found that are vulnerable to take up and maintain tobacco use, especially when communication channels are selectively chosen to reach those populations.

Fifth, policymakers wishing to enact a comprehensive ban on tobacco advertising and promotion need to be aware of the many types of tobacco advertising and promotion, so as to avoid ambiguities in legislation that would allow manufacturers to shift marketing expenditures from "banned" media to "allowed" media (see below and chapters 3 and 8).

Finally, it is important to know the dose and duration of a population's exposure to tobacco advertising and promotion to estimate the amount of "corrective communication" that may be needed to negate or overcome the effects of many years of protobacco marketing. Again, varying susceptibility to smoking and receptivity to advertising and promotion need to be taken into account in determining the optimal amount of corrective communication. In the civil (i.e., noncriminal) lawsuit waged by the U.S. Department of Justice (DOJ) against tobacco manufacturers, alleging violations of the Racketeer Influenced Corrupt Organizations (RICO) Act, the DOJ proposed extensive remedies including corrective communication concerning the adverse health effects of smoking and exposure to secondhand smoke, the addictiveness of smoking and nicotine, "low-tar" cigarettes, and the impact of tobacco marketing on youth.⁶ (Federal Judge Gladys Kessler, in a decision issued on August 17, 2006, concluded that "adoption of such a public education and countermarketing campaign

would unquestionably serve the public interest." However, she ruled that "under the narrow standard for §1964(a) remedies articulated in [Court of Appeals] Judge [David] Sentelle's Opinion [*United States v. Philip Morris USA Inc., et al.*, 396 F.3d 1190 (D.C. Cir. 2004)], the Court cannot enter such a remedy because it is not specifically aimed at preventing and restraining future RICO violations."⁷⁾

Sources of Data

Information on the types and extent of tobacco advertising and promotion comes from many sources, including the Federal Trade Commission (FTC), advertising trade publications such as *Advertising Age* and *Adweek*, research published in scholarly journals and reports, and the lay press. The FTC is a major source of data on tobacco advertising and promotional expenditures. The Federal Cigarette Labeling and Advertising Act of 1965 and the Public Health Cigarette Smoking Act of 1969 required the FTC to transmit an annual report to Congress concerning current practices and methods of cigarette advertising and promotion.⁴ These reports have been transmitted to Congress since 1967.^{1,8} The Comprehensive Smokeless Tobacco Health Education Act of 1986 required the FTC to report to Congress every other year on current advertising and marketing practices for smokeless tobacco products;⁴ ten such reports have been transmitted to Congress, with the first report issued in 1987 (but dated 1986) and the most recent issued in 2007.^{9,10} The FTC has obtained information on advertising and promotion from the largest cigarette and smokeless tobacco manufacturers through a compulsory data collection process.

Beginning with fiscal year 2000, the Federal Reports Elimination and Sunset Act of 1995 (Public Law 104-66) terminated most periodic reporting requirements established

before 1993, including those requiring the FTC to transmit to Congress reports on cigarette and smokeless tobacco advertising and promotion. A Senate Committee has reviewed the legislative history and detail surrounding that action.¹¹ In April 2001, the FTC announced that it was soliciting public comments “to help it determine whether to continue to issue reports on the sales, advertising and promotion of cigarettes and smokeless tobacco products, as well as the formats for any such reports.”^{12(p.18640)} At least 98 public comments were submitted to the agency, almost all of which supported continued publication.¹² As noted above, the FTC has continued to issue reports on cigarette and smokeless tobacco marketing since the sunset of statutory requirements.

The FTC has produced one report on cigar advertising and promotion¹³ that presented data on advertising and promotional expenditures for 1996 and 1997 (summarized later in this chapter). The agency collected these data “in response to information showing a resurgence of cigar use in the United States,” by issuing special orders to the five leading domestic cigar manufacturers at that time (Consolidated Cigar Corporation; General Cigar Co., Inc.; Havatampa Inc.; John Middleton Inc.; and Swisher International, Inc.).

Types of Tobacco Advertising and Promotion

FTC Definitions

To facilitate data collection, monitoring, and reporting, the FTC has developed categories and definitions of advertising and promotion expenditures, with particular reference to the tobacco industry. These categories, drawn from FTC reports on cigarette, cigar, and smokeless tobacco advertising and promotion (especially

the cigarette report for 2004/2005¹), are presented below, alphabetically. As explained within the definitions, this classification system has been structured to avoid double counting of expenditures in more than one category. For example, expenditures for a magazine advertisement promoting a cigarette-sponsored event appear in the “sponsorships” category but are excluded from the “magazines” category.

Audiovisual. Audiovisual or video advertising on any medium of electronic communications not subject to the Federal Communications Commission’s jurisdiction, including screens at motion picture theaters, video cassettes, and monitors in stores, but excluding expenditures in connection with Internet advertising.

Company Web site. All expenditures associated with advertising on any company Internet Web site.

Coupons. All costs associated with coupons for the reduction of the retail price of tobacco products, whether redeemed at the point of sale or by mail, including all costs associated with advertising or promotion, design, printing, distribution, and redemption. However, when coupons are distributed for free tobacco products and no purchase or payment is required to obtain the coupons or tobacco products, these activities are considered as sampling rather than couponing. This category has been separate from the “retail-value-added” category in the FTC’s cigarette reports since 1997.

Direct mail. Advertising sent via direct mail to the consumer, excluding expenditures in connection with sampling, specialty item distribution, public entertainment, endorsements, sponsorships, coupons, retail value added, and Internet advertising.

Endorsements and testimonials. This category includes, but is not limited to,

all expenditures made to procure tobacco use; the mention of a tobacco product or company name; the appearance of a tobacco product, name, or package; or other representation associated with a tobacco product or company, in any situation (e.g., motion pictures, stage shows, or public appearances by, or photographs of, a celebrity or public figure) in which such use, mention, or appearance may come to the public's attention.

Internet—other. Internet advertising other than on the company's own Web site, including on the World Wide Web, on commercial online services, and through electronic mail messages.

Magazines. Magazine advertising, but excluding expenditures in connection with sampling, specialty item distribution, public entertainment, endorsements, sponsorships, coupons, and retail value added.

Newspapers. Newspaper advertising, but excluding expenditures in connection with sampling, specialty item distribution, public entertainment, endorsements, sponsorships, coupons, and retail value added.

Outdoor. Billboards; signs and placards in arenas, stadiums, and shopping malls, whether they are open air or enclosed; and any other advertisements placed outdoors, regardless of their size, including those on cigarette retailer property; but excluding expenditures in connection with sampling, specialty item distribution, public entertainment, endorsements, sponsorships, coupons, and retail value added.

Point-of-sale (point-of-purchase) advertising. Advertising posted in retail outlets, but excluding expenditures in connection with outdoor advertising, sampling, specialty item distribution, public entertainment, endorsements, sponsorships, coupons, and retail value added.

Price discounts. Price discounts paid to tobacco retailers or wholesalers to reduce the price of tobacco products to consumers, including off-invoice discounts, buy downs, voluntary price reductions, and trade programs, but excluding retail-value-added expenditures for promotions involving free tobacco products and expenditures involving coupons.

Promotional allowances—retail. Payments to tobacco retailers to facilitate the sale or placement of any tobacco product, including payments for stocking, shelving, displaying, and merchandising brands, volume rebates, and incentive payments, but excluding expenditures in connection with newspapers, magazines, outdoor, audiovisual, transit, direct mail, point of sale, and price discounts.

Promotional allowances—wholesale. Payments to tobacco wholesalers to facilitate the sale or placement of any tobacco product, including payments for volume rebates, incentive payments, value-added services, promotional execution and satisfaction-of-reporting requirements, but excluding expenditures in connection with newspapers, magazines, outdoor, audiovisual, transit, direct mail, point of sale, price discounts, and retail promotional allowances.

Public entertainment—adult only. Public entertainment events bearing or otherwise displaying the name or logo or an image of any portion of the package of any of a company's tobacco products or otherwise referring or relating to tobacco products, which take place in an adult-only facility, including all expenditures made by the company in promoting and/or sponsoring such events. The definition for this category for cigars specifically mentions the inclusion of "dinners, wine or spirit tastings, and weekends or other vacations featuring cigar smoking."¹³

4. Types and Extent of Tobacco Advertising and Promotion

Public entertainment—general audience.

The same as “public entertainment—adult only,” except that the public entertainment events do *not* take place in an adult-only facility.

Retail value added—bonus tobacco products. Retail-value-added expenditures for promotions involving free tobacco products (e.g., buy two packs, get one free), whether or not the free tobacco products are physically bundled together with the purchased tobacco products, including all expenditures and costs associated with the value added to the purchase of tobacco products (e.g., excise taxes paid for free cigarettes and increased costs under the Master Settlement Agreement [MSA]).

Retail value added—non-tobacco-product bonus. Retail-value-added expenditures for promotions involving free nontobacco items (e.g., buy two packs, get a cigarette lighter), including all expenditures and costs associated with the value added to the purchase of tobacco products.

Sampling distribution. Sampling of tobacco products, including the costs of the products, all associated excise taxes and increased costs under the MSA, and the cost of organizing, promoting, and conducting sampling. Sampling includes the distribution of tobacco products for consumer testing or evaluation when consumers are able to use the tobacco products outside of a facility operated by the company, but does not include the cost of actual clinical testing or market research associated with such tobacco product distributions. Sampling also includes the distribution of coupons for free tobacco products, when no purchase or payment is required to obtain the coupons or tobacco products.

Specialty item distribution—branded. All costs of distributing items other than cigarettes (whether the items are sold, redeemed by coupon, or otherwise

distributed) that bear the name or logo or depict an image of any portion of the package of a tobacco product, including the costs of the items distributed but subtracting any payments received for the item. The costs associated with distributing nontobacco items in connection with sampling or retail-value-added programs are reported in those categories, not as specialty item distribution. Examples of specialty items distributed as part of tobacco promotions are sunglasses, key chains, calendars, sporting goods, T-shirts, caps, and other clothing.

Specialty item distribution—nonbranded.

The same as “specialty item distribution—branded,” except that the specialty items do *not* bear the name or logo or depict an image of any portion of the package of a tobacco product.

Sponsorships. For cigarettes, this category is defined as sponsorships of sports teams or individual athletes but excludes endorsements.¹ For smokeless tobacco, this category is called “sports and sporting events,” is duplicative of expenditures for other categories, and is defined as follows: “All costs associated with sponsoring, advertising or promotion of sports or sporting events, including football, weight lifting, sailing, rodeo, automobile, race car, funny car, motorcycle, bicycle, truck, monster truck, tractor-pull, fishing, and hunting events, competitions, tournaments, and races.”^{10(p.32)} In the FTC’s report on cigar advertising and promotion,¹³ this category is called “sports” and also was duplicative of expenses reported in other categories.

Telephone. Telephone advertising, including costs associated with the placement of telemarketing calls or the operation of incoming telephone lines that allow customers to participate in any promotion or hear pre-recorded product messages; but excluding costs associated with having

customer service representatives available for responding to consumer complaints or questions.

Television and radio. This category was used for the FTC's report on cigar advertising and promotion,¹³ and was defined as advertising on any medium of electronic communications subject to the jurisdiction of the Federal Communications Commission such as broadcast television, cable television, and radio. For that report, this category was combined with the "audiovisual" category. Broadcast advertising has been prohibited by law for manufactured cigarettes (since 1971), smokeless tobacco (since 1986), and "little cigars" (since 1973) but is still permitted for other cigars, pipe tobacco, and roll-your-own cigarette tobacco⁴ (chapter 8).

Transit. Advertising on or within private or public vehicles and all advertisements placed at, on, or within any bus stop, taxi stand, transportation waiting area, train station, airport, or any other transportation facility; but excluding expenditures in connection with sampling, specialty item distribution, public entertainment, endorsements, sponsorships, coupons, and retail value added.

All other. Advertising and promotional expenditures not covered by another category.

Indirect Advertising

Indirect advertising, a form of trademark diversification, is often used by manufacturers where partial advertising bans are in force. This term, also called *brand sharing* or *brand stretching*, refers to the application of cigarette brand names, logos, or other distinctive elements of cigarette brands (and their ads) to nontobacco products.^{14,15} For example, after enactment of a cigarette advertising ban in Norway in 1975, Camel boots were introduced in that country, with

advertisements that were virtually identical to earlier ads for Camel cigarettes.¹⁶ Other examples include "Marlboro Classics" clothing, sold in at least 29 countries; Marlboro and Camel lighters, Pall Mall matches, Peter Stuyvesant Travel, and Camel footwear in France, following the tobacco advertising restrictions imposed by the *Loi Veil* legislation in 1976; Camel boots in Finland, after direct tobacco advertising was banned in 1976; "Camel adventures" (travel tours) in Sweden, after tobacco advertising was restricted in 1979; Liggett & Myers (L&M) matches, Camel scooters, Gauloises travel excursions, and Bastos cassettes in Belgium, after the enactment of advertising limits under the Royal Decree of 20 December 1982; the Benson & Hedges Bistro in Kuala Lumpur, Malaysia, where direct tobacco advertising is banned; Camel Trophy "adventure boots" in Turkey, after its 1997 ban on tobacco advertising; and plain (nontobacco) *pan masala* as an advertising surrogate for tobacco-containing *pan masala* in India, where advertising of tobacco products has been banned since 2004.^{14,17-21}

A Web site description of a Marlboro Classics clothing store in Hong Kong reads,

Although Marlboro Classics clothing chain is part of the Marlboro cigarettes company, one thing is for sure: their clothes are a lot healthier, and better looking. There are great chinos, shirts, T-shirts and accessories, including shoes. You will walk out looking like you just did a photo shoot in the Wild West for, well, a cigarette advert. But nevertheless, the quality is high, the prices fair, and the style is definitely cool.²²

Two R.J. Reynolds (RJR) France documents, "Communication Strategy and Strategic Plan 1992-1996" and "Worldwide Brands, Inc. Strategic Plan 1993-1997" describe how to circumvent legal restrictions by promoting nontobacco products and services bearing the Camel and Winston

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brand names.^{23,24} These documents were made public in a court judgment (Tribunal de Grande Instance de Paris 19 October 1998).¹⁵ According to RJR France's 1992–1996 strategic plan,^{23(p.4)}

Compared to most competitors, RJR France seems better prepared to successfully confront the new legal restrictions thanks to a larger number of available logo licensing activities, (Camel Trophy watches, Camel boots, Camel collection/shops, Winston wear) allowing a satisfactory communication continuity behind [the] Camel and Winston [brands].

Tobacco control research has also borne out the connection between brand stretching and promotion of the sponsoring tobacco products. Initial research shows that advertising for the nontobacco product or service is consistently seen as advertising for the sponsoring tobacco brand,^{25,26} while 15-year-olds' awareness of brand stretching is independently associated with being a smoker.²⁷ Thus, indirect advertising serves as a powerful tool for maintaining a product brand identity, particularly in the absence of traditional promotional channels.

Advertising on the Package

As the “face” of the product being sold, packaging is always an important part of the firm's advertising and promotion considerations. For cigarettes, packaging is even more important because the package is not opened once and discarded, as with many purchases, but is opened each time a cigarette is removed. The visibility of the package under these circumstances makes packaging an important advertising vehicle. An additional advantage of advertising on tobacco packaging is that it does not fall within any of the FTC's categories of advertising and promotion; hence, expenditures for this marketing vehicle are not reported to the FTC.

Internal tobacco corporate documents make it clear that the industry understands and appreciates the value of packaging in influencing smokers and potential smokers. A 1963 Liggett & Myers report states, “The primary job of the package is to create a desire to purchase and try. To do this, it must look new and different enough to attract the attention of the consumer.”²⁸(Bates no. TI3072-9042)

Philip Morris's comment regarding its efforts to target women provides one example of how packaging is used to influence specific target markets or niches:

Some women admit they buy Virginia Slims, Benson & Hedges, etc. when they go out at night, to complement a desire to look more feminine and stylish....²⁹(Bates no. 2060037888) Women are a primary target for our innovative packaging task.²⁹(Bates no. 2060037905)

In appealing to the youth segment, Lorillard developed unique packaging for Zack (a new brand in the 1970s). “Zack's strength in appealing to young adults is its unusual name, denim pack and graphic entity.”³⁰(Bates no. 91260420) Similar strategies have been followed by Gauloises in France and Brown & Williamson (B&W) in the United States. Special package design for *Légères*, a brand made by Gauloises, portrays a seductive young female in a dungeons and dragons setting.³¹ Referring to an innovative Kool package that opens as a book and has rounded corners and vivid colors, B&W vice president Ludo Cremers commented, “The response from consumers is ‘this is a pack to be seen with’.”³²(p.C11)

Many other examples of new cigarette packaging shapes or materials³³ and vivid or creative imagery on cigarette packs^{34–36} have been reported. A collector of cigarette packs—who claims to have collected more than 33,500 cigarette packs from more than

Cigarette Packaging as Seen by the Tobacco Industry

The impact of cigarette packaging was explored in detail in one study of industry documents. This study concluded that pack imagery has significant effects on an individual's perception of the cigarette product and encourages trial smoking, and in highly competitive or restricted environments, the pack acts as an advertisement that creates or reinforces brand imagery.^a When the pack shows signs of weakness, redesign is quick to follow:

Marlboro is significantly under-represented in the 27.5% menthol category. The existing Marlboro Menthol has a 0.2 market share, or less than 1% of the category.... Three new products have been developed.... The full flavor pack has been redesigned to achieve a fresher more contemporary look while preserving the basic identity of the original.^b

British American Tobacco focused on packaging even when it considered selling individual cigarettes to people in less-developed countries: "The brand image must be enhanced by the new packaging ... if you just say, this is a cheap cigarette ... they're not going to go for it."^c In addition, cigarette packages have been designed to appeal to particular target groups, such as young adults or women.

^aWakefield, M., C. Morley, J. K. Horan, and K. M. Cummings. 2002. The cigarette pack as image: New evidence from tobacco industry documents. *Tobacco Control* 11 Suppl. 1: i73–180.

^bFuller, S. Marlboro menthol. 30 Sep 1987. Philip Morris. Bates No. 2048517809/7813. <http://legacy.library.ucsf.edu/tid/jqm92e00>.

^cMuggli, M. E., and R. D. Hurt. 2003. Listening between the lines: What BAT really thinks of its consumers in the developing world. *Tobacco Control* 12 (1): 104.

140 countries, dating from the 1890s to the present—has more than 1,700 images and illustrations of cigarette packs on the collection's Web site.³⁷ It includes, for example, dozens of different images of Camel iconography (including Joe Camel) on cigarette packs sold in Argentina, Austria, France, Germany, Italy, Mexico, Norway, Switzerland, and the United States.³⁷

Packaging accessories provide yet another channel for advertising imagery. In Hong Kong, Philip Morris introduced a plastic outer cover for Marlboro cigarette packs, featuring a series of images of the Marlboro cowboy. Besides presenting powerful visuals of the "Marlboro Man," the cover also seems designed to obscure the health warning on the underlying pack.³⁸

Cigarette package design can be an important feature of in-store advertising. An American Tobacco Company memorandum stated that "an integrated

package design look can provide for a greater in-store presence,"³⁹(Bates no. 94600013) and Wakefield and colleagues explained that "the arrangement of packs at the point of purchase themselves become an advertisement for the brand family."⁴⁰(p.i76)

Similarly, a British American Tobacco report states,

Given the consequences of a total ban on advertising, a pack should be designed to give the product visual impact as well as brand imagery.... The pack itself can be designed so that it achieves more visual impact in the point of sale environment than its competitors.⁴¹(Bates no. 102699354)

Colors on packaging, like the colors in traditional advertising (chapter 3), can contribute to brand image. For example, tobacco companies have used lighter colors on packages to convey a sense of a lighter and perhaps healthier cigarette.

In a 1979 report, RJR pointed to lighter colors for the Camel's filter brand as playing a key role in creating the image of "reduced strength":

Refinements in the [Camel Filter brand] Package consist mainly of increasing the amount of white space on the pack and lightening the brown color tones, ... to give the revised package the appearance of reduced strength.⁴²(Bates no. 500566631)

A Canadian ministerial advisory committee on tobacco control concluded,

The colours and designs of cigarette packages continue to reinforce the notion that some brands are less harmful. The hue and density of the colours applied within a brand family follow a natural spectrum of intensity, with the lightest colours matched to the 'lightest' brand.⁴³(p.10)

The committee recommended a ban on the use of "deceptive descriptors such as 'light' and 'mild' on cigarette packaging and marketing ... [and] the use of other words, *colours* or devices that result in an erroneous perception of a difference in health risks and/or tar/nicotine deliveries."⁴³(p.11) (emphasis added)

Beyond the issue of perceiving products as light or mild, tobacco packaging has been shown in general to both reinforce brand imagery and reduce the impact of health warnings.⁴⁴⁻⁴⁷ Conversely, when fewer brand image cues appear on the packaging, adolescents are able to recall nonimage health information more accurately.⁴⁷ Plain packaging limits the ease with which consumers associate particular images with cigarette brands and significantly influences smoking behavior.⁴⁴ Thus, packaging not only plays a role in product branding but can also be used effectively in policy interventions designed to counter the desirability of smoking.

Viral (or Stealth) Marketing

One strategy that tobacco marketers have used increasingly is called *viral* or *buzz* marketing or, more pejoratively, as *stealth* or *guerilla* marketing. It is described as the situation in which "the advertiser creates an environment in which the idea can replicate and spread. It's the virus that does the work, not the marketer."⁴⁸(p.26) Examples might include paying teens to talk to their friends about a product or to infiltrate a chat room, commissioning footpath graffiti, or creating Web sites or sponsoring events that support a

Integrating Packaging and Marketing: The "Kool Mixx" Campaign

One example of combining custom packaging with merchandising for an integrated product marketing effort was Brown & Williamson's 2004 hip-hop music-themed "Kool Mixx" campaign for Kool cigarettes. The campaign included (1) a series of limited-edition cigarette packs featuring artists' renditions of the elements of hip-hop culture—"MC-ing" (rapping), "disc jockeying" (DJ-ing), break dancing, and creating graffiti art; (2) a "Mixx Stick" radio, free with the purchase of a limited-edition two-pack set; (3) free magazine subscriptions for various hip-hop themed magazines; (4) an interactive Kool Mixx compact disc featuring video clips of Kool Mixx events and interviews and performances from rappers, DJs, graffiti artists, and dancers; (5) "Mixx"-branded desktop wallpaper to be downloaded to the user's computer; (6) three "test your hip-hop skills" interactive games; (7) a selection of audio tracks; and (8) DJ software enabling the user to create original music mixes.^a

^aHafez, N., and P. M. Ling. 2006. Finding the Kool Mixx: How Brown & Williamson used music marketing to sell cigarettes. *Tobacco Control* 15 (5): 359–66.

product but without overt brand imagery.^{49,50} The labels for this marketing activity reflect how it works: the marketers orchestrate a “tsunami of chatter”⁴⁹—or buzz—that helps an idea or product spread like a virus. Commercial sponsorship is surreptitious so that consumers believe they are discovering something on their own—hence, the descriptors “stealth” and “guerrilla.”⁵⁰

Although the terms *viral marketing* and *stealth marketing* are relatively new, they are not different from two other concepts familiar to social scientists. A parallel, earlier concept familiar to communication researchers is the multistep flow in persuasion efforts. This process refers to the fact that those around us can and do influence us, but this influence comes as a consequence of the media messages to which we are all exposed.⁵¹ A bandwagon effect represents a similar concept that R.J. Reynolds recognized decades ago. Widespread exposure to a brand’s advertising creates an initial focus on the brand. A bandwagon, or virus, then allows the brand’s share of the market to grow. Once 30% of underage smokers adopt a brand, its lasting success in the marketplace is said to be ensured.⁵²

An article on stealth marketing in *Business Week*⁴⁹ describes the use of the technique to reinvigorate a well-known cigarette brand:

Brown & Williamson Tobacco Corp. and its ad agency, Bates, decided to add buzz to Lucky Strike’s equation. The result was the Lucky Strike Force, attractive couples working trendy neighborhoods such as Miami’s South Beach, New York’s Soho, and Santa Monica, Calif., proffering hot coffee and cell-phone calls to shivering smokers in winter or iced coffee and lounge chairs in spring and summer. ‘Send up a smoke signal, and we’ll be there,’ local teaser ads urged. The Strike Force has helped the onetime icon edge back toward broad availability. ‘As a marketer, you hope

to have your consumer do your marketing for you,’ explains Sharon Smith, director of Lucky Strike. ‘It is credible, less expensive, and enormously believable.’

The Internet has played a crucial role in viral marketing. Camel was the sponsor of a German Web site for a new rock band, featuring English headings such as “party previews,” “love parade,” and “Berlin fashion,” and a picture of the members of a mixed-sex band fondling each other nude.⁵³ A nontobacco example is the Web-based company Tremor. With 280,000 teens (1% of total teenage population), the firm, which is formally linked to major (nontobacco) marketers, seeks to involve teenagers in the marketing process. One example of the process is the naming of the movie *Eurotrip*. More than 60,000 Tremor members submitted title suggestions after reviewing a brief movie synopsis. Dreamworks, the movie’s producer, narrowed down the list, picked its favorites, and then chose the official title. The winning title had been submitted by 20 Tremor members.⁵⁴

Although not formally linked to tobacco firms, Internet “virtual teen smoking clubs” make positive smoking images for youths the norm.⁵⁵ Ribisl⁵⁵ reviews a number of sites, including (1) <http://www.smokingcelebs.com/teenceleb.html>, one of a dozen or more Web sites dedicated to smoking by celebrities; (2) online clubs, such as the Yahoo! Club “Smoking_Girls_in_Movies” or the newsgroup alt.smokers.glamour; (3) Teen Smokers Home Page, described as a “place for teen smokers to hang out”; and (4) Badteengirlssmokingden, a Yahoo! site that has almost 1,500 members. In addition, teen smokers participate in online polls and message boards.

British American Tobacco (BAT) has developed an independent Web site that features BAT retailers who appear to offer independent advice on nightlife to young people. The youth are directed to bars, clubs,

or restaurants where BAT cigarettes are being sampled or promoted.⁵⁶

Another approach to viral, or stealth, marketing is embodied by trend influence marketing, which involves an alliance among the tobacco industry, the alternative press, and bars and nightclubs.⁵⁷ The alternative press includes free periodicals distributed in trendy nightclubs and found at stores and coffee houses frequented by the club crowd. These periodicals, which lend “hip credibility” to the advertised brands, have become a major outlet for modern tobacco marketing. A sampling of two prominent alternative weeklies (one in San Francisco and the other in Philadelphia) found a dramatic increase in tobacco advertising from 1994 to 1999: the number of ads increased from 8 to 337 in the San Francisco weekly, and from 8 to 351 in the Philadelphia weekly.⁵⁸ In addition, smoking “hipsters” are recruited clandestinely (from the bar and nightclub scene) to surreptitiously sell tobacco products to unsuspecting young adults in bars and elsewhere.⁵⁷

BAT’s “Project Whisper,” a good example of a viral strategy, was intended to capitalize on social interactions within bars to influence bar patrons:

The rationale of Project Whisper is straightforward—influence an opinion leader with your product communication and you are at the same time achieving dissemination of that communication throughout his sociometric network. An additional aspect of this type of communication is that it typically takes place where a high degree of opinion transfer and modelling behaviour is observed. This is seen in the British public house or night club, and has equivalent phenomena in all societies.⁵⁹(Bates no. 542003684)

Young marketers (or “roachers”) are hired by tobacco companies to sell cigarettes in

trendy bars and clubs in Sydney, Australia. Selected for their good looks, style, and charm, the roachers often appear at special dance events where tents filled with bean bags, a bar, and a DJ help them create “fantastic themed sales points.”⁶⁰

Viral marketing techniques are spread across several of the FTC’s categories of advertising and promotion, but some of these techniques may not be captured by those categories. In addition, a clear definition of viral marketing for purposes of estimating the extent of its use has not been developed, so no information is available on expenditures and trends for viral marketing of tobacco products.

Internet Marketing

Aside from its use in viral marketing, as described above, the Internet has been used to actually sell tobacco products. In a 2002 study, Ribisl⁵⁵ found 195 Internet cigarette vendors in the United States. A majority of vendors (105) were in New York State, and most of these were in the western part of the state on Indian reservations. A total of 88 Web sites sold other tobacco products: 42%, cigars; 39%, smokeless tobacco; 18%, clove cigarettes; and 8%, bidis.

The 2001 National Household Survey on Drug Abuse found that 3.3% of 12- to 17-year-olds reported having purchased cigarettes over the Internet at least once during the past month.²⁰ Data from additional studies indicate that buying cigarettes on the Internet is easier than in retail outlets, suggesting the potential for future growth. As one example, a youth tobacco purchase survey found that four 11- to 15-year-olds were successful in 76 (92%) of 83 attempts to purchase cigarettes via the Internet.⁵⁵

States have taken a variety of steps to attempt to control tobacco sales over the Internet to ensure that state tobacco taxes

are applied and that illegal sales to minors do not occur.⁶¹ However, the extent to which these actions may have reduced Internet-based tobacco sales and marketing is unclear.

In March 2000, an attorney with Philip Morris Corporate Services commented on the use of the company's Australian Web site:

As you are no doubt aware, our ability to communicate about the Company and its positions through traditional media is severely restricted. As a result, the website takes an *[sic]* added significance.⁶²(Bates no. 2072557317A)

Nevertheless, the attorney added that “the site will be purely an information site and will not have any elements of marketing, branding or e-commerce.”⁶²(Bates no. 2072557317A)

As noted above, the FTC now requires tobacco manufacturers to report to the agency their expenditures on advertising and promotion, according to several categories, two of which pertain to the Internet: (1) expenditures associated with advertising on any of the tobacco company's Internet Web sites (“Company Web site”); and (2) expenditures for Internet advertising other than on the company's own Web site, including on the World Wide Web, on commercial online services, and through electronic mail messages (“Internet—other”). From 1996 to 2001, there was only one (combined) category for Internet expenditures, and for these years, the major cigarette companies reported the following expenditures for Internet advertising: \$432,000 (1996); \$215,000 (1997); \$125,000 (1998); \$651,000 (1999); \$949,000 (2000); and \$841,000 (2001). The companies reported a 285% increase in spending for advertising on company Web sites from 2002 (\$940,000) to 2005 (\$2,675,000). For those four years, however, they reported no expenditures for “Internet—other” advertising, such as banner ads on third-party Web sites or direct mail advertising

using e-mail.¹ The major smokeless tobacco companies, using one combined category for Internet advertising, reported no expenditures for that category before 2000 but reported spending \$155,405 in 2000 and \$413,000 in 2005, a 266% increase.¹⁰

In a repeated cross-sectional survey of New Jersey adults, the proportion of Internet users reporting exposure to online tobacco-product advertising increased from 6.9% in 2001 to 15.6% in 2002 to 17.8% in 2005. The 2005 survey showed significantly higher recall of online tobacco-product advertising among those aged 18–24 years than among older groups.⁶³ The 2004 National Youth Tobacco Survey found that 34.1% of middle school students and 39.2% of high school students reported seeing advertisements for tobacco products on the Internet.⁶⁴

In a 2003 fact sheet on Internet tobacco marketing (<http://www.tobaccofreekids.org/research/factsheets/pdf/0081.pdf>), the Campaign for Tobacco-Free Kids reported that RJR had created a Web site to sell Eclipse cigarettes, a product purported to lower the risks of smoking.⁶⁵ When the Web site (now located at <http://www.tobaccopleasure.com/ECL/home.aspx>) was reviewed in February 2007, it discussed “The Eclipse Concept,” including assertions that the product “responds to concerns about certain illnesses caused by smoking, including cancer” and “reduces secondhand smoke by 80%.” The site explained how to use the product and promoted “special introductory offers”: (1) two free coupons for \$4 off three packs or a carton, and (2) “Give 3 adult friends our Eclipse Get-Acquainted Form and get a \$4.00 off coupon for each friend that signs up.” Persons requesting coupons had to go through a registration process; a question on how the registrant heard about the Web site included the following response choices: direct mail, from a friend, magazine, newspaper, alternative weekly/local city publication, phone, cigarette pack, cigarette carton, bar coasters/

napkins, matchbooks, retail display, pocket card, other. The site offered a store locator, a “Smokers’ Bulletin Board,” and a list of 135 “key publications and presentations relevant to the scientific evaluation of Eclipse.” The Web site informed visitors that it was no longer selling Eclipse online, but that the product was available for purchase via a toll-free telephone number.

As reviewed in chapter 8, the European Union’s directive on tobacco advertising bans tobacco promotion on the Internet, and the World Health Organization’s (WHO’s) Framework Convention on Tobacco Control (FCTC) mentions Internet advertising in the context of Article 13, which directs each party to the treaty to ban all tobacco advertising, promotion, and sponsorship “in accordance with its constitution or constitutional principles.”^{66(p.11)}

Kenyon and Liberman have explored the challenges of regulating tobacco advertising on the Internet.⁶⁷ A presentation at the 13th World Conference on Tobacco OR Health in July 2006, for example, reported a 27% increase in the number of protobacco Web sites on the Russian-speaking Internet since 2004, most of which violated advertising norms such as age restrictions.⁶⁸

Video Games

Video games are a \$9.4 billion business in the United States, with sales higher than that of the movie box office. There are 100 million video gaming consoles in households, 60 million handheld games, and growing numbers of game-enabled cell phones. The average gamer is 29 years of age. Younger audiences, in particular, regard video games as a more important form of entertainment than television.⁶⁹ According to Nielsen Media Research data, males aged 18–34 years now spend as much time with video games as with television; yet, while advertisers spent more than \$8 billion in 2003 to try to reach that market segment,

less than \$15 million was spent on video games as an advertising vehicle.⁷⁰

In 2003–2004, Nielsen data recorded a significant drop in television viewership among young males, seemingly in favor of video games. This has triggered a major initiative on the part of the advertising industry to explore the use of video games for marketing purposes. In fact, video games are becoming a significant part of the advertiser’s media planning strategy. Major marketers, including McDonald’s, PUMA, P&G, AT&T Wireless, Nokia, Coca Cola’s Sprite, and Nestlé’s Butterfinger, have embedded their brands into some of the most popular video games.⁶⁹ Massive, a firm in partnership with Viacom, is developing a system for inserting ads into video games and tracking their impact.⁷¹ The firm conducted a survey of gamers 12–36 years of age. Of these, 70% thought ads in video games would greatly enhance the quality and realism of the gaming experience and indicated they would feel more positive about a brand or product advertised in a video game.⁷² A 2004 survey of nearly 1,000 males aged 18–34 years, conducted by Activision and Nielsen Entertainment, found that 52% of “heavy gamers” like games to contain real products and 35% of male gamers agree that advertising in video games helps them decide which products to buy (<http://news.gamewinners.com/index.php/news/92/>).

Just as the tobacco industry has begun to use the Internet as a strategic advertising vehicle in reaching target audiences, tobacco control advocates have concern that video games will be used in the same way. The Entertainment Software Rating Board is an independent rating system established by the computer and video game industry in 1994. Its “Principles and Guidelines,” established by its Advertising Review Council (ARC), states as a basic principle, “Companies must not specifically target advertising for entertainment

software products rated ‘Teen,’ ‘Mature,’ or ‘Adults Only’ to consumers for whom the product is not rated as appropriate.” Among the core guidelines that the ARC indicates it will focus on with concern is the following: “glamorizing, encouraging and/or depicting the consumption of alcohol.” However, there is no statement with regard to tobacco products.⁷³ Even if tobacco advertisers formally avoid the teen category, any placement in the mature (M) category might influence them as well, given the breadth of appeal of these games to youth.

Some game content incorporates or features tobacco products. A review of 396 video games indicated that 6 of these involved tobacco and/or alcohol.⁷⁴ In one video game, *The Chronicles of Riddick: Escape from Butcher Bay* (rated M), cigarettes are used as a reward, with each pack revealing some aspect of a new, related Riddick movie. In this video game, cigarettes are made to seem “cool” and the cigarette warning labels are mocked.⁷⁵

In *Halo 2* (rated M), the most popular video game for the Xbox game console for almost two years after its debut in November 2004,⁷⁶ a character named Sergeant Major Avery Johnson smokes a cigar and discarded cigars are featured. On a Web site devoted to “Xbox Hints and Tips,” a hint entitled “Johnson’s Cigar In Cairo Station” is described as follows:

In the first level, as soon as you get off the lift do not go on the train. Instead, look to your right to find a trash can. Go over to it, crouch, and look in between the can and the wall. There should be a Johnson Cigar burning away. Additionally, go to the armory. As you are coming up the stairs, you will hear the man shooting his shotgun and talking. Kill the Elites and go through the door. Jump over the turret and look to the right. Jump on the lights sticking out of the wall, then jump over the rail. Get on one of the beams



Xbox game “Halo 2” character Sergeant Major Avery Johnson with cigar

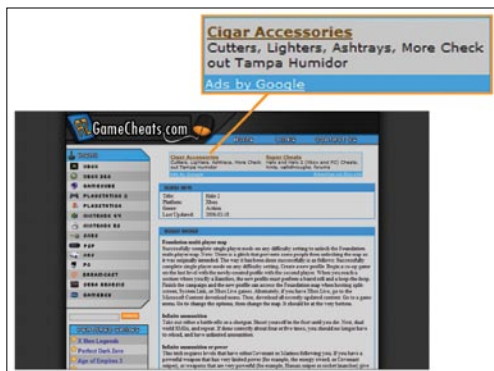
and jump off it onto one of the rails. There will be a small room with no doors. Jump onto that and bash the trash can. When you look on the floor, you will see Johnson’s cigar.⁷⁷

A posting on an online forum for *Halo* explains that Sergeant Johnson “obviously wasn’t aloud [*sic*] to smoke on ‘Cairo Station’ so he hid his cigar behind a trash can.”⁷⁸ That posting includes two screenshot images and a downloadable game-playing videoclip showing the discarded cigar.

Another Web site devoted to “Halo 2 cheats” includes a posting (entitled “Smoke a cigar”) about another appearance of the cigar in this game:

On the first level if you go to the boxes near the sheild [*sic*] re-charger and hit them all together u will c a cigar in the middle then take out your battle rifle and shoot it your screen should turn white and then if you die you will see a cigar on the floor next to your body. This only works on legendary and should give u extra power in your melee.⁷⁹

It is unclear whether the images and usages of cigars were built into *Halo 2* as the result of paid advertising (i.e., product placement). The MSA [Section III, subsection (e)] bans “payment or other consideration” to promote tobacco products “in any motion picture, television show, theatrical production or other live performance, live or recorded



Cigar accessories advertised to “Halo 2” players

performance of music, commercial film or video, or *video game*” (emphasis added).^{80(p.18)} Cigar manufacturers, however, are not parties to the MSA between the major cigarette firms and 46 state attorneys general.

When viewing a Web site description of the cigar “cheat code” in *Halo 2*,⁸¹ a banner advertisement for cigar accessories was visible at the top of the Web page. This illustrates the complex (and often unpredictable) interplay between video games, the Internet, and digital advertising. More research is needed to track the appearance and use of tobacco products in video games, to determine whether these depictions are the result of paid promotion or “artistic” design, and to evaluate their impact on video game players’ attitudes and behaviors related to tobacco use (see chapter 10).

Paid Placement of Tobacco Products in Movies

The portrayal of tobacco use and the appearance of tobacco products, brand names, and brand imagery in movies and other entertainment media can occur in exchange for promotional fees (product placement) or because of artistic (noncommercial) decision making by producers. Strong evidence links the placement of cigarette products in films and on television with adolescent

smoking.^{82–85} Product placement is a form of promotion, is captured by the FTC’s categories of advertising and promotion, and is the focus of this section. Chapter 10, on the other hand, focuses on both paid and unpaid depictions of tobacco in entertainment media, in the context of examining the role of these media in promoting or discouraging tobacco use.

A chronology of events developed by Mekemson and Glantz⁸⁶ in reviewing the paid placement of tobacco products in movies is presented in table 4.1. The discussion below, reviewing the evidence available (largely through internal corporate documents), is also drawn from Mekemson and Glantz.⁸⁶

R.J. Reynolds. Executives of the public relations firm charged with developing product placements for R.J. Reynolds recognized the importance of tying celebrities to smoking on (and off) the screen: “Our primary objective will remain ... to have smoking featured in a prominent way, especially when it is tied to celebrities.”^{87(Bates no. 503579240)} The firm detailed one placement in a James Bond movie:

For a financial consideration of [U.S.] \$10,000 ... Sean Connery, and other principal players, will smoke Winston and Camel cigarettes. A Salem Spirit billboard will be used in an action scene. No other cigarette company will be represented.^{88(Bates no. 503579592)}

Other placements by Rogers & Cowan for R.J. Reynolds include those in *The Jazz Singer*, *Backroads*, *Cannonball Run*, *Pennies from Heaven*, and *Blowout*.⁸⁶

Philip Morris. Philip Morris products were placed in more than 191 movies between 1978 and 1988; 48 were rated PG, 10 were PG-13, 91 were R, and 1 was G (*The Muppet Movie*). Among the movies listed during that period were *Grease*, *Rocky II*, *Airplane*, *Little Shop of Horrors*, *Crocodile Dundee*,

Table 4.1 Chronology of Tobacco Industry Activities Related to Smoking in Motion Pictures, 1972–2001

1972	Productions Inc., ^a a movie and television company, informs R.J. Reynolds (RJR) that product placement in movies is “better than any commercial that has been run on Television or any magazine, because the audience is totally unaware of the sponsor involvement.”
1978	Philip Morris begins working with Charles Pomerance to place tobacco products in movies.
1979	Brown & Williamson (B&W) contracts with the product placement firm of Associated Film Promotions for placing B&W products in movies.
1979	Philip Morris pays to have Marlboros featured in the movie <i>Superman II</i> .
1980	RJR contracts with Rogers & Cowan to develop a relationship with the television and movie industry that includes product placement, providing free products to key entertainment industry workers, and promoting star use of RJR products through national media.
1982	American Tobacco contracts with Unique Product Placement (UPP) to place American Tobacco products in films.
1982	Rogers & Cowan reports to RJR that it has arranged to have Sean Connery and others smoke Winston and Camel cigarettes in <i>Never Say Never Again</i> for \$10,000.
1983	In the spring, B&W launches a campaign placing cigarette ads in 3,000 movie theatres. During July, a Kool ad is run during the G-rated Disney film <i>Snow White</i> in Boston; antismoking activists create extensive controversy.
1983	In the fall, B&W implements a critical audit of relationship with Associated Film Promotions, questioning the effectiveness and control of the product placement program.
1984	B&W cancels product placement and in-theatre ad programs.
1984	Twentieth Century Fox Licensing and Merchandising Corporation seeks tobacco company product placement agreements that would feature products and guarantee exclusivity in films for \$20,000 to \$25,000 per film.
1988	Philip Morris pays \$35,000 for the use of Larks in the James Bond movie <i>Licence to Kill</i> and for rights to run a media promotion effort to coincide with the movie’s opening in Japan.
1989	A Philip Morris ^b marketing study notes that most “strong, positive images for cigarettes and smoking are created and perpetuated by cinema and television.”
1989–90	Congressman Thomas Luken’s Subcommittee on Transportation, Tourism, and Hazardous Materials conducts public hearings on product placement.
1990	The Federal Trade Commission (FTC) conducts an inquiry into product placement activities of various tobacco firms.
1990	RJR International contracts with Rogers & Cowan International for the placement of RJR products in films produced outside the United States.
1990	Cigarette companies modify the voluntary Cigarette Advertising and Promotion Code to prohibit paid product placement.
1991	After declining through the 1960s, 1970s, and 1980s, the frequency of smoking in the movies begins a rapid increase.
1992	The UPP contract with American Tobacco is modified to limit UPP’s engagements with filmmakers to reactive efforts rather than proactive ones.
1996–97	The FTC notes that expenditures by the cigar industry for “celebrity endorsements, and appearances, and payment for product placement in movies and television more than doubled between 1996 and 1997.” ^c
1998	The Cigar Manufacturers’ Association adopts a voluntary policy discouraging (but not outlawing) paid and donated cigar placements in movies and on television.
1998	The Master Settlement Agreement prohibits participating cigarette manufacturers from product placement activities.
2000	The average amount of smoking in movies exceeds levels observed in the 1960s.
2001	Studies of films during the 1990s find continuing brand use depiction in movies with about 80% of the exposures being Philip Morris products, primarily Marlboro; identifiable brand use by high-profile stars is higher than before the tobacco industry’s voluntary restrictions on product placement in movies.

Note. From Mekemson, C., and S. A. Glantz. 2002. How the tobacco industry built its relationship with Hollywood. *Tobacco Control* 11 Suppl. 1: 81–91.

^aRichards, R. P. We are about to go into production with the motion picture, “Run Sheep Run,” a suspense, thriller, set in Los Angeles. 25 Aug 1972. R.J. Reynolds. Bates No. 500201423/1424. <http://legacy.library.ucsf.edu/tid/y1m89d00>.

^bKelly Weedon Shute Advertising. Philip Morris cigarette marketing—A new perspective. Nov 1989. Bates No. 2501057693/7719. <http://legacy.library.ucsf.edu/tid/lti49e00>.

^cFederal Trade Commission. 1999. Cigar sales and advertising and promotional expenditures for calendar years 1996 and 1997. <http://www.ftc.gov/os/1999/07/cigarreport1999.htm>.

*Die Hard, Who Framed Roger Rabbit, and Field of Dreams.*⁸⁶

A contract between Leo Burnett, the agency for Marlboro/Philip Morris, and the producers (Danjaq S.A; Switzerland) documents an exclusive placement of Lark cigarettes in a James Bond movie, *License to Kill*, in return for \$350,000. Another contract documents placement of Marlboro in *Superman II* for £20,000.^{86,89}

Brown & Williamson. B&W contracted with the product placement firm AFP, which arranged to pay \$500,000 to Sylvester Stallone for using B&W tobacco products “in no less than five feature films.”⁹⁰(Bates no. 685083119) A 1983 audit of AFP revealed that B&W paid \$965,500 to Kovoloff, of which \$575,000 was for movies that had not yet been released.⁹¹ B&W was prepared to pay \$100,000–\$200,000 “on special movie placement where a star actually smokes our brand ... and where our presence in the movie is more apparent.”⁹²(Bates no. 680118052)

Liggett and American Tobacco. Hearings held in 1989 by the Subcommittee on Transportation and Hazardous Materials, Committee on Energy and Commerce, U.S. House of Representatives—under the leadership of Subcommittee Chairman Thomas A. Luken—revealed that Liggett paid \$30,000 to place Eve cigarettes in *Supergirl* and that American Tobacco paid \$5,000 to have Lucky Strike appear in *Beverly Hills Cop*.⁸³

Cigars. General Cigar Company, Inc. contracted with the product placement firm Keppler Entertainment Inc. for \$27,000 to place its products on the television shows *Friends, Baywatch, Mad About You, Spin City, Suddenly Susan, and Third Rock from the Sun*.⁸⁶ As late as 1996 and 1997, “Expenditures on celebrity endorsements and appearances, and payment for product placements in movies

and television, more than doubled.”¹² It was only in 1998 that the Cigar Association of America formally precluded paid placement in movies and on television.

Paid Placement in Movies Made in India and Nigeria

Information on paid placement of tobacco products in movies by U.S. tobacco firms has surfaced through congressional hearings and investigations and the disclosure of previously secret tobacco industry documents. In the absence of similar investigations and industry document disclosure in other countries, it is difficult to determine whether tobacco depictions in movies made outside the United States are the result of promotional payments from tobacco companies. However, circumstantial evidence suggests that paid placement of tobacco products is occurring in India, which has the world’s largest motion-picture industry (including Bollywood, the popular Hindi-language film industry), and in Nigeria, whose film industry (Nollywood) has become the world’s third largest.⁹³

The Burning Brain Society in Chandigarh, India, with support from WHO and the Indian Ministry of Health and Family Welfare, studied the appearance of tobacco scenes in a random sample of 110 Hindi movies released in 2004 and 2005.⁹⁴ They found that 98 (89%) of the movies contained tobacco scenes, 74 (67%) showed the main protagonist using tobacco, and 30 (27%) trivialized or mocked the dangers of tobacco use. A key observation is that 45 (41%) of the movies displayed a specific brand of tobacco (usually a shot of the cigarette pack) or include a verbal mention of the brand name. More than 90% of brand appearances were for cigarettes made by Philip Morris (Marlboro) or ITC (Wills and Gold Flake).

By contrast, a WHO study found 62 brand exposures in 395 high-revenue Bollywood movies released during 1990–2002 (16%, assuming that each exposure occurred in

a different film).⁹⁵ Goswami and Kashyap suggest that the increase in brand exposures in movies released in 2004–2005 occurred because of tobacco industry efforts to circumvent the Cigarettes and Other Tobacco Products Act, 2003, which banned all forms of direct and indirect tobacco advertising as of 2004.⁹⁴

Although movie producers may choose to portray tobacco use in films for artistic or other noncommercial purposes, such portrayals would typically not use overt brand identifications (e.g., close-up shots of cigarette packs or cartons). Thus, the substantial increase in brand exposures in Indian movies, coinciding with legislative restrictions on tobacco advertising, suggests that paid placement is occurring. Further suggestive evidence comes from disclosures by several Indian movie actors, producers, and directors that they have received requests from tobacco companies for tobacco brand endorsements or product placements.⁹⁴ One movie producer-director in India said that his company had rejected approaches from tobacco companies, explaining that “we are in a comfortable position and we can be responsible”; he added, however, that “there are many needy producers who will do anything for money. Corruption is part of our culture and money overrules everything.”^{95(p.20)}

Tobacco depictions in Bollywood movies, whether resulting from paid placement or “artistic” design, are particularly worrisome to public health advocates because of the popularity of Bollywood movies. India produces about 1,000 films a year (accounting for more than one-quarter of the global film production by volume), in more than eight languages, seen by more than 188 million persons each year. An estimated 15 million people watch a Bollywood (Hindi-language) film each day. Cable and satellite television features more than 10 movie channels showing movies around the clock. Four of these channels

show 5–10 movies per week, reaching 60%–70% of the cable and satellite audience each week. Pirated copies of films are viewed in India by an estimated 230,000 people each day. Mainstream Indian films target an estimated 250 million youth in India, and the films appeal to millions of diaspora Indians in South Asia, the Middle East, and parts of the United Kingdom, United States, Europe, and Africa.^{94–96}

Nollywood, Nigeria’s “thriving” straight-to-video film industry, produces more than 400 movies each year. Most are filmed for less than \$15,000 within two weeks’ time; they are then copied onto videocassettes and sold in open-air markets for about \$3.⁹⁷ The organization Environmental Rights Action/Friends of the Earth Nigeria (ERA/FoEN) screened a random sample of 10 new Nollywood movies.⁹⁸ A program manager for ERA/FoEN reported that “smoking scenes, mostly unnecessary and of no value to the plot, were prevalent,”⁹⁸ and that brand placements occurred in 6 of the 10 movies. As noted above in the case of Bollywood movies, the visibility of brand placements in several of the movies suggests that paid product placement has occurred. Another spokesperson for ERA/FoEN reported that all but one of the 10 movies had smoking scenes, and the one movie lacking a smoking scene had an image of an actor smoking on the sleeve of the video compact disc.⁹⁸ The frequent depiction in Nollywood movies of smoking and tobacco brand names, and the likelihood of paid brand placements, are as worrisome to public health advocates as are similar occurrences in Bollywood movies. Nollywood movies are popular across the African continent and are brought to Europe and North America by expatriates, where they are distributed to the African diaspora.^{93,97}

Restrictions on Cigarette Placements in Movies

In 1990, the Cigarette Advertising and Promotion Code introduced a voluntary

ban on paid product placement in the United States; however, it did not include a prohibition on providing free products, signs, or other props. As noted above, the MSA provided legal backing for the ban on paid product placement of any type, including paid placement in motion pictures and commercial films or videos.⁸⁰ The major U.S. cigarette firms have denied paying for product placement in movies since the Federal Trade Commission began to request information on such payments in 1989.⁸³

The FCTC (chapter 8) calls on each country that has ratified the treaty to enact a comprehensive ban of all tobacco advertising, promotion, and sponsorship “in accordance with its constitution or constitutional principles” (Article 13).^{66(p.11)} The treaty’s definitions of “tobacco advertising and promotion” and “tobacco sponsorship” (Article 1) includes paid placement: “‘tobacco advertising and promotion’ means any form of commercial communication, recommendation or action with the aim, effect or likely effect of promoting a tobacco product or tobacco use either directly or indirectly,”^{66(p.4)} and “‘tobacco sponsorship’ means any form of contribution to any event, activity or individual with the aim, effect or likely effect of promoting a tobacco product or tobacco use either directly or indirectly.” By April 2008, 154 countries had become parties to the FCTC, including India (in 2004) and Nigeria (in 2005) but excluding the United States.

On May 31 (World No Tobacco Day), 2005, the health minister of India announced new rules banning all scenes showing smoking, cigarette packs, or tobacco advertisements in movies and television programs, to become effective as law in August of that year.^{96,99} After intense opposition arose from the Information and Broadcasting Ministry and the film industry, the Indian government set aside the ban and began to explore alternative control strategies,

including (1) movie industry self-regulation, using a self-regulatory body similar to the Advertising Standards Council of India, to vet films before sending them to a censor board for certification, and (2) certification of films showing smoking scenes as “A”—only for adult viewing.^{100–102}

Chapter 10 reviews strategies and efforts to reduce tobacco exposures in entertainment media (e.g., movie rating systems and self-regulation) and to modify viewers’ response to exposures through, for example, antitobacco advertising in theaters and “media literacy” interventions (educational approaches to help viewers better understand media influence).

Extent of Tobacco Advertising and Promotion

As mentioned earlier, the FTC has issued reports on expenditures for tobacco advertising and promotion, providing annual data on expenditures for 1970–2005 for cigarettes, for 1996–1997 for cigars, and for 1985–2005 for smokeless tobacco. The FTC reports are the most readily available sources of quantitative data on the extent of tobacco advertising and promotion. Information on the extent of tobacco advertising and promotion is useful for (1) assessing the level of consumers’ exposure to marketing messages and images, particularly among vulnerable populations; (2) understanding how marketing affects social norms concerning tobacco use; (3) predicting whether cigarette advertising will suppress coverage of smoking-and-health issues in various media; (4) informing policymakers on how to avoid or close loopholes in tobacco advertising bans; and (5) determining the amount of corrective communications needed to negate or overcome the effects of many years of protobacco marketing.

Expenditures on Advertising and Promotion for Cigarettes

From 1940 to 2005, the tobacco industry spent about \$250 billion on cigarette advertising and promotion—averaging more than \$10 million per day. (Unless otherwise stated, all figures for cigarette marketing expenditures presented in this section are adjusted to 2006 values, using the consumer price index for all items.) In 2005, the last year for which figures are available, the industry spent just over \$13.5 billion¹—or \$37 million per day (\$36 million in unadjusted dollars). The unadjusted expenditure in 2005 is equivalent to \$63 per

person aged 18 years and older, or \$47 per capita for the entire population (using 2000 census data). The total annual expenditures from 1970 to 2005 (in 5-year increments until 1995, and then annually) are presented in table 4.2.

As indicated in table 4.2, total expenditures climbed from \$1.9 billion in 1970 to \$7.1 billion in 1997. Since the MSA, the rate of increase has climbed dramatically, with the total almost doubling from 1997 (just prior to the settlement coming into effect) to \$13.5 billion in 2005.¹ Figure 4.1 shows the increase in cigarette advertising and promotional expenditures from 1970 to 2005 using both adjusted and unadjusted dollar figures. Expenditures peaked in 2003 at \$16.6 billion and dropped during the subsequent two years to \$13.5 billion.

The nature of the expenditures, following the definitions provided earlier, are detailed in table 4.3. The “price discounts” category now accounts for the overwhelming percentage of advertising and promotional expenditures (77.3% in 2004 and 74.6% in 2005). (For the sake of convenience, the term *marketing expenditures* is often used below to refer to advertising and promotional expenditures.) Because this category was not previously broken out separately, it is difficult to determine its rate of growth relative to previous years. Once the “price discounts” category is extracted, the two categories that earlier accounted for the bulk of marketing expenditures are now considerably diminished:

1. In 2005, just under \$1 billion, or just under 7% of total marketing expenditures, was spent on “promotional allowances.”
2. Because the FTC cigarette reports had listed “coupons” together with the “retail-value-added” category until 1997, the two categories are combined in table 4.4 for comparative purposes. Expenditures for this category were,

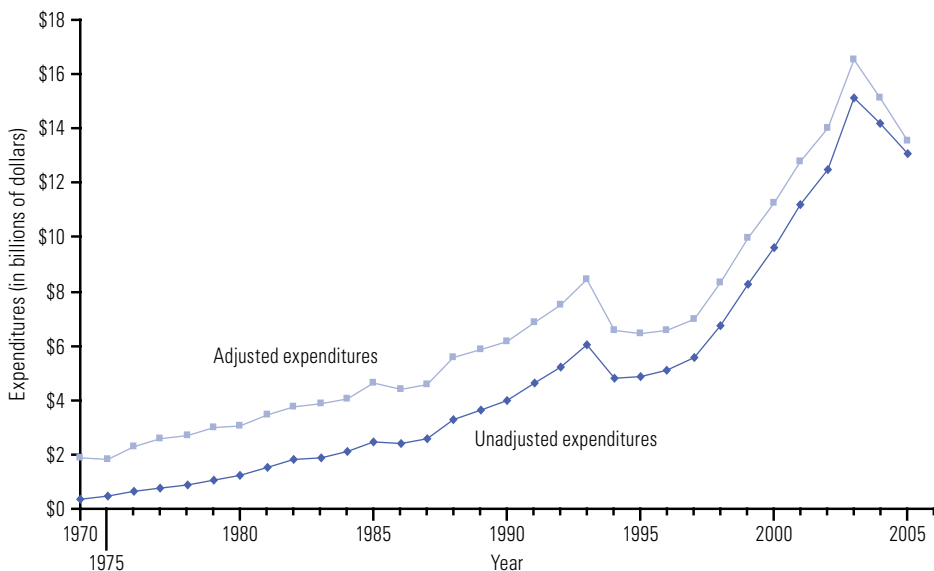
Table 4.2 Cigarette Advertising and Promotional Expenditures in the United States, 1970–2005 (in millions of dollars)

Year	Total Expenditures	
	Unadjusted (\$)	Adjusted (\$) ^a
1970	361.0	1,875.7
1975	491.3	1,841.0
1980	1,242.3	3,039.4
1985	2,476.4	4,639.8
1990	3,992.0	6,157.5
1995	4,895.2	6,475.5
1996	5,107.7	6,562.9
1997	5,660.0	7,109.4
1998 ^b	6,733.2	8,327.7
1999	8,237.6	9,968.2
2000	9,592.6	11,230.4
2001	11,216.2	12,775.1
2002	12,466.4	13,970.1
2003	15,146.0	16,594.8
2004	14,150.0	15,101.3
2005	13,111.0	13,533.9

Note. Federal Trade Commission. 2007. *Federal Trade commission cigarette report for 2004 and 2005*. <http://www.ftc.gov/reports/tobacco/2007cigarette2004-2005.pdf>.

^aAdjusted to 2006 dollars, using the consumer price index (all items).

^bYear the Master Settlement Agreement was signed.

Figure 4.1 Cigarette Advertising and Promotional Expenditures in the United States, 1970–2005

Note. Source of data: Federal Trade Commission. 2007. *Federal Trade Commission cigarette report for 2004 and 2005*. <http://www.ftc.gov/reports/tobacco/2007cigarette2004-2005.pdf>. Adjusted expenditures are adjusted to 2006 dollars using the consumer price index (all items).

in 2004, \$1.5 billion, or 10% of total marketing expenditures, and in 2005, \$1.7 billion, or 12% of total marketing expenditures.¹

The predominance of price discounts among the cigarette industry's marketing activities is an effective marketing tool, given smokers' sensitivity to cigarette prices, especially those who are young or in otherwise vulnerable population groups. The price elasticity of demand for cigarettes is -0.3 to -0.5 , meaning that a 10% increase in price will reduce overall cigarette consumption by 3%–5%.¹⁰³ Moreover, studies indicate that adolescents and young adults are two to three times more sensitive to cigarette price than are adults.¹⁰³ In addition, there is evidence indicating greater cigarette price sensitivities among low-income persons, less-educated persons, and minority populations.¹⁰³ Thus, price-discount promotions—by making cigarettes more affordable—will tend to

increase cigarette sales and will undercut the impact of cigarette tax increases on cigarette consumption.¹⁰⁴

As can be seen in table 4.5, from 1970 to 2005 the pattern of marketing expenditures shifted dramatically: from 82% allocated for advertising in “measured media” (i.e., syndicated marketing research services estimate the audiences for magazines, television, radio, newspapers, and billboards) in 1970 to almost 0% in 2005. Correspondingly, the percentage of marketing expenditures devoted to promotional activities increased during this period, from 18% to almost 100%.

The cigarette industry's shift away from advertising in measured media is also reflected in data on the advertising-to-sales (A-S) ratio for cigarettes in comparison to other products and services. The A-S ratio—the ratio of advertising

Table 4.3 Cigarette Advertising and Promotional Expenditures in the United States, 2005
 (in millions of dollars)

Advertising medium/promotional activity ^a	Expenditures		Percentage of total expenditures ^c
	Unadjusted (\$)	Adjusted (\$) ^b	
Newspapers	1.6	1.7	—
Magazines	44.8	46.2	—
Outdoor	9.8	10.1	—
Transit	0.0	0.0	—
Point of sale	182.2	188.1	1.4
Price discounts	9,776.1	10,091.5	74.6
Promotional allowances—retail	435.8	449.9	3.3
Promotional allowances—wholesalers	410.3	423.5	3.1
Promotional allowances—other	1.5	1.5	—
Sampling distribution	17.2	17.8	—
Specialty item distribution—branded	5.3	5.5	—
Specialty item distribution—nonbranded	225.3	232.6	1.7
Public entertainment—adult only	214.1	221.0	1.6
Public entertainment—general audience	0.15	0.2	—
Sponsorships	30.6	31.6	—
Direct mail	51.8	53.5	—
Endorsements and testimonials	0.0	0.0	—
Coupons	870.1	898.2	6.6
Retail value added—bonus cigarettes	725.0	748.4	5.5
Retail value added—noncigarette bonus	7.5	7.7	—
Company Web site	2.7	2.8	—
Internet—other	0.0	0.0	—
Telephone	0.06	0.1	—
Other ^d	99.0	102.2	1.0
Total	13,111.0	13,533.9	100.0

Note. Federal Trade Commission. 2007. *Federal Trade Commission cigarette report for 2004 and 2005*. <http://www.ftc.gov/reports/tobacco/2007cigarette2004-2005.pdf>.

^aSee “FTC Definitions” earlier in this chapter for explanation of terms.

^bAdjusted to 2006 dollars, using the consumer price index (all items).

^cFigures are rounded to nearest percentage point; “—” indicates values of less than 1%.

^dExpenditures for audiovisual are included in the “other” category to avoid disclosure of individual company data.

expenditures to net sales—is a measure of the intensity of advertising for a particular company or industry. The trade magazine *Advertising Age* publishes annual data on the A-S ratio for the 200 industries with the largest dollar volume of advertising in measured media. As shown in table 4.6, the median A-S ratio for these industries

typically ranges from 0.8% to 3.0%. The A-S ratio for cigarettes was substantially higher than the median value in past decades, with correspondingly high rankings among the top-200 advertisers. However, for four of the past five years (2002–06), the A-S ratio for cigarettes was less than the median value, and cigarettes ranked in the

4. Types and Extent of Tobacco Advertising and Promotion

Table 4.4 Cigarette Advertising and Promotional Expenditures in the United States, 1995–2005 (in billions of dollars^a)

	Total advertising and promotional expenditures (\$)	Expenditures on promotional allowances ^b		Expenditures on coupons & retail value added ^b		Expenditures on price discounts ^c	
		(\$)	(%)	(\$)	(%)	(\$)	(%)
1995	6.414	2.444	38	1.766	28	—	—
1996	6.501	2.737	42	1.666	26	—	—
1997	7.042	3.034	43	1.894	27	—	—
1998	8.249	3.527	43	2.670	32	—	—
1999	9.873	4.247	43	3.704	38	—	—
2000	11.124	4.539	41	4.823	43	—	—
2001	12.647	5.020	40	6.048	48	—	—
2002	14.000	1.997	14	1.806	13	8.627	63
2003	16.594	2.098	13	1.477	9	11.842	71
2004	15.101	1.060	7	1.497	10	11.665	77
2005	13.534	0.907	7	1.654	12	10.095	75

Note. Federal Trade Commission. 2007. *Federal Trade Commission cigarette report for 2004 and 2005*. <http://www.ftc.gov/reports/tobacco/2007cigarette2004-2005.pdf>.

^aAdjusted to 2006 dollars, using the consumer price index (all items). Figures are rounded to nearest million.

^bPercentages represent the share of total expenditures devoted to the category listed.

^cPrice discounts were itemized separately beginning in 2002.

Table 4.5 Cigarette Advertising and Promotional Expenditures in the United States, 1970–2005, with Relative Emphasis on Advertising Versus Promotion (in millions of dollars^a)

	Advertising expenditures in measured media ^b		Promotional expenditures and “others” ^c		Total (\$)
	(\$)	(%)	(\$)	(%)	
1970	1,526	82	332	18	1,858
1975	1,228	67	596	33	1,824
1980	1,915	64	1,096	36	3,011
1985	1,730	38	2,867	62	4,597
1990	1,276	21	4,823	79	6,099
1995	740	12	5,674	88	6,414
2000	413	4	10,711	96	11,124
2003	171	1	16,424	99	16,594
2004	126	1	14,976	99	15,101
2005	58	0	13,475	100	13,534

Note. Federal Trade Commission. 2007. *Federal Trade Commission cigarette report for 2004 and 2005*. <http://www.ftc.gov/reports/tobacco/2007cigarette2004-2005.pdf>.

^aAdjusted to 2006 dollars, using the consumer price index (all items).

^bAdvertising expenditures include newspapers, magazines, outdoor, and transit.

^cPromotional expenditures include point of sale, promotional allowances, sampling distribution, specialty item distribution, public entertainment, direct mail, endorsements/testimonials, Internet, coupons, retail value added, and all others.

Table 4.6 Advertising-to-Sales Ratios (expressed as percentages) for Selected Product Categories, 1975–2006

	A-S ratios for the top-200 advertisers ^a			A-S ratios for cigarettes	
	Mean (%)	Median (%)	Range (%)	A-S Ratio (%)	Rank
1975	1.8	0.8	0.1–20.1	8.0	11
1980	2.0	1.3	0–10.7	6.3	11
1985	2.5	1.8	0–16.7	4.2	42
1990	3.4	2.4	0.3–18.8	3.9	61
1995	3.2	2.4	0.2–18.1	4.1	47
1997	3.53	2.7	0.3–17.4	5.9	33
1998	3.80	2.7	0.1–14.9	8.2	27
1999	3.84	3.0	0.3–27.1	3.9	70
2000	4.17	3.0	0.1–22.1	2.9	98
2001	4.14	2.95	0.1–46.3	8.4	25
2002	3.78	2.4	0.1–61.2	1.8	116
2003	3.50	2.5	0.1–38.4	1.8	116
2004	3.10	2.2	0.0–15.8	4.0	53
2005	3.22	2.2	0.0–30.4	1.6	115
2006	3.27	2.2	0.1–18.4	2.2	100

Note. Sources of data: *Advertising Age* (1975–1995). Data for 1975: October 19, 1981, p. 42. Data for 1980: August 17, 1981, p. 38. Data for 1985: September 15, 1986, p. 60. Data for 1990: September 16, 1991, p. 32. Data for 1995: August 14, 1995, p. 26. Data for 1997–2006: http://adage.com/datacenter/article.php?article_id=106575. A-S ratio = advertising-to-sales ratio (advertising expenditures as a percentage of net sales).

^aThe 200 industries with the largest dollar volume of advertising in measured media.

lower one-half of the top 200 industries for advertisement spending (table 4.6).

In a ranking of total domestic advertising spending in measured media by industry, “cigarettes & tobacco” ranked 29th in both 2004 and 2005.¹⁰⁵ The largest industries in advertising spending in each of those years were automotive, retail, and telecom/Internet/Internet service provider, respectively. Again, this relatively low ranking for cigarettes is likely related to the cigarette industry’s movement of its marketing dollars into promotional activities during the past few decades.

Until 1980, when advertising in measured media dominated the tobacco industry’s marketing portfolio, each of the major companies was ranked among the largest advertisers across all industries.^{106–113}

As seen in table 4.7, in 1955 L&M/Liggett was ranked as the 17th-largest advertiser in the United States, spending \$70 million in measured media. In 1980, Philip Morris was ranked as the third largest, spending \$782 million. Also in 1980, RJR was ranked as the 5th-largest advertiser in the country, spending \$720 million. In 1965, each of the six major tobacco firms was among the 25 leading national advertisers (table 4.7).

In 2005, Altria Group (the corporate name adopted by Philip Morris in 2003) was the 20th leading advertiser in the United States, spending \$1.49 billion on advertising that year (\$1.53 billion in 2006 dollars).¹⁰⁵ Other cigarette companies were not among the 100 leading national advertisers in 2005, probably because of the shift of the cigarette industry’s marketing efforts from advertising in measured media

Table 4.7 Cigarette Company Advertising Expenditures, 1945–1980 (in millions of dollars^a)

	L&M/Liggett		Lorillard/Loews		Am. Tobacco		B&W/BAT		RJR		Philip Morris		No. 1 Ranked Company	
	Rank	AE (\$)	Rank	AE (\$)	Rank	AE (\$)	Rank	AE (\$)	Rank	AE (\$)	Rank	AE (\$)	Rank	AE (\$)
1945	17	57.120	—	—	—	—	28	40.971	26	33.932	21	49.400	—	—
1950	13	69.772	22	46.734	8	80.966	90	—	11	74.285	20	46.639	—	—
1955	17	70.396	18	68.258	9	130.279	62	24.469	10	114.748	36	38.734	—	—
1960	26	126.782	18	170.007	12	198.706	17	170.706	9	232.481	15	175.883	—	—
1965	20	226.975	21	222.127	11	371.479	24	210.439	8	446.881	19	241.290	—	—
1970	28	187.138	—	—	13	304.337	21	242.650	7	436.383	12	346.585	—	—
1975	24	190.582	—	—	23	212.276	30	173.252	6	420.400	9	341.976	—	—
1980	95	199.120	—	—	40	218.993	31	194.400	5	719.605	3	781.701	—	—

Note: Expenditures are for advertising in measured media for all tobacco and nontobacco products sold by each company. Sources of data: *Advertising Age* (1946–1981). Data for 1945: April 22, 1946, p. 2. Data for 1950: February 28, 1951, p. 59. Data for 1955: March 26, 1956, pp. 120–21. Data for 1960: August 28, 1961, p. 43. Data for 1965: August 29, 1966, p. 45. Data for 1970: August 30, 1971, p. 24. Data for 1975: August 23, 1976, p. 30. Data for 1980: September 10, 1981, p. 12. “—” signifies that the company’s advertising expenditures ranked below the top 100 for that time period. L&M = Liggett & Myers; Am. = American; B&W = Brown & Williamson; BAT = British American Tobacco; RJR = R.J. Reynolds; AE = adjusted expenditures; P&G = Proctor & Gamble; GM = General Motors.

^aAll figures adjusted to 2006 dollars, using the consumer price index (all items).

Table 4.8 Cigarette Company Advertising Expenditures for Selected Brands in Selected Years between 1972 and 2000 (in millions of dollars^a)

	Philip Morris			Lorillard Loews				R.J. Reynolds				BAT/B&W		
	Marlboro (\$)	Merit (\$)	Virginia Slims (\$)	Benson & Hedges (\$)	Newport (\$)	Kent (\$)	TRUE (\$)	Camel (\$)	Winston (\$)	Salem (\$)	Kool (\$)	Capri (\$)	Carlton (\$)	Raleigh (\$)
2000	110	33	47	—	—	—	—	—	—	—	—	—	—	—
1999	115	39	37	24	—	—	—	54	66	—	—	—	—	—
1998	166	32	34	22	—	—	—	96	71	—	—	—	—	—
1997	144	33	35	22	—	—	—	78	44	—	—	—	—	—
1996	143	35	40	22	—	—	—	62	5	—	57	25	24	—
1995	172	39	35	35	—	—	—	36	20	—	70	25	23	—
1994	131	42	34	55	—	—	—	44	17	—	45	22	21	—
1993	106	14	24	6	48	12	—	60	25	5	29	21	—	8
1992	123	45	27	14	52	8	—	33	21	14	8	20	—	7
1991	150	—	41	—	65	21	—	50	67	14	29	27	—	14
1990	132	—	68	—	81	15	—	48	29	39	9	23	—	2
1989	164	88	72	61	79	10	13	44	39	48	32	48	—	—
1988	203	94	54	98	75	15	12	41	52	60	33	53	—	—
1978	133	136	—	92	—	39	49	110	128	134	114	—	73	36
1977	138	141	—	92	—	96	35	21	146	112	95	—	74	31
1976	111	157	—	49	—	80	43	23	108	86	81	—	75	21
1975	82	—	—	54	—	62	27	37	117	89	75	—	37	20
1974	104	—	—	75	—	61	33	46	133	88	69	—	15	42
1973	94	—	—	73	—	70	31	30	99	91	72	—	10	34
1972	102	—	—	74	—	59	30	32	105	84	96	—	0	34

Note. Source of data: *Advertising Age* (1979–2001). “—” indicates not available. BAT = British American Tobacco; B&W = Brown & Williamson.

^aAll figures adjusted to 2006 dollars, using the consumer price index (all items).

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to promotional activities, as well as the increasing market share—and advertising “share of voice”—of Altria/Philip Morris.

Table 4.8 documents how much money was committed for selected brands in selected years, from 1972 to 2000. Since 1976, Philip Morris has consistently committed more than \$100 million per year to advertising for Marlboro, the industry’s dominant brand. In 2005, the Marlboro brand had 40% of the market and Philip Morris brands overall had 50% of the market.¹¹⁴

Table 4.9 demonstrates another metric in measuring the success of the advertising and promotional efforts for Marlboro. In 2006, the Marlboro brand was estimated to be worth \$21.35 billion in brand equity—the 12th most valuable brand worldwide.¹¹⁵

Marlboro has also achieved stature in annual and semiannual rankings by *Advertising Age* of the “top 200 brands” (according to total measured U.S. advertising spending). For example, Marlboro was ranked as 71 in 1997, 67 in 1998, 126 in 1999, and 142 in 2000,¹¹⁶ surpassing in 2000 “brands” that are entire companies, such as FedEx delivery services, Toys “R” Us stores, and Victoria’s Secret women’s apparel. The Camel cigarette brand was ranked as 163 in 1997 and 138 in 1998.¹¹⁶

Table 4.10 shows the percentage of total advertising expenditures in three media (outdoor, magazines, and newspapers) that were devoted to cigarette advertising, for 1984, 1985, and 1988. Consistent with the shift in cigarette marketing expenditures from advertising in measured media to promotional activities (table 4.5), the percentage of total advertising expenditures devoted to cigarette advertising declined in each of these media, from 21.1% to 16.9% for outdoor media, from 8.4% to 5.7% for magazines, and from 1.0% to 0.4% for newspapers.^{117,118} These trends have continued, as reflected in the declining

expenditures for cigarette advertising in newspapers, magazines, and outdoor media from 1988 to 2005;¹ during that time, cigarette advertising expenditures fell (in 2006 dollars) from \$180.3 million to \$1.6 million for newspapers, from \$605.1 million to \$46.2 million for magazines, and from \$544.1 million to \$10.1 million for outdoor media. The drop in cigarette advertising in outdoor media in the years following 1998 was due in large part to the MSA’s ban on billboard cigarette advertising.

Table 4.9 Global Brand Equity for Leading Brands, 2006 (in billions of dollars)

1	Coca-Cola	\$67.00
2	Microsoft	\$56.93
3	IBM	\$56.20
4	GE	\$48.91
5	Intel	\$32.32
6	Nokia	\$30.13
7	Toyota	\$27.94
8	Disney	\$27.85
9	McDonald’s	\$27.50
10	Mercedes-Benz	\$21.80
11	Citi	\$21.46
12	Marlboro	\$21.35
13	HP	\$20.46
14	American Express	\$19.64
15	BMW	\$19.62
16	Gillette	\$19.58
17	Louis-Vuitton	\$17.61
18	Cisco	\$17.53
19	Honda	\$17.05
20	Samsung	\$16.17
21	Merrill Lynch	\$13.00
22	Pepsi	\$12.69
23	Nescafe	\$12.51
24	Google	\$13.38
25	Dell	\$12.26

Note. Source of data: *Business Week*, 2006, <http://bwnt.businessweek.com/brand/2006>. IBM = International Business Machines; GE = General Electric; HP = Hewlett-Packard; BMW = Bavarian Motor Works.

Table 4.10 Percentage of Total Advertising Expenditures in Selected Media Devoted to Cigarette Advertising, United States, 1984–1988

	1984 (%)	1985 (%)	1988 (%)
Outdoor media	21.1	22.3	16.9
Magazines	8.4	7.1	5.7
Newspapers	1.0	0.8	0.4

Note. Sources of data: Davis, R. M. 1987. Current trends in cigarette advertising and marketing. *New England Journal of Medicine* 316 (12): 725–32. Centers for Disease Control and Prevention. 1990. Cigarette advertising—United States, 1988. *Morbidity and Mortality Weekly Report* 39 (16): 261–65.

According to the Media Records classification system used in the 1980s,^{117,118} national advertising expenditures for products and services were classified into major categories (e.g., alcoholic beverages, automotive products, foods, tobacco, and transportation) and subcategories (e.g., beer, passenger cars, nonalcoholic beverages, cigarettes, and airlines). By using the subcategories in this classification system, it was found that cigarettes were the most heavily advertised product or service in outdoor media and the second most heavily advertised product or service in magazines (after passenger cars) in both 1985 and 1988. For newspaper advertising, cigarettes were ranked third (after passenger cars and airlines) in 1985 and sixth in 1988.^{117,118}

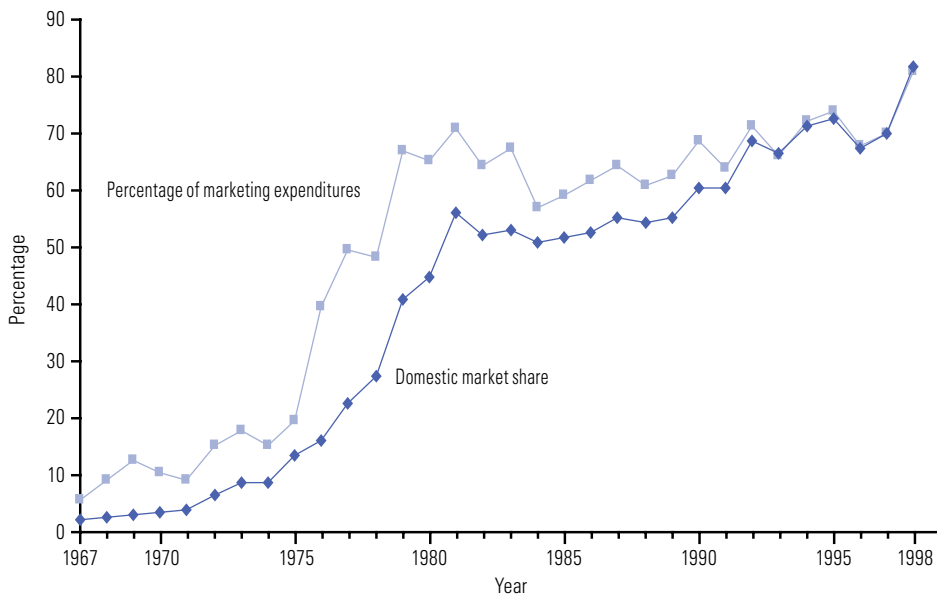
The nature of the cigarettes both advertised and purchased changed over the decades, with “light” cigarettes (defined as less than 15 milligrams of “tar”) coming to dominate both categories. Figure 4.2 illustrates (1) the trend with regard to the percentage of the tobacco industry’s advertising and promotion dollars that were allocated annually to light cigarettes from 1967 to 1998, the years for which the FTC reported these data in their annual reports on cigarettes;¹¹⁹ and (2) the annual percentage of total cigarette sales represented by light cigarettes. Until the 1990s, the percentage of dollars allocated to advertising and promotion for light cigarettes exceeded their share of the market. Two possible explanations for this

disparity are that the low-tar segment of the market is more competitive than higher-tar segments, or the companies were trying to drive smokers toward low-tar brands, perhaps in the hope that health-conscious smokers would be less likely to quit if they switched to a brand perceived as less hazardous.¹¹⁷ For most of the 1990s, perhaps because of a “ceiling effect” (both percentages could realistically go only so high), the two sets of percentages were more closely aligned. The 2000 FTC report (presenting data for 1998) was the last report that provided the percentage of the industry’s sales and marketing dollars allocated to light cigarettes. Chapter 5 reviews the content of advertisements for low-tar cigarettes and other brands aimed at “concerned smokers.”

Expenditures on Advertising and Promotion for Cigars

As mentioned above, the FTC has produced one report on cigar advertising and promotion,¹³ which presents data on advertising and promotional expenditures for 1996 and 1997. Total expenditures for cigar advertising and promotion in the United States increased by 32% from 1996 (\$30.9 million) to 1997 (\$41.0 million), coinciding with substantial increases in cigar sales volume and revenues. The largest expenditure categories in 1997 were promotional allowances (39.8% of total marketing expenditures), magazines (24.1%), and point of sale (13.0%) (table 4.11).

Figure 4.2 Share of Market for Light Cigarettes and Percentage of Marketing Expenditures Devoted to Light Cigarettes, 1967–1998



Note. Source of data: Federal Trade Commission. 2000. Report to Congress for 1998 pursuant to the Federal Cigarette Labeling and Advertising Act. <http://www.ftc.gov/reports/cigarettes/cig98rpt.pdf>. Light cigarettes are defined as < 15 mg of tar. Percentage of marketing expenditures is the proportion of total cigarette advertising and promotional expenditures devoted to light cigarettes.

As noted above, broadcast advertising has been prohibited by law for manufactured cigarettes (since 1971), smokeless tobacco (since 1986), and “little cigars” (since 1973) but is still permitted for other cigars, pipe tobacco, and roll-your-own cigarette tobacco. The FTC report on advertising for cigars showed that cigar manufacturers spent \$327,000 in 1996 and \$325,000 in 1997 on television, radio, and audiovisual advertising. The report also noted

Some portion of the \$339,000 reported as expenditures for endorsements and product placements was money spent to place cigars on television shows. Moreover, the extent of cigar advertising on television and radio is greater than simply the major manufacturers’ expenditures reported herein. For instance, it has come to the Commission’s attention that individual

cigar retailers in several parts of the country have run cigar advertisements recently on local television and radio stations.¹³

Because of the FTC’s belief that cigars and other tobacco products should be regulated in a consistent manner, it recommended “that Congress enact legislation prohibiting the advertisement of cigars on television, radio, or any other electronic media regulated by the Federal Communications Commission.”¹³

The National Cancer Institute’s Smoking and Tobacco Control Monograph 9 includes a chapter on the marketing and promotion of cigars.¹²⁰ It reviews the content of cigar advertisements and provides data on advertising expenditures in measured media for cigar brands sold by seven different

Table 4.11 Cigar Advertising and Promotional Expenditures for Years 1996 and 1997 (in millions of dollars^a)

Type of Advertising	1996		1997	
	\$	% of total	\$	% of total
Magazines	6.63	21.4	9.88	24.1
Newspapers	0.19	0.6	0.67	1.6
Television, radio, audiovisual	0.33	1.1	0.33	0.8
Internet	0.08	0.3	0.22	0.5
Outdoor	0.04	0.1	0.05	0.1
Transit		0.0		0.0
Point of sale	3.84	12.4	5.23	13.0
Coupons and retail value added	3.91	12.7	2.72	6.7
Direct mail	0.21	0.7	0.24	0.6
Endorsements and product placements	0.14	0.5	0.34	0.8
Promotional allowances	12.36	40.0	16.29	39.8
Promotional items	0.31	0.9	0.66	1.6
Public entertainment	0.69	2.2	1.02	2.5
Sampling	0.31	1.0	0.42	1.0
All other	1.89	6.1	2.91	7.0
Total expenditures	30.91	100.0	40.98	100.1 ^b
Sports ^c	0.37	1.2	0.38	0.9

Note. Source of data: Federal Trade Commission. 1999. *Cigar sales and advertising and promotional expenditures for calendar years 1996 and 1997*. <http://www.ftc.gov/os/1999/07/cigarreport1999.htm>.

^aFigures are in nominal (unadjusted) dollars rounded to the nearest million.

^bTotal percentages are not exact due to rounding.

^c"Sports" includes all expenses (reported in any other category) in sponsoring or promoting sports activities or sports figures in connection with a sport.

cigar manufacturers. The chapter presented three conclusions:

1. Cigar use began to increase in the United States after promotional activities for cigars increased beginning in 1992.
2. Promotional activities for cigars have increased the visibility of cigar consumption, normalized cigar use, and broken down barriers to cigar use.
3. Although the use of sex and celebrity to sell cigarettes has been forbidden by the cigarette industry's voluntary code since 1965, these appeals are a regular feature of cigar marketing.^{120(p.217)}

Expenditures on Advertising and Promotion for Smokeless Tobacco

The FTC's 2007 report on smokeless tobacco¹⁰ provides detailed data on expenditures for advertising and promotion in 2005, the most recent data available. The total amount spent (a small amount compared with that spent on cigarette advertising and promotion) was \$258.9 million. The largest categories (using 2006 dollars) were "price discounts" (\$102.9 million, or 40% of the total), "coupons" (\$29.5 million, or 11% of the total), and "sampling" (\$29.1 million, or 11% of the total). "Point of sale" accounted for \$21.4 million (8%), and "magazines"

Table 4.12 Smokeless Tobacco Advertising and Promotional Expenditures by Category for 2005 (in millions of dollars^a)

	Expenditure (\$)	% of total ^b
Newspapers	0.5	<1
Magazines	21.7	8
Outdoor	0.2	<1
Audio, visual	0.1	<1
Transit	0	0
Direct mail	8.5	3
Point-of-sale	21.4	8
Price discounts	102.9	40
Promotional allowances	16.5	6
Sampling	29.1	11
Specialty item distribution	0.2	<1
Public entertainment	0.3	<1
Endorsements & testimonials	0.4	<1
Sponsorships	4.3	2
Coupons	29.5	11
Retail value added	14.2	5
Company websites	0.3	<1
Internet—other	0.4	<1
Telephone	0.1	<1
All other	8.3	3
Total	258.9	100

Note. Source of data: Federal Trade Commission. 2007. *Smokeless tobacco report for the years 2002–2005*. <http://www.ftc.gov/reports/tobacco/02-05smokeless0623105.pdf>.

^aAdjusted to 2006 dollars, using the consumer price index (all items).

^bRounded to nearest percentage point.

for \$21.7 million (8%). Table 4.12 lists the advertising categories, the dollars spent in each category by the smokeless tobacco companies, and the percentage of total marketing expenditures spent in that category. Various aspects of smokeless tobacco advertising have been described elsewhere^{121–124} and in chapters 3 and 5.

Shift in Emphasis by the Tobacco Industry to In-Store Promotion

Importance of Convenience Stores to the Cigarette Industry

Considerable evidence exists for how and why the tobacco industry has shifted its

resources from advertising in measured media to promotion in and around stores, particularly convenience stores.¹²⁵ There is also considerable evidence indicating how this shift has influenced target populations.

About 60% of all cigarettes sold in the United States are purchased in convenience stores.^{126,127} In a ranking of the top 10 in-store product categories for the convenience store industry (in terms of consumer sales, excluding gasoline), cigarettes and “other tobacco” (cigars, smokeless tobacco, and loose tobacco) ranked first and fifth, respectively, in 2005.¹²⁸ These two categories accounted for 34.5% and 2.8%, respectively, of convenience stores’ in-store sales in 2003.¹²⁷

In a national study conducted for the Point-of-Purchase Advertising Institute (now called Point-of-Purchase Advertising International, or POPAI), customers were interviewed regarding products they had purchased at 120 stores of five retail chains. The 2002 report indicates that, on average, customers recalled in-store advertising for 29% of products purchased. Among the 10 products listed in the report, cigarettes ranked highest, followed by carbonated beverages, coffee, food service, noncarbonated beverages, beer, candy/gum/mints, salty snacks, sweet snacks, and milk.¹²⁹

Mechanics of Promotional Allowances

As discussed above, cigarette industry expenditures for promotional allowances accounted for just under \$1 billion in 2005, or 7% of the industry's marketing expenditures during that year (table 4.4). Philip Morris/Altria, the largest tobacco company, presents retailers with three levels or "category merchandise options" (CMOs) for displaying Philip Morris products and the commensurate remuneration received for adopting each option. Dipasquale explains how the CMOs work:

All require that Philip Morris brands get the percentage of shelf space equal to the company's share of sales in that location, determined by averaging share of market and share in that store. The amount of space is the same at each level; only the configuration of the display changes.¹²⁶

CMO3 ("Horizontal Set") is the highest retail merchandising level, at which Philip Morris pays the highest incentive, 90 cents per carton, to retailers. At this level, Philip Morris gets the most desirable shelf space—a horizontal portion at the very top of the fixture. The bottom horizontal portion can be stocked as the retailer chooses. At this level, competitors'

permanent (more than 30 days) signs are prohibited outside the store or anywhere inside the store beyond the tobacco fixture.

CMO2 ("Combination Set") is the second level. At this level, Philip Morris brands are placed in a vertical and horizontal L-shaped combination beginning at the top left of the fixture. The retailer gets 60 cents per carton at this level.

CMO3 ("Vertical Set") is the lowest level. At this level, Philip Morris brands are placed vertically in the middle of the tobacco fixture, allowing the retailer to choose how to stock the vertical space on either side. The retailer gets 40 cents per carton at this level.

Observational Assessments of the Shift to In-Store Promotion

The shift to in-store promotion during recent decades and, particularly since the MSA in 1998, is evidenced not only in the marketing expenditure data reported annually by the industry to the FTC, but also in empirical observational studies of retail outlets. In 1999, the presence of tobacco point-of-purchase advertising was examined in a national U.S. study covering 3,000 retail outlets. Almost all stores (92%) had some form of tobacco point-of-purchase advertising. Four of five (80%) had interior tobacco point-of-purchase advertising. More than two-thirds (69%) had at least one tobacco-branded functional item (e.g., counter change mats or shopping baskets). More than one-third (36%) had self-service cigarette pack placement, and one-quarter (25%) had multipack discounts.¹³⁰

Significant increases in tobacco promotion have been noted from the period just before implementation of the billboard ban (pursuant to the MSA) to the period just after the settlement. These included increases in (1) the percentage of stores

carrying interior store advertising for tobacco products and the extent of that advertising; (2) the percentage of stores carrying exterior advertising for tobacco products and the extent of that advertising; (3) the percentage of stores carrying a range of promotions, including gift with purchase, cents-off promotions, and multipack discounts; and (4) the percentage of stores carrying tobacco-related functional objects and the extent to which these objects were in the store.¹³¹

In 2001, a cross section of 586 California retailers was found to have more than 17 tobacco point-of-purchase ads, on average, in or around the store. More than four-fifths of these (85%) were located within four feet of the counter; 11% had large exterior signs—in violation of the MSA; 48% had ads at or below child level (three feet); and 23% had cigarette product displays next to candy.¹³²

Concerns about the heavy volume and high visibility of tobacco promotions at the point of sale are heightened given the frequency of youth shopping at convenience stores. When asked where they have shopped during the past 30 days, 44% of adolescents aged 12–17 years mentioned convenience stores (behind shopping malls and centers [58%] and discount stores [45%]), and 52% of teenagers aged 16–17 years cited convenience stores (second only to shopping malls and centers [63%]).¹³³ In a study of more than 3,000 students in grades 9–12 who smoked, Wakefield and colleagues found that their cigarette brand preferences correlated with the brands most heavily advertised in the convenience stores within a one-mile radius of their schools.¹³⁴

Summary

Tobacco products remain among the most heavily promoted consumer products in the United States. The allocation of cigarette

marketing expenditures has changed dramatically in recent decades, shifting from traditional print advertising to promotional activities. Cigarette marketing at the point of sale increased substantially after the 1998 MSA prohibited cigarette advertising on billboards.

In response to the changing regulatory climate, tobacco firms are exploring new ways to promote their products, such as viral marketing and a presence on the Internet. In the meantime, tobacco marketing expenditures overwhelmingly involve discounting and promotional allowances for in-store marketing, together with other channels such as coupons and specialty item distribution. Leading cigarette brands, especially Marlboro, still maintain substantial brand equity, even within today's regulatory environment, and continue to rank as leading brands among consumer products in the United States.

Data on trends in tobacco advertising and promotion highlight the economic importance of effective marketing efforts for tobacco industry interests. These trends, combined with shifts in marketing expenditures across categories of advertising and promotion, underscore the need to critically examine the evolution of tobacco advertising and promotional efforts. Such an examination, in turn, must continue to inform ongoing tobacco control efforts aimed at reducing the morbidity and mortality associated with smoking and other forms of tobacco use.

Conclusions

1. Cigarettes are one of the most heavily marketed products in the United States. Between 1940 and 2005, U.S. cigarette manufacturers spent about \$250 billion (in 2006 dollars) on cigarette advertising and promotion. In 2005, the industry spent \$13.5 billion (in 2006 dollars) on

- cigarette advertising and promotion (\$37 million per day on average).
2. Most of the cigarette industry's marketing budget is allocated to promotional activities, especially for price discounts, which accounted for 75% (\$10.1 billion in 2006 dollars) of total marketing expenditures in 2005. From 1970 to 2005, the pattern of marketing expenditures shifted dramatically; the proportion of expenditures allocated for advertising in "measured media" decreased from 82% in 1970 to almost none in 2005. Measured media include television, radio, newspapers, magazines, and billboards. Correspondingly, the proportion of marketing expenditures devoted to promotional activities increased from 18% to almost 100%.
 3. During the past three decades, Philip Morris has consistently committed more than \$100 million per year (in 2006 dollars) to advertising for Marlboro, the industry's dominant brand, which currently has 40% of the U.S. market share. In 2006, the Marlboro brand was the 12th most highly valued brand worldwide, with an estimated \$21.4 billion in brand equity.
 4. Expenditures for smokeless tobacco advertising and promotion reached \$259 million (in 2006 dollars) in 2005. The five largest categories of expenditure were price discounts (40%), coupons (11%), sampling (11%), point of sale (8%), and magazines (8%).
 5. Cigarette advertising and promotion are heavy in volume and high in visibility at the point of sale, particularly in convenience stores. Cigarette marketing at the point of sale increased substantially after the 1998 Master Settlement Agreement, which included a ban on cigarette advertising on billboards. About 60% of all cigarettes sold in the United States are purchased in convenience stores, where cigarettes are the top in-store product category in terms of consumer sales.
 6. As cigarette advertising is being curtailed in some traditional media, cigarette companies are exploring the use of new or nontraditional media for distributing protobacco messages and images, including the Internet and cigarette packages. In addition, cigarette firms (like other companies) are experimenting with viral (stealth) marketing to create a "buzz" about a product.

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5

Themes and Targets of Tobacco Advertising and Promotion

As with any consumer product, tobacco industry marketing efforts show clear evidence of targeting specific population subgroups and using themes and strategies designed to build brand loyalty and market share. This chapter provides an overview of specific themes and population targets employed in tobacco advertising and promotion based on studies of marketing materials and tobacco industry documents.

- *Key tobacco marketing themes include taste and satisfaction, implied harm reduction, affinity with desirable social characteristics, brand loyalty, and smokers' rights.*
- *Specific targeting criteria for tobacco advertising and promotion can include age, gender, race or ethnicity, and sexual orientation. Such groups can be targeted directly—for instance, by focusing on rugged individualism for men or weight control for women—or indirectly through adult themes such as independence or peer acceptance that also appeal to young smokers.*
- *Tobacco brands are frequently designed to appeal to specific market segments or population subgroups, such as blue-collar women, African Americans, and young adult smokers.*

In addition to advertising, promotional channels for tobacco products can include affinity magazines, direct mail, coupons for gift catalogs, and promotional booths at targeted venues as well as other niche-market efforts. Marketing objectives for these channels range from creating new markets to attracting young smokers who are making their long-term brand choice. Understanding targeted marketing is also an important consideration in designing tobacco control efforts.

Introduction

As explained in chapter 3, the practice of targeting marketing efforts to specific population subgroups is a general principle of marketing strategy and is therefore common to most consumer marketing efforts. In addition, consumer marketing seeks to develop and associate images or themes appealing to the target audience with a consumer product, so that when consumers purchase the product, they subscribe to the image associated with it. In these respects, tobacco is no different from any other consumer product. However, to the extent that such targeted marketing efforts have resulted in greater smoking uptake and less smoking cessation in the targeted subgroups, such marketing practices have contributed to the enormous tobacco-related harms and costs faced by modern American society.

While chapter 7 presents details on the effects of tobacco marketing on tobacco use, this chapter aims to provide a descriptive overview of population subgroups that have been targeted by specific tobacco industry marketing strategies, and to give examples of how these strategies have been pursued, so that readers can appreciate the nature and scope of this activity. It also examines the campaign themes and strategies used to reach these specific subgroups to provide background and context to these targeted marketing efforts. The chapter is not exhaustive but provides examples of images and appeals that have been made to specific population subgroups. In general, the chapter focuses on the United States, using data drawn from published studies of tobacco advertising materials and industry documents, but examples from other countries are used when informative or illustrative.

In 1969, the U.S. Congress was considering legislation that would, among other things,

ban cigarette advertising on television and radio. The tobacco industry offered to voluntarily discontinue advertising cigarettes on the broadcast media if Congress would give the cigarette companies an exemption from antitrust laws to allow them to take this action in concert. (Ultimately, Congress refused to grant such an exemption and instead passed a statutory ban.) In testimony before Congress about the industry's offer, Joseph F. Cullman III, chairman of the board of directors and chief executive officer of Philip Morris and chairman of the executive committee of the Tobacco Institute, explained how cigarette companies would market their products after leaving the broadcast media:

It is the intention of the cigarette manufacturers to continue to avoid advertising directed to young persons; to abstain from advertising in school and college publications; not to distribute sample cigarettes or engage in promotional efforts on school and college campuses; not to use testimonials from athletes or other celebrities who might have special appeal to young people; to avoid advertising which represents that cigarette smoking is essential to social prominence, success, or sexual attraction; and to refrain from depicting smokers engaged in sports or other activities requiring stamina or conditioning beyond those required in normal recreation.¹(Bates no. 2023375863)

The themes and targets that Cullman said would be avoided in cigarette advertising were among those used extensively by cigarette companies in the years to come.

Tobacco corporations have long identified segments of the population with strong potential as customers. Their research has produced tailored brand lines and sophisticated messages delivered through the communication channels with the greatest likelihood of reaching these groups. The objectives of these targeted marketing

activities are likely to include encouraging smoking initiation, establishing and maintaining brand loyalty, increasing tobacco consumption, and averting cessation efforts² (see chapter 7 for an overview of effects of tobacco marketing on smoking behavior). Less direct but still potent public relations efforts are aimed at the leadership of varied groups to discourage opposition to tobacco marketing activities and to salvage tobacco corporate reputations; such public relations efforts are discussed further in chapter 6.

Segmentation, Tailoring, and Targeting

From the early days of organized tobacco marketing, there have been products and messages aimed at particular demographic and psychographic groups, beginning with adult males in the 1920s, then moving to youth and young adults, women, and specific ethnic populations. This breakdown is done, according to Pollay and colleagues,³ to maximize sales and profits, using unique combinations of advertising, packaging, distribution channels, prices, and other strategies to catch the interest of specific market segments. As discussed in detail in chapter 3, these segments may be defined by demographic variables such as gender, ethnicity, or age. They may also be segmented according to a group's needs, values, and aspirations, described below as psychographic niches, and once characterized by the industry as "tobacco-graphics" population groups.⁴

Several studies (described below) review the evolution of major tobacco corporations' plans of the 1970s, 1980s, and 1990s for market segments that are defined by the population, traits, values, and needs of potential smokers. Targeting becomes increasingly important as consumer presence is fragmented across a growing multiplicity of communication channels

(cable television, Internet, etc.), which makes it difficult to market effectively to the entire population.

Philip Morris, the largest tobacco corporation in the United States, has developed marketing plans and product lines based on consumer attitudes, aspirations, and lifestyles. According to Ling and Glantz's⁵ review of industry documents, the young adult categories include groups such as Enlightened Go-Getters, 90s Traditionalists, Mavericks, 50s Throwbacks, Uptown Girls, and Macho Hedonists. Marlboro, for example, would appeal to the 50s Throwbacks, while Marlboro Lights are for Uptown Girls. This same analysis describes R.J. Reynolds's plan for the early 1990s in which the company identified young adult smoker segments with personal concerns about smoking, social guilt about their image and their sidestream smoke, "smart" or "quality" or price-sensitive shoppers, and young smokers with an irreverent approach to life or concerns about originality and status. Both corporations tackle young adult price concerns by using marketing strategies such as free samples and coupons in locations where young adults take on new behaviors—for example, bars, colleges, workplaces, and the military.

In a similar vein, Cook and colleagues⁶ reviewed industry documents to identify market segments based on psychological needs such as obesity reduction, stress relief, and personal image. They found that new tobacco products were designed and old tobacco brands extended to meet the specific needs of identified segments. Product design features may vary by taste, size, tar and nicotine levels, sidestream smoke, filtration, price, and packaging with specific psychographic market segments in mind for each set of features.^{5,6}

Campaigns are tailored for these niches by using special models, messages, settings, values, and product features. Camel's virile

5. Themes and Targets of Tobacco Advertising and Promotion

male model of the late 1970s, the “Turk,” is a case in point of a campaign designed to grab the attention and appeal to the desires of male aspirants to the Turk’s lifestyle. His look was dark and handsome, and he appeared to live an adventurous outdoor life surrounded by sexy women.⁷ The stylish imagery of Winston’s metal-flask-shaped S-2 cigarette package was aimed at young trend-setting males. Basic’s pricing strategies and folksy direct mail newsletters are geared toward a different niche: price-conscious, established, older smokers. The new Camel Exotic Blends are expansions of the Camel line designed for trend-setting young adults and flavored to appeal to newer smokers.

Campaigns target or reach specific groups via channels used by concentrations of these populations at times when they may be persuaded to initiate smoking or may be making other kinds of changes in their lives. One can identify important target populations and the brands aimed at them by examining the types of magazines and tobacco-sponsored events used by certain brands to reach narrow populations of interest. Magazines have long been used by tobacco companies to reach specific demographic and lifestyle audiences.⁸ Events also appeal to relatively narrow fan bases. The U.S. Smokeless Tobacco Corporation (USST) has placed Skoal free-sample booths at motorcycle races and Copenhagen booths at Professional Rodeo Cowboys Association (PRCA) rodeos, reaching a high proportion of young males.^{9,10} Often, channels are combined for a comprehensive campaign “narrowcast” through multiple channels reaching the same group. This method is exemplified by the Kool Mixx DJ (disc jockey) campaign using “poets of urban hip hop,” models, settings, and language of urban nightlife to reach young African Americans. The channels include a series of urban tobacco-sponsored bar nights with samples of newly designed



Copenhagen booth at PRCA Rodeo, Rancho Mission Viejo, California, 2002



*Kool Mixx CD cover, included with the Kool advertisement in *Vibe* magazine and in bar promotions in 2004*

Kool Fusion specialty-flavored menthol cigarettes, advertisements with a Kool Mixx CD (compact disc) attached to the advertisement in *Rolling Stone* and *Vibe*, direct mail promotions, and a DJ Web site, all designed to reach young urban African Americans.¹¹

Personalized direct marketing opportunities, such as the hundreds of bar promotions announced for Marlboro in California in early 2004 (California Department of Justice, e-mail correspondence to Tess Boley Cruz, June 2004), or coupons collected from smokers,¹² have been used to reach specific recipients for a more personal marketing relationship via direct mail promotions. Once individual smokers have been entered into a tobacco company’s direct mail list, by virtue

of their willingness to exchange their name and address for free tobacco samples or prizes, they may receive discount coupons, glossy promotional brochures, and lifestyle magazines for a particular demographic and psychographic group. A free promotional magazine mailed to smokers in 2003 features an array of Virginia Slims advertisements and related lifestyle stories. Each issue of this magazine, *All Woman*, carries articles tailored for each decade of life between ages 20 and 60, as well as fashion images for women from slight to full body sizes. Several of these promotional magazines exist, each geared to a different lifestyle and appealing to different types of smokers. Another magazine, *Unlimited*, by Marlboro, features outdoor sports such as snowboarding, auto racing, and bull riding. *Basic Times* for Basic cigarettes features occupations that might appeal to middle-aged smokers, such as appraising antiques. *Heartland* for USST features turkey shooting, deer hunting, and rodeo. *CML* for Camel provides features on urban evening entertainment. *Flair* and *Real Edge* for Brown & Williamson and *P.S.* for Newport focus on a fun and social lifestyle for young adults. The models and stories are designed for specific types of smokers on the corporations' direct mail lists. People usually end up on these direct mail lists after providing personal information in a tobacco-related coupon exchange, bar promotion, or brief survey form attached to a direct mail or Internet promotion.¹³

Populations may be targeted by public relations and philanthropic efforts aimed at the leadership of priority populations. The rationale for this approach is described in chapter 6. Donations such as R.J. Reynolds's support of Hispanic Chambers of Commerce¹⁴ and Philip Morris's support of African American scholarships¹⁵ might undermine potential opposition to the tobacco companies and their marketing activities, help legitimize their products among members of the recipient groups, and build allies in antiregulation campaign efforts.



All Woman magazine sent by Phillip Morris to women smokers on the corporation's direct mail list, Fall 2003

Dominant Themes

From the 1960s until the late 1980s, the Federal Trade Commission reviewed tobacco advertising and promotional themes in its annual reports to Congress pursuant to the Federal Cigarette Labeling and Advertising Act¹⁶⁻²¹ and identified examples of three approaches used at the time of the reports. Most tobacco advertising has been dominated by these three common themes that are easily recognized in today's marketing messages: satisfaction, assuaging anxieties, and association with desirable outcomes.

Satisfaction

Many aspects of tobacco use are portrayed by advertisers as satisfying, but taste has been one of the mainstays, with claims of freshness, mildness, and strength. Salem, for example, classically offered a taste "as fresh as Springtime,"^{17(p.7)} and Winston has suggested, "Taste isn't everything. It's the only thing."^{19(p.4)} In 2003 and 2004, Camel's "Pleasure to Burn" campaign carried out this theme with nightclub performers and bartenders proffering flavor choices from Camel's older classics, newer



Camel "Pleasure to Burn" advertisement

Exotic Flavors, and Turkish Gold brand families: "Rich and Classic," "Exotic and Indulgent," and "Mellow Turkish."²²

Reducing Anxiety

The second major theme seeks to allay anxieties about health hazards by discussing filters, low tar, and low nicotine^{16–19,23} (see chapters 3 and 4). These themes are exemplified by True's advertising line in 1976: "Considering all I'd heard, I decided to either quit or smoke True. I smoke True."^{24(p.i25)} The image focuses on a healthy female tennis player thoughtfully touching her head. It conveys the impression that the low tar and nicotine yields of this product make it as safe as quitting. Expenditures devoted to the advertising and promotion of low-tar cigarettes have usually exceeded their market share, suggesting that manufacturers have attempted to move smokers to low-yield cigarettes to discourage health-conscious smokers from quitting (see chapter 4). This same message of reducing smoker anxiety continues to this day with new product lines such as Eclipse and Advance, designed to appeal to smokers concerned about health risks.

In a content analysis of cigarette advertisements in selected issues of

Time magazine, for selected years from 1929 to 1984, Warner²⁵ found that large percentages of ads emphasized health themes (e.g., special filters or low tar yield) instead of conventional cigarette ad imagery in all of the years of major smoking-and-health "events" (with the possible exception of 1964, the year when the first Surgeon General's report on smoking and health was published).²⁵

Altman and colleagues²⁶ analyzed cigarette advertisements appearing from 1960 to 1985 in eight popular magazines: *Rolling Stone*, *Cycle World*, *Mademoiselle*, *Ladies' Home Journal*, *Time*, *Popular Science*, *TV Guide*, and *Ebony*. They found that cigarette ads increasingly emphasized "healthy" cigarettes (i.e., containing an explicit low-tar or low-nicotine appeal), up to the peak year of 1979, when 82% of all cigarette ads contained this theme. The Institute of Medicine,²⁷ in a report on tobacco harm reduction, published a table (table 3-1 in that report) of health-related text messages used in advertisements for cigarettes and "potential reduced-exposure products" (PREPs) from 1927 to 2000.

Additional information on this theme appears in the section, "Concerned Smokers."

Desirable Associations

The third dominant set of themes associates smoking with persons, ideas, places, outdoor and athletic activities, personality characteristics, success (social, sexual, etc.), slimness, and other conditions considered desirable by target groups. Possibly the most well-known campaign of this type would be Marlboro's long-running association of smoking with the macho, independent, mature Marlboro cowboy and the rugged country in which he lives. Virginia Slims cigarettes are associated with women's liberation, slenderness, and success, in advertisements that claim "You've come a long way, Baby."^{17(p.8)} In both cases, the theme of individualism runs strong. King and colleagues²⁸ studied eight different types



"Come to where the flavor is. Come to Marlboro Country." A direct mail promotion with a coupon insert for "Buy 1 Pack Get 1 Free" sent to an adult smoker in California, October 2002

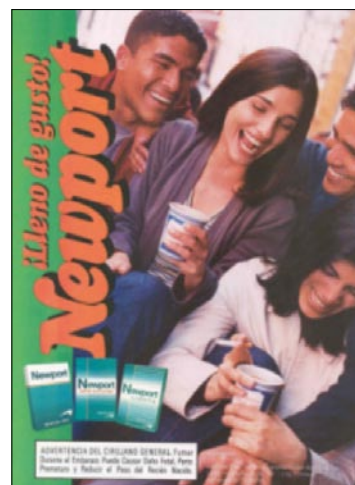
"Come to Marlboro Country," a direct mail promotional flyer sent to a California adult smoker in 2002

of magazines from the 1950s to the 1980s and found that the themes of individualism/solitariness and recreation were the themes most frequently portrayed in almost all magazine types studied. Another common association has been "coolness," promoted as a quality of smoking menthol cigarettes and in the bar-themed campaigns aimed at young adults. Sutton and Robinson²⁹ have identified three messages in 2004 that the industry uses for its "coolness" category: ethnic awareness, fresh/refreshing/cool/clean/crisp, and youthfulness/silliness/fun. Kool cigarettes have capitalized on the pairing of ethnic awareness with youthful fun, exemplified by the Kool Fusions campaign featuring hip hop artists and their related lifestyle. Newport demonstrates the last category in its images of young African American and Latino couples at play.

Smoking has been associated with sporting and a healthy outdoor life in numerous advertisements as well as in promotions linked with specific events. Early advertisements for True, Vantage, Virginia Slims, and others typically displayed sports scenes or accessories. Magazine advertisements in 2003 and 2004 have paired Winston with surfing, Skoal with soccer, and Basic with canoeing. Sports sponsorship

was broadened in 1982 and 1983 with R.J. Reynolds's support of soccer, rodeo, and skiing and Philip Morris's support of tennis.³⁰ In the late 1990s and early 2000s, tobacco brand and corporate sponsorship helped motor sports and rodeos become prime-time entertainment across the United States, and such sponsorship helped various tobacco brands become distinctly associated with the lifestyles of those sports.¹⁰

In their study of cigarette advertising in magazines from 1960 to 1985, Altman and



Newport Menthol cigarette advertisement "Full of Pleasure!" in TV Y Novelas, 2002

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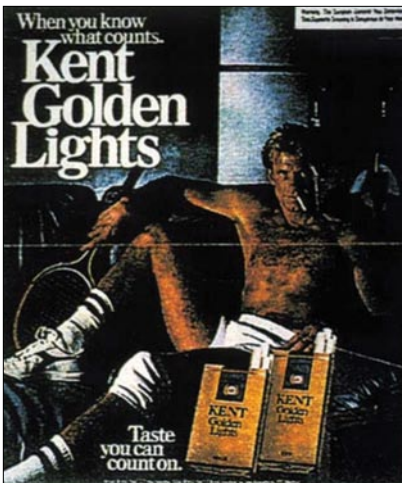
colleagues²⁶ assessed the frequency of use of the “*vitality of smoking*”²⁶(Bates no. TIMN459458) theme, with the subcategories of adventure/risk appeal (e.g., rock climber, sailor, race car driver), recreation (e.g., tennis, surfing), and erotic/romantic appeal (e.g., scantily dressed models, romantic settings). They found that ads during this period increasingly associated smoking with vitality, and significant increases were noted for each of the three subcategories of vitality. In peak years, the proportions of ads using themes of adventure/risk and erotic/romantic appeal were 30% to 40% (1983–85) and 38% (1985), respectively.

As noted above, tobacco industry spokesperson Joseph Cullman III promised to Congress in 1969 that cigarette advertising would “refrain from depicting smokers engaged in sports or other activities requiring stamina or conditioning beyond those required in normal recreation.”³¹(Bates no. 2023375863) Nevertheless, cigarette advertisements have shown smoking by persons who appear to have just completed vigorous physical activity. Examples include a tennis player smoking Kent cigarettes, and a ballet dancer smoking Vantage cigarettes.³¹

Cullman also testified that the cigarette manufacturers would “avoid advertising

which represents that cigarette smoking is essential to social prominence, success, or sexual attraction.”³¹(Bates no. 2023375863) However, these themes have appeared prominently in cigarette advertisements. A Barclay ad showed a man in a tuxedo lighting his cigarette, next to a woman drinking from a champagne glass—apparently in the back of a limousine. An ad for Ritz cigarettes, which bear the name and logo of fashion designer Yves Saint Laurent, also showed a man and woman in formal evening attire. A Vantage ad showed an architect above the slogan, “The Taste of Success.”

Advertisements for More and Barclay showed women in provocative poses, alongside slogans with double entendre: “I’m More satisfied” and “The pleasure is back.” A Benson & Hedges ad showed a man and woman sharing pajamas, with copy that explained, “He likes the bottoms.... She likes the tops.... But there’s one thing they agree on. Benson & Hedges.” In an essay about “below the belt” cigarette advertising, Pollay³² provided many examples of cigarette ads containing sexual imagery, symbolism, and innuendo. Sansores and colleagues³³ found that 77% of a sample of 1,186 adolescents in Mexico City reported perceiving sexual content in the traditional Camel advertisement showing a camel



Kent tennis player



Ritz couple in formal attire



I'm More satisfied

next to a pyramid. This ad was judged by members of the Department of Research in Tobacco Smoking and COPD at the National Institute of Respiratory Diseases in Mexico City as having “unquestionable sexual content,”³³(p.2018) and male adolescent participants perceived a naked man embedded in the picture of the camel.

Packaging design has also been intended to create specific associations and may be designed with an eye to circumventing various advertising restrictions.³⁴ Colors are used to further the illusion of taste and reduced risk, with green packages (menthol) suggesting coolness, red packages suggesting full taste, and white packages giving the impression of low tar and safety while preserving satisfaction (see chapter 3).^{24,34} Mainstream brands have experimented with packaging that makes a strong lifestyle statement (see chapter 4). R.J. Reynolds redesigned its Winston packs and billboards to feature the first part of the name “Wins” on the front, and created a flask-shaped, curved pack for its high-tech “S-2” campaign. Kool cigarettes were given away in free samples and test markets in 2004 in a new blue and green Smooth Fusions pack that unfolds like a book and, in bar promotions, features a cardboard wrapper that can be reused on



Barclay's "The Pleasure Is Back"

fresh packs sporting a three-dimensional Hip Hop DJ. Camel's new Exotics blends were distributed in 2003 in flat metal and cardboard packs featuring flavors, colors, and images signifying style and innovation. Industry documents suggest that these types of changes create a brand image that snags the smoker's attention in the stores, repeats a positive impression in the smoker's mind every time a cigarette is removed, and creates a positive public persona that associates the smoker with the brand image whenever the pack is pulled out in public or laid on the countertop of a bar.³⁴

Loyalty and Bonuses

Two additional themes have been less dominant but still long-standing: loyalty and bonuses. The first of these themes extols loyalty to a brand with slogans such as, “I’d walk a mile for a Camel,” and “I’d rather fight than switch.”¹⁶ Direct mail promotions to smokers and password-protected Web sites for smokers provide direct and indirect appeals such as coupons, gifts, and lifestyle magazines for the user who stays on the mailing list.³⁵

The second theme offers bonuses such as extra cigarette length, “buy-one-get-one-free” offers, coupons, and other price

promotions to smokers concerned about price.^{12,16,36} In the 1980s, a number of discount and generic brands of cigarettes emerged for price-sensitive smokers.^{20,37} Five of the six companies selling cigarettes at that time introduced brand extensions containing 25 cigarettes per pack; Marlboro 25's were advertised with the slogan "5 more smokes for the long working day."³⁷ In the late 1980s and 1990s, promotional offers adding nontobacco "specialty items" to a pack of cigarettes became increasingly common³⁸ (see also chapter 4). For example, in 1989, Philip Morris offered a free CD featuring hit songs by Tina Turner, Eddie Money, and Cheap Trick with the purchase of a three-pack of Parliament cigarettes; CBS Records produced 330,000 CDs for the promotion.³⁹ Price discounts have become the dominant category of promotional spending by cigarette companies, accounting for about three-quarters of cigarette advertising and promotional expenditures³⁸ in 2004 and 2005 (see also chapter 4).

Targeting of Population Subgroups

Although major themes are aimed at potential psychographic types (attributes relating to personality, values, attitudes, interests, or lifestyles), they also appeal to specific demographic groups that are the cornerstone of tobacco sales or are ripe for expansion. These market segments, described below, include groups such as men, women, youth, young adults, African Americans, and gay men.

Men

In the first decades of the 20th century, the leading tobacco advertising target in the United States was men, representing 95% of the market.⁴ Although numerous other market segments have arisen, men continue to dominate, smoking more and using

Missing Themes: Health Hazards and Addictiveness

Two themes that tobacco companies have avoided in branded advertising are the health hazards and addictiveness of smoking. As discussed earlier in this chapter, specific brands of tobacco products have adopted marketing themes designed to assuage smokers' health concerns, ranging from the overt health claims of early to mid-twentieth century advertising to the later focus on the implied harm reduction of low-tar and low-nicotine cigarettes.

Some tobacco manufacturers have sponsored unbranded advertising on the dangers of smoking and the undesirability of smoking by youth, including Philip Morris's "Talk. They'll listen" campaign aimed at parents^a and Lorillard's youth smoking prevention campaign, "Tobacco Is Whacko if You're a Teen";^b however, these messages have generally been less effective than those sponsored by public health authorities.^{c,d} These programs are explored in further detail in chapters 11 and 12 of this monograph.

^aFairclough, G. 2002. Study slams Philip Morris ads telling teens not to smoke: How a market researcher who dedicated years to cigarette sales came to create antismoking ads. *Wall Street Journal*, May 29.

^bSussman, S. 2002. Tobacco industry youth tobacco prevention programming: A review. *Prevention Science* 3 (1): 57–67.

^cFarrelly, M. C., C. G. Heaton, K. C. Davis, P. Messeri, J. C. Hersey, and M. L. Haviland. 2002. Getting to the truth: Evaluating national tobacco countermarketing campaigns. *American Journal of Public Health* 92 (6): 901–7.

^dWakefield, M., Y. Terry-McElrath, S. Emery, H. Saffer, F. Chaloupka, G. Szczypka, B. Flay, P. O. O'Malley, L. Johnston. 2006. Effect of televised, tobacco company-funded smoking prevention advertising on youth smoking-related beliefs, intentions and behavior. *American Journal of Public Health* 96 (12): 2154–60.

more smokeless tobacco than do women in all demographic groups. In 2006, adult smoking prevalence (ages 18 and older) was 23.9% for men and 18.0% for women.⁴⁰

Much of the cigarette and smokeless tobacco advertising during the past several decades features men depicted as strong, powerful, macho, rugged, and independent. Chapter 3 describes in detail the integrated marketing communications used by Philip Morris to associate these masculine characteristics with the quintessential male brand—Marlboro. Winston cigarettes, according to a marketing plan for 1984, were aimed at males aged 18–34 years, and the brand was positioned “to focus on the key differentiating wants of Virile Segment smokers ... [including] rugged masculinity.”⁴¹(Bates no. 505415129) David Goerlitz, who was the “Winston Man” in 42 advertisements in the brand’s “Search and Rescue” advertising series, has described his role in the campaign, which “showed myself and other young men hanging out of helicopters and off the edge of cliffs, looking rugged and healthy under blue skies.”^{42,43} In the early 1980s, several advertisements for Camel cigarettes showed men (and associated “gear”) in rustic scenes, with the slogan, “Where a man belongs.”⁴⁴

Two male subgroups that have been targeted by tobacco advertising and promotion are military service members and blue-collar workers. Tobacco industry efforts to reach these groups are described below.

Military Service Members

The U.S. military includes 1.4 million active duty personnel stationed worldwide.⁴⁵ Smoking prevalence among members of the military is considerably higher (33.8% in 2002) than the U.S. Department of Defense (DoD) goal of 20%.⁴⁶ Smoking diminishes short-term troop health and readiness^{47,48} and significantly increases

medical and training costs.^{49,50} At the same time, the military is a fertile field for tobacco sales because of its size, the opportunity to attract young men near the typical age of smoking uptake who fit a specific socioeconomic and cultural profile, and potential carryover of profits to civilian markets.⁵¹ An R.J. Reynolds marketing document on the “Military YAS [young adult smokers] Initiative” reported several key findings, including (1) the military attracts “classic downscale smoker types ... blue collar, less educated, high school, poor academic performance, limited job prospects, part of ‘wrong crowd,’ in trouble with authorities”,⁵²(Bates no. 507358566/8567) and (2) “Military YAS carry brand preferences back into civilian market.”⁵²(Bates no. 507358573)

Thus, soldiers were an early target audience, beginning in World War I, when they were supplied with cigarettes in massive numbers.^{4,53} During World War II, the Korean War, and the Vietnam War, free samples were a part of combat rations and were easily obtained at low cost from the commissaries on military bases. President Roosevelt characterized the product as an essential wartime material.⁵⁴ Cigarettes have been advertised in publications targeted to military service members, including *Army Times*, *Navy Times*, and *Air Force Times*.³⁷

The tobacco industry used distinctive promotional methods such as in-store tobacco merchandising, sponsorships, and brand development to target the military, both in the United States and abroad during times of conflict.⁵¹ For example, Joseph and colleagues⁵¹ found tobacco company documents describing unusual point-of-purchase marketing techniques; efforts to target military spouses; military motor sport sponsorship; and carnivals, picnics, and “mini-war games” with company versus company competitions. R.J. Reynolds considered new brand concepts for the young military adult such as “rest and

5. Themes and Targets of Tobacco Advertising and Promotion

relaxation” and Double Eagles, which were described as “a cigarette for the younger adult military smoker who is looking for a product ... and an image which positively supports his decision to serve in the armed forces.”⁵⁵ Philip Morris developed the 1776 brand for the military market, its pack consisting of an embossed flag design with gold, red, white, and blue colors.⁵⁶

Although tobacco companies in the past distributed free cigarettes to the military, the DoD stopped this practice in 1986.⁵³ However, during Operation Desert Storm in October 1990, Philip Morris and Brown & Williamson distributed free tobacco products to U.S. Army soldiers stationed in Saudi Arabia.⁵¹ In 1990, Philip Morris also embarked on a “voice card” advertising program for Marlboro cigarettes, at a cost of \$1 million. It was designed to get national coverage through *USA Today* and *Newsweek* magazine and was communicated via military base newspapers to soldiers stationed in Saudi Arabia. Family members in the United States would be provided a 10-second voice message, recorded with a computer chip, to be inserted into a holiday greeting card from Marlboro.⁵¹ As the advertising explained,

To a service member stationed in the Gulf, what could be more appreciated than hearing a friendly voice from home. If someone you love is overseas and involved in Operation Desert Shield, now you can send them your love in a unique holiday card, free. It's called Voice Card. And it carries your personal ten-second message that plays back when a button is pressed inside the card. Below is a list of military installations where you can record a Voice Card on November 9th, 10th, 11th.... Your Voice Card is a holiday gift from Marlboro.⁵⁷

The issue of tobacco promotion and the military came to national attention in relation to the conflict in

Iraq. In a November 2004 photo essay for the *Los Angeles Times*, photographer Luis Sinco documented the battle of Fallujah.⁵⁸ One picture, of the new “Marlboro Man,” resonated with news editors across the United States, and suddenly the photograph of Marine Lance Corporal James Blake Miller, a 20-year-old “country boy” from tobacco-growing Kentucky, was everywhere. His bloodied nose, smudged camouflage, and dangling cigarette portrait were splashed across the pages of hundreds of newspapers, and he was praised in evening television newscasts and in pro-war opinion pieces as the embodiment of the noble American fighting spirit.⁵⁸ The *New York Post*, published by Rupert Murdoch, who has sat on the board of directors of Philip Morris, placed Blake’s picture on the front page, with the headline, “Marlboro men kick butt in Fallujah.” The image provided the tobacco industry, especially the Marlboro brand, a bonanza of free publicity.

The different price structure of military stores (commissaries and exchanges)—including limits on the markup of wholesale prices and exemptions from state and local taxes (including those imposed on tobacco products)—has permitted the sale



The new “Marlboro Man” as depicted by the *New York Post* in November 2004

of discount cigarettes to the military.^{45,51} Smith and colleagues⁴⁵ undertook an analysis of internal tobacco industry documents, searches of government and military Web sites and newspaper databases, and interviews with key informants to document why cigarettes continue to be sold in the military at discounted prices. Efforts to try to raise the price of tobacco products in the military began in the mid-1980s, but opposition quickly emerged. Some military officials viewed tobacco use as a “right” and low prices as a “benefit.” Others raised issues of authority, and some saw the change as threatening the stores. Smith and colleagues concluded that the tobacco industry successfully exploited complex relationships among the Congress, the DoD, commissaries and exchanges, and private industry, obstructing change for more than a decade.⁴⁵ They found that leadership from the secretary and assistant secretary of defense, presidential support, and procedural maneuvering finally resulted in a modest price increase in 1996 and again in 2001, but even then, high-level military officials were apparently threatened with retaliation from protobacco congressmen.⁴⁵ The U.S. military still makes tobacco available at discount prices to members of the military.

Blue-Collar Workers (the Working Class)

Several themes have been used to capture the male market, including freedom, independence, success with women, adventure, and virility. Industry documents by R.J. Reynolds identify a critical market as the working-class “virile segment,” which is “younger, more male, less well educated and contains fewer blacks,”⁵⁹(Bates no. 505921999) with about one-third having a moderate income under \$25,000 and two-thirds having educational attainment lower than a college degree. Their ideal image is adventurous, geared for fitting in, taking risks, with lots of sex appeal. They would most likely smoke Marlboro, Camel, or Winston.⁶⁰

Blue-collar workers smoke at a much higher rate than do white-collar workers.⁶⁰ Cigarette companies reach blue-collar workers through advertising in magazines such as *Field & Stream*, *Popular Mechanics*, *Car and Driver*, *Outdoor Life*, *Road & Track*, *Hot Rod*, and *Motor Trend*, which in aggregate accounted for about 9% of total tobacco industry spending on magazine advertisements in 1994.⁶¹

Early Spokespersons—and Early Victims

Following World War II, television arose as a major cultural force in the United States, with strong support from cigarette manufacturers. Many shows, such as *Hennessy* and *Topper*, and stars, such as John Wayne, Desi Arnaz, and Ronald Reagan, were shown smoking or promoting specific products,^a creating an early theme that associated cigarettes with glamour and success.

In time, many television personalities and entertainers who promoted cigarettes or were featured in tobacco advertising later died from diseases—such as lung cancer and emphysema—that were caused by smoking. Roswell Park Cancer Institute, as part of its tobacco documents archive, maintains a Web site called the “Hall of Shame,”^b detailing the deaths of celebrities such as Wayne and Arnaz, and tobacco advertising pitchmen such as Nat King Cole and Ed Sullivan, that were caused by smoking.

^aIngram, B. 2004. Video vault: Cigarette advertising on TV. <http://www.tvparty.com/vaultcomcig.html>.

^bRoswell Park Cancer Institute. 2006. Tobacco Industry Hall of Shame: Once shining stars snuffed out by tobacco and smoking-caused illnesses. http://roswell.tobaccodocuments.org/hall_of_shame.htm.

5. Themes and Targets of Tobacco Advertising and Promotion

The working class can be reached through other media as well. An R.J. Reynolds spokesperson was quoted in *Business Week* as follows:

Blue-collar people read the sports pages, and we will make every effort to place Winston in newspapers. We also know that they're impressed with out-of-home advertising because that gives them comfort when they see their brand in the marketplace.⁶²(p.52)

The marketing of a cigarette brand aimed at blue-collar women (Dakota) is described in the following section, "Women."

Some of the most popular male-oriented campaigns have combined the ideals identified by R.J. Reynolds (adventurous, geared for fitting in, taking risks, and lots of sex appeal) into an image of a self-reliant, rugged, and independent male using a seemingly full-flavored tobacco. This approach is found in the Marlboro cowboy, the Camel Turk, the Copenhagen bull-riding champion, the Player weekend sports adventurer, and others. For example, Imperial Tobacco positioned Players cigarettes to convey a man "free

to choose friends, music, clothes, own activities, to be alone if he wishes," but not lonely, and self-reliant with "nobody to interfere."⁶³(Bates no. 689451814) The male smoker is autonomous, accepted, athletic, and admired.⁴

Advertisements tended to show men in a man's world, according to the Federal Trade Commission analysis of advertisements in 1967. This report found that women are generally excluded unless they are attracted to the man or willing to be a member of the gang. "Men who are men are not reticent about being liked by women," the report states, offering examples such as the Pall Mall advertisements including a close-up of a woman who is won over by a man who might offer her this brand of cigarettes.⁶⁴(pp.14-15)

This image of a man's world is carried out in advertising campaigns aimed predominantly at male consumers. USST captured this image on a Web site featured in a Copenhagen advertisement in *Playboy* magazine in 2004. The Web site for adults⁶⁵ leads to a video called *The Spirit and Tradition of Copenhagen*, in which a folksy announcer states, "And just like the men who use it, Copenhagen is committed to being the best. That's the spirit of a man, the spirit of America, the spirit and tradition of Copenhagen." The background imagery rotates among pictures of men engaged in repairing oil rigs, logging, working in construction, welding, racing cars, riding bulls, and hunting deer, with frequent breakaway images of these men sampling tobacco.

Sports sponsorship provides additional opportunities to pair tobacco with imagery that would appeal to men and to sign up attendees for compelling direct mail promotions (see chapter 6 for a further discussion of tobacco sponsorship). In 2001, tobacco sponsorship included Winston's association with the National Association



World Champion All-Around Cowboy Ty Murray states, "The three priorities in my life are my horse, my rope and my Copenhagen. But not necessarily in that order."

of Stock Car Auto Racing (NASCAR);* Skoal racing teams at National Hot Rod Association (NHRA) events; the Players, Kool, and Marlboro teams at Championship Auto Racing; and Copenhagen booths at PRCA and professional bull-riding events.¹⁰ All of these activities appeal to a large and loyal fan base dominated by white males. In both the cowboy and the racing imagery, the independent male has been a heroic figure.^{66(p.179)}

Women

Tobacco marketing to women was launched in the 1920s with campaign messages that resonate in advertisements for women today. American Tobacco urged women to “Reach for a Lucky instead of a sweet,” playing directly to concerns about body weight.^{67,68(p.267)} During this same era, the company represented cigarettes as “symbols of freedom” and organized a display of several women walking and smoking their “torches of freedom” in New York’s Easter parade.^{69(p.386)} Leo Burnett combined the two women’s themes of weight control and liberty in the 1960s with the launch of the decades-long campaign, “You’ve Come a Long Way, Baby,” pairing Virginia Slims cigarettes with stereotypes of thin, capable, and independent women.⁶⁸ Direct mail materials for women continue these themes, exemplified by the magazine *All Woman*, which is produced for Virginia Slims users of all ages. In a content analysis of Virginia Slims advertisements from 1970 to 1996, Boyd and colleagues⁶⁸ found a consistent emphasis on values of beauty, independence, and sexual desirability, and on the message that thinness was a link between tobacco use and success.

The 1970s and 1980s saw the advent of a succession of brands aimed at women, including Kim and Eve—and in the 1990s,

Satin—with packaging that featured sophistication and femininity, such as designs on the cigarette, softer or pastel colors, and long slim packs.³⁴ Eve cigarettes, for example, had a feminine floral design on the paper with the advertising caption, “Farewell to the ugly cigarette. Smoke pretty. Eve.”^{70(Bates no. 03375509)} Marketed during the 1990s, Capri was the first “ultra-slim cigarette” whose advertising attempted to tap the need of busy women to indulge in an escapist fantasy.⁷¹ Satin cigarettes urged women to spoil themselves with satin and offered a satin pouch in which to carry the pack.^{71,72} Ritz, billed as the first “designer cigarette,” bore the logo of the fashion designer Yves Saint Laurent on its package and filter tip.³⁷ However, these women’s brands represent only 5% to 10% of the market, with most female smokers selecting brands, such as Marlboro, that appeal to a wide array of audiences.⁷³

Many of the women’s brands have been marketed with promotional strategies that have been used more and more heavily by cigarette companies (see chapter 4). Beginning in 1971, Virginia Slims was marketed aggressively for many years through sponsorship of professional women’s tennis tournaments, and in later years, through the “V Wear” catalog of clothing and accessories.⁷² Empty packs of Eve Lights were redeemable for a free pair of Silkies panty hose or a discounted Anne Rothschild chemise.³⁷ During the introduction of Newport Slim Lights, which was targeted to women as an extension of the gender-neutral brand Newport, a free package of Aziza eye shadow came with the purchase of two packs of cigarettes.⁷⁴

Women represented a growth market for tobacco companies for decades in the United States and, later, worldwide. In 1990, an editorial in the *Tobacco Reporter* reflected this interest: “Women are becoming more

*Winston withdrew sponsorship in 2003, and the event is now called the Sprint Cup.

independent and, consequently, adopting less traditional lifestyles. One symbol of their newly discovered freedom may well be cigarettes.”⁷⁵

Several other themes, in addition to those listed above, have characterized campaigns aimed at women, including glamour, fashion or style, sophistication, and romance. In the 1930s and for decades afterwards, Chesterfield advertisements linked smoking to glamour, featuring Hollywood stars such as Rita Hayworth, Betty Grable, and Dorothy Lamour, while Camel cigarettes were endorsed in the 1950s by Joan Crawford.⁷² In the 1980s, Salem used imagery filled with springtime softness and romance to appeal to women and to convey the freshness of menthol. Later imagery in cigarette advertisements directed at women emphasized slimness, equality, and independence, along with attractiveness, social success, style, romance, and sassiness. These separate themes are often united by an overarching concern with self-image, acceptance, and independence.⁷²

A series of campaigns aimed at blue-collar women and less-educated women, including R.J. Reynolds’s Dakota and Camel cigarette campaigns, has taken a different direction. Both Philip Morris and R.J. Reynolds consider the blue-collar market, both men and women, to be critical.⁶⁰ Dakota, introduced around 1990, was designed to appeal to young adult, less educated, “virile females” who appreciate traditional “masculine” values such as independence and self-control, who might work in service or factory jobs, and who might otherwise smoke Marlboro cigarettes.^{72,73,76} The campaign was pulled after protests by antitobacco advocacy groups and poor performance in test marketing.⁷² Camel cigarettes have featured a female Joe Camel and branded merchandise products for women, offered in exchange for Camel Cash coupons. Doral has also stepped in with a campaign aimed at gutsy, edgy, but also

fashion-loving women. Winston and Marlboro have been the main brand sponsors of automobile sports in the 1990s, with women representing a large portion, though not majority, of this fan base.⁷²

Many campaigns specifically aimed at women downplay or avoid health issues, reserving those messages for campaigns targeting concerned smokers (who happen to be predominantly female; see discussion in the section, “Concerned Smokers”). For decades after the first fears of lung cancer emerged in the 1950s, there was a quiet emphasis on images showing health, vitality, sexiness, and attractiveness, while text receded in importance.⁷⁷ Women’s magazines that relied heavily on cigarette advertising revenues were found to be less likely to carry articles about the health hazards of tobacco (see chapter 9),^{67,77} and tobacco company direct mail magazines such as *All Woman* and *Flair* (see section above on “Segmentation, Tailoring, and Targeting”) tout a healthy lifestyle despite the association with smoking.⁷⁸

Women were recognized by tobacco companies as the first and primary market for menthol cigarettes in the United States during the 1950s and 1960s, and were targeted with early advertising images that associated menthol with gentle outdoor scenes, romance, and springtime. Since that time, women have been one of the most significant demographic groups (in addition to African Americans) among the 25% of smokers who use menthol cigarettes.²⁹

The American Council on Science and Health (ACSH)⁷⁹ examined the publication of smoking-related content during 2001 and 2002 in 15 magazines, most of which are targeted to women: *Cosmopolitan*, *Elle*, *Family Circle*, *Glamour*, *Good Housekeeping*, *Harper’s Bazaar*, *Health*, *Ladies’ Home Journal*, *Prevention*, *Reader’s Digest*, *Redbook*, *Self*, *Shape*, *Vogue*, and *Woman’s Day*. Material evaluated

included articles primarily about smoking, references to negative effects of smoking, references that portrayed smoking in a positive fashion, and advertisements (either for cigarettes or by antismoking campaigns). The study found that 390 pages of cigarette advertisements appeared in these magazines during the two years, ranging from 0 for six of the magazines to 13 for *Family Circle*. Among nine magazines studied by ACSH in both 1981 and 2001, cigarette advertising decreased from more than 1,300 pages in 1981 to 210 pages in 2001. Among 10 magazines studied by ACSH in 1997–98, 1999–2000, and 2001–02, the numbers of cigarette advertising pages per issue were 2.9, 4.3, and 1.5, respectively, for this period. Despite the decrease in the volume of cigarette advertising in these magazines over time, due in part to the Master Settlement Agreement (MSA) (see chapter 3), ACSH noted that the nine magazines carrying cigarette advertising in 2001–02 published 390 pages of cigarette ads but only four antismoking articles with a minimum of one full page of text.⁷⁹

Rosenberg and Siegel⁸⁰ conducted a comprehensive study of tobacco company sponsorships during the period 1995–99. They identified 2,733 tobacco-sponsored events, programs, and organizations in the United States, involving all 50 states, with total tobacco company funding exceeding \$365 million. Those sponsorships included 33 events, programs, or organizations related to women, for which the tobacco industry's total financial support exceeded \$4.0 million. The individual events, programs, and organizations are listed in a detailed report by Siegel.⁸¹

Youth

It has been documented that male- and female-targeted marketing campaigns initially influenced young smokers of each sex.⁸² The battle among the tobacco corporations for the youth market in

particular has been fierce because of the industry's recognition that most smokers do not change brands once they have settled on a first steady choice.⁴ Despite tobacco industry claims that it does not market to youth, the corporations' own documents reveal decades of research and development of strategic plans designed to capture the youth market. The industry conducted survey and focus group research into the smoking behavior of teenagers, developed highly competitive marketing proposals, designed products that eliminated harsh taste, featured coded words such as "smooth" and "mild," tailored the packaging, and coupled lower prices with value-added promotions; all of these were features intended to appeal to beginning smokers.^{4,5,83} To recruit starters, brand images communicated independence, freedom, and sometimes peer acceptance.⁴ These advertising images portrayed smokers as attractive and autonomous, accepted and admired, athletic, and at home in nature.

Along with tailored messages and packaging, communication channels have also been used to deploy brand messages and images to high numbers of youth in locations that can catch their attention and aid in the association of the brand with fun or a certain lifestyle.⁸³ From 1960 to 1966, the *Flintstones* television cartoon featured the lead characters smoking Winston cigarettes during the closing commercials.⁸⁴ Magazines carried tobacco advertising that reached large numbers of youth. In an analysis of tobacco advertising in magazines, the brands that were most popular among adolescents were more likely than brands popular with adults to run in magazines with high youth readerships.^{85,86} Sports and entertainment magazines with high youth readership, such as *Sports Illustrated* and *Rolling Stone*, have been a mainstay of tobacco advertising, with reductions following the advent of the MSA of 1998, which restricted marketing to youth.⁸⁶ Chapters 4 and 10 provide

greater detail on advertising in magazines, tobacco product placement, and portrayal of smoking in movies.

The MSA banned tobacco billboards, which were another channel (if not the leading one) that reached large numbers of youth. In an analysis of billboard expenditures and related business documents in 1998, Davis⁸⁷ concluded that tobacco companies dominated outdoor advertising in locations where people live and shop, and that the billboards were highly visible, difficult to ignore, and a leading source of tobacco advertising exposure among youth. Point-of-purchase marketing is also an effective way to reach youth who are frequent visitors to convenience stores.⁸⁸

Sports sponsorship in communities and on television has permitted Winston, Marlboro, Copenhagen, and Skoal to reach large numbers of youth and young adults in settings that facilitate sampling and promotions and to associate the brands with the allure of racing and rodeo heroes.^{9,10,89} Tobacco-sponsored adult-only sampling booths at these events are restricted to adults but create appealing and sometimes mysterious exhibits with large exterior wall space for brand advertisements (see the Copenhagen booth), along with the added value of being a “forbidden fruit” restricted to adult smokers. Automobile racing, motorcycle racing, and rodeo themes continue to resonate through all levels and locations of brand advertising and promotions for Winston, Players, Marlboro, Copenhagen, and Skoal. NASCAR, in particular, has gained additional leverage with youth through its non-tobacco-sponsored promotions to youth in toy stores, on cereal and chip packages, in fast food “kiddie” meals, and on Saturday morning television.^{9,10}

R.J. Reynolds’s Camel campaign is a good example of what a carefully targeted and tailored campaign can achieve in the population for which it is designed.

When the cartoon character Smooth Joe Camel was introduced in 1988, Camel cigarettes had been most popular among men over the age of 65 and had just 0.5% of the youth market.⁹⁰ By 1991, its share in the youth market increased sharply to 32.8%, and recognition of the cartoon character was greater among youth than among adults.⁹¹ As a cartoon character, Joe had an obvious appeal to children, but the product also had sugar added to the tobacco, and the word “smooth” in the message played on the interest of potential smokers unused to the harshness of cigarettes.^{83,92}

Perhaps in response to the success of Joe Camel (who was “retired” by R.J. Reynolds in 1997 in the midst of public and legal attacks on the campaign), Brown & Williamson test-marketed a modern youth-oriented version of the cartoon advertising model “Willy the Penguin” for its Kool cigarette brand in 1991. Willy was described as having “the biceps of Hulk Hogan, a Vanilla Ice hairdo, Spike Lee high top sneakers, and a Bart Simpson attitude.”^{93(p.133)}

The smoother, milder taste of menthol cigarettes also appeals as a starter cigarette for youth, used by close to one-half of middle school students who smoked in 1999. The tobacco companies were aware of this tendency, according to a Philip Morris tracking study that reported that Newport had the youngest franchise of any cigarette brand in 1984, with more than one-half of its smokers under age 24. The message in menthol-related advertisements at that time and since has stressed “cool” lifestyles and young people having lots of fun together, both important themes for youth and young adults.^{29,83}

Skoal Bandits, a smokeless tobacco product consisting of moist snuff packaged in teabag-like pouches, is another youth-targeted starter brand. The lower pH of the snuff in this product decreases nicotine absorption

in the mouth and therefore reduces the harshness of the taste for the new user.^{94,95} The pouch avoids the “messiness” of loose tobacco in the mouth, which also facilitates use among young initiates. Industry documents describe a “graduation process” in which youth begin smokeless tobacco use with Skoal Bandits, and then, after developing tolerance to the modest bioavailability of its nicotine content, they graduate to higher nicotine brands. Marketing activities have targeted college students (on campuses and at warm-weather student vacation sites), and advertisements have provided instructions on how to use the products.⁹⁶

The most successful campaign among youth has been the long-standing Marlboro man. While the western imagery, cowboys, and horses would appeal to the youngest child, this campaign features the themes of independence and freedom from authority—both messages that address important issues for adolescents.^{4,83}

These three cigarette brands (Marlboro, Newport, and Camel) and their evolving imagery continue to be popular among children. Marlboro is the leading choice of teens, used by 48.0% of smokers in this age group, followed by Newport (23.2%) and Camel (10.1%), according to the 2005 National Survey on Drug Use and Health.⁹⁷

Rosenberg and Siegel,⁸⁰ in their study of tobacco company sponsorships during the period 1995–99 (described above), identified 11 tobacco-sponsored events, programs, or organizations related to youth, with the tobacco industry’s total financial support exceeding \$8.8 million. The individual events, programs, and organizations are listed in a detailed report authored by Siegel.⁸¹

Chapter 7 reviews other evidence that youth are exposed to, and affected by, tobacco advertising and promotion.

Young Adults

In the late 1970s, the term *young adult* began to replace terms such as *youth* and *young smoker* in the tobacco industry’s internal documents. Cummings and colleagues concluded that this shift was in part an effort by the tobacco industry to dodge claims that tobacco marketing targeted youth, despite stated plans to promote cigarettes near high schools and other youth-oriented locations.⁸³ *Young adult* was more than simply a euphemism for *youth*. There has been keen tobacco industry interest in the 18- to 25-year-old target population because this age range is a time of transition and experimentation and because most new smokers stay with the brand they first use regularly.^{4,98,99}

There is even an acronym found in tobacco industry documents—FUBYAS—that refers to young adult smokers who are choosing their first usual brand.⁶⁰ A successful tobacco brand must attract young smokers who will ideally (from the manufacturer’s perspective) go through a series of stages leading from experimentation, to loyalty to a particular brand, to increased consumption as they age and become mature smokers.^{100,101} Because every day approximately 4,000 adolescents between the ages of 12 and 17 initiate cigarette smoking,¹⁰² the early years are critically important in helping young adult smokers settle on a brand for life, thus helping tobacco companies gain total brand share.

Tobacco marketing has been aimed at “tunnels of influence” through which young adults travel frequently and in which they are experimenting and experiencing changes in their lives, such as colleges, fraternities, bars, and the military.¹⁰⁰ Bars have been identified as locations in which young adults are open to trying new things, influenced by friends and alcohol, receptive to tobacco marketing, and thinking mainly about having a good time.^{98,100} In a survey of 10,904 students

enrolled in 119 nationally representative four-year colleges and universities during the 2000–2001 school year, Rigotti and colleagues¹⁰³ found that 8.5% of respondents had attended a bar, nightclub, or campus social event where free cigarettes were distributed. Tobacco sponsorship of promotions at urban bars appears to have risen in the 1990s.¹⁰⁴

Coupled with restrictions on tobacco marketing in locations accessible to youth, tobacco companies are using bars for a variety of promotions. In the first six months of 2004, more than 10,000 tobacco-sponsored bar nights were announced in California, many representing locations where the marketing staff would stop for a few minutes to see if any potential smokers might be interested in a free sample.¹⁰⁵ In some cases, these promotional methods are used surreptitiously (i.e., without disclosure of the corporate sponsorship). This is referred to as “stealth marketing,” “buzz marketing,” or “undercover marketing,”¹⁰⁶ a subject discussed in more detail in chapter 4.¹⁰⁷

Tobacco promotions have also occurred at sponsored racing and rodeo events, with booths restricted to adults. The event could be corporate sponsored, such as Supercross motorcycle racing and professional rodeos (with USST sponsorship), or brand sponsored, such as NHRA racing (with Skoal sponsorship). In both cases, Skoal and/or Copenhagen booths (see page 144 for an example) can pass out promotional literature, coupons, and even free samples, as long as distribution is restricted to adults. At these types of events, there is a large young adult population.^{9,10}

Industry documents reveal that music, sports, and social activities are important environments for young adults and can help associate smoking with a fun, normal adult life.¹⁰⁰ Because the number of smokers in this age group far exceeds the number under the age of 18, growth in marketing

aimed at this critical target population is likely to occur.

Racial and Ethnic Populations

Racial and ethnic populations in the United States represent a wide array of opportunities for growth in sales of tobacco products as well as support from community leaders for industry legislative initiatives. Prevalence of tobacco use among some of these populations is higher than among the general population, and quit rates are lower.^{108,109} These characteristics make racial and ethnic groups attractive targets of tobacco marketing, as described below.

African Americans

Tobacco advertising and promotion to African Americans have been marked by special products, imagery, themes, and locations designed to reach and appeal to black audiences. Around 1900, the American Tobacco Company advertised Bull Durham smoking tobacco with the caricatured images of blacks that were commonly used in that era. In the final decades of the 20th century, before the MSA banned cigarette billboards, several studies found disproportionately high rates of cigarette advertisements on billboards in predominantly African-American urban areas.^{87,110,111(p.221)} Tobacco companies have run



American Tobacco Company advertisement for Bull Durham tobacco

advertisements in predominantly African-American publications since the 1940s, when Philip Morris first recognized the significance of this market.¹¹² In a comparison of cigarette advertisements in *Life* and *Ebony* magazines from 1950 to 1965, Pollay and colleagues³ found more athlete endorsements, fewer brands, and a later introduction of filtered products in *Ebony* than in *Life*. They also found that the models and spokespersons in *Ebony* were predominantly black.

Special tobacco products, mostly menthols, were developed and promoted originally to women and then increasingly to African Americans.¹¹³ A senior marketing official of R.J. Reynolds stated, in a speech in 1988, that, “Where menthol smokers make up only 29 percent of the general market, almost 70 percent of Black smokers choose a menthol brand. That’s why special advertising and promotions for Salem cigarettes make a lot of sense in Black media and Black communities.”¹¹⁴(Bates no. 507714730)

Brown & Williamson, along with other companies, has been proactive in advertising to African-American men by

using darker-skinned models, language associated with the black experience, and masculine imagery, which resulted in Kool’s becoming the top-selling cigarette in this population in 1969.²⁹ An example from 2004 of this approach is Brown & Williamson’s Kool Mixx DJ campaign via bars, featuring DJ competitions and tobacco samples, special lighters with a green flame that matches the color of a Kool cigarette package, a CD with hip-hop music with the Kool brand on the outside, and a copy of *VIBE* magazine. Similar promotions ran in retail outlets and magazines (see Newport’s “Full of Pleasure!” menthol cigarette advertisement, page 147).¹¹ This campaign sparked a protest among multiple groups in the United States. When observations were conducted by tobacco control advocates in bars in southern California, materials from a Kool bar night were collected, including Kool bar napkins, a lighter with a green flame, packs of Kool cigarettes, coupons, and a Kool Mixx plastic bag. These materials served as evidence that permitted court actions in three states to halt distribution of some of the promotional items (California Department of Justice,

Standing Up to Targeted Marketing—the Uptown Protest

One product designed to be promoted to African Americans, Uptown cigarettes, was developed by R.J. Reynolds in 1990 to be test-marketed in Philadelphia. It was intended to compete with Newport (Lorillard), which had an 80% share of the young adult African-American market. Package design and colors were tested with this market in mind, with tar and nicotine levels that were higher than in most other menthol brands. While Newport advertising portrayed a fun, stylish, mainstream sensibility, Uptown focused more on status, style, and premium quality. Both brands drew on urban nightlife and music themes. African-American community groups organized a coalition to oppose this introduction of Uptown, forcing R.J. Reynolds to withdraw the planned product launch.^{a,b} Although this achievement was significant and brought national attention to tobacco targeting practices, it did not deter R.J. Reynolds from using many of the Uptown marketing strategies to promote its other menthol products, such as themes focused on urban nightlife, and the use of escape or fantasy settings in its advertisements.^a

^aBalbach, E. D., R. J. Gasior, and E. M. Barbeau. 2003. R.J. Reynolds’ targeting of African Americans: 1988–2000. *American Journal of Public Health* 93 (5): 822–27.

^bSutton, C. D., and R. G. Robinson. 2004. The marketing of menthol cigarettes in the United States: Populations, messages, and channels. *Nicotine & Tobacco Research* 6 Suppl. 1: S83–S91.

e-mail correspondence to Tess Boley Cruz, June 2004).

African-American opposition to targeted tobacco advertising has been loud and visible in the Kool Mixx and Uptown protests. However, much opposition to the industry's practices has been countered by corporate giving to pivotal community and arts groups, education scholarships, fashion shows, career fairs, and appointments in the top ranks and board rooms of the major tobacco corporations.^{3,15,112} Black publishers have been the recipients of special events and awards, along with substantial tobacco advertising revenues. Black opinion leaders have been courted and enlisted as allies to defuse antitobacco efforts from within and outside their communities and as a frontline force to advance the industry's positions.¹¹² Philip Morris could claim that it supported the African-American community by purchasing advertising space in black publications, hiring and promoting African-American models, promoting diversity hiring and employee retention, and supporting African-American organizations.¹¹⁵

Rosenberg and Siegel,⁸⁰ in their study of tobacco company sponsorships during the period 1995–99 (described above), identified 78 tobacco-sponsored events, programs, or organizations related to minorities, with the tobacco industry's total financial support exceeding \$2.0 million. Fourteen of the sponsorships appear in the category "Minorities—African American."⁸¹

Hispanics

A similar pattern of concentrated magazine advertising, development of special brands, and support for community leaders can be found in both the African American and Hispanic populations.

As early as 1979, Brown & Williamson had produced a report on the Hispanic market, followed by a series of similar reports by

Philip Morris. An investigation of tobacco industry documents¹¹⁶ describes their recommendations. The reports reflect a clear grasp of the regional differences, cultural festivals, and business leadership groups available for special promotions. For example, the "1994 Marlboro Hispanic Marketing Plan" by Philip Morris identified the largest Cinco de Mayo events in the nation for promotions that would lead to the collection of names for the corporation's direct mail databases, resulting in more than 90,000 names generated.¹¹⁷ The main target was development of Marlboro brand loyalty among young adult males, followed by young adult females, primarily through retail visibility and coupon catalogues. The corporation recognized that automobile racing was a popular sport among Hispanics, so they used this theme in stores and through direct mail, along with the Marlboro music shows at cultural festivals and fairs. The other prominent tobacco advertising themes identified in industry documents were quality (Viceroy and Marlboro), fun and sociable occasions (Newport), and authenticity (Winston). The concept of low cost was equated with low quality, and therefore to be avoided. The reports by Philip Morris and by R.J. Reynolds show a preoccupation with the Spanish-speaking smoker, in some cases with special efforts directed to the border area. Lorillard's Newport was similarly promoted to young Spanish-speaking smokers in an effort to capture the Hispanic menthol market, using advertising that emphasized sociability and fun (see "Full of Pleasure!" advertisement, page 147).

Philip Morris, with its specially targeted brand Rio in the 1960s, its advertising for Marlboro and Virginia Slims, and its public relations campaigns, has been the leading advertiser to Hispanics.^{3,111(p.220)} In 1999, Philip Morris launched a new Virginia Slims campaign that seemed aimed at several ethnic women's populations, including whites, Hispanics, African Americans, and Asian Americans, with the slogan,

“Find Your Voice,” suggesting that each woman uphold her own unique form of expression.¹¹¹ The advertisements ran in women’s magazines and were delivered in direct mail to smokers. Some of these advertisements were in Spanish in Spanish-language magazines. This campaign produced a united response among several ethnic networks and women’s organizations nationwide. However, the protest was not completely successful, and the campaign lasted through 2002.

Both Philip Morris and R.J. Reynolds used various methods, including financial support of groups and events; donations; recognition of Hispanic leaders, publishers, and politicians; and participation of industry staff on community and arts boards. Many business alliances, such as the Hispanic Chambers of Commerce, from the national to local levels, received support from R.J. Reynolds. The Cinco de Mayo festivals, supported first through Marlboro-brand sponsorships and then through Philip Morris support, reached out to leaders as well as to potential consumers. The industry lent its support to these groups to encourage opposition to tobacco regulations, taxes, and legislation, as well as to gain access to grassroots movements that would be willing

to convey the industry’s message and to gain goodwill for its political agenda (Bialous, Cruz, and Baezconde-Garbanati unpublished manuscript).^{9,10,14}

Rosenberg and Siegel,⁸⁰ in their study of tobacco company sponsorships during the period 1995–99 (described above), identified 78 tobacco-sponsored events, programs, or organizations related to minorities. At least 14 of the sponsorships are related to Hispanics⁸¹ and include support for dance companies, theater groups, ethnic festivals, an art exposition, conferences, and leadership development.

Asian Americans and Pacific Islanders

There has been relatively little research about tobacco marketing aimed at Asian Americans and Pacific Islanders. Billboards and stores in predominantly urban Asian American communities have been found to carry more tobacco advertising compared with other urban neighborhoods and to be less likely to carry health warnings compared with white neighborhoods.¹¹¹

Rosenberg and Siegel,⁸⁰ in their study of tobacco company sponsorships during the period 1995–99 (described above), found at least three sponsorships related to Asian Americans. These sponsorships provided support for the Asian American Expo (in El Monte, California), dinners held by the Congressional Asian Pacific American Caucus in association with presidential inaugural activities, and publication of a directory of Asian Pacific American organizations.⁸¹

Investigations of tobacco industry documents provide additional information. Beginning in the 1980s, four major tobacco corporations commissioned reports on the marketing possibilities in the Asian American population groups and found promise of growth markets because of high population growth, high smoking rates in countries



“Find Your Voice” campaign for Virginia Slims in Buen Hogar Magazine, 2002

of origin, increasing consumer power, and high brand loyalty to American products as a way to assimilate. In addition, the majority of convenience store owners in key locations were Asian Americans, making them an important group to cultivate. The heterogeneity of the various population groups and the lack of well-developed Asian American media, however, were barriers to market expansion.¹¹⁸

Philip Morris developed a three-pronged strategy to deal with these issues. First, the “push” strategy would promote trade relations with Asian American business owners through cultural sensitivity training of Philip Morris sales staff, promoting special retail sales materials, and special business-to-business programs involving support of business associations. Second, the “pull” strategy would involve marketing to consumers with special promotions, events such as exhibition of a Marlboro race car and promotions during the Chinese New Year, and tailored advertising materials. One of the themes that emerged as important was upward mobility associated with smoking. The third strategy was corporate goodwill, which was sought by supporting organizations such as political groups, women’s organizations, arts and culture groups, senior centers, and food banks. R.J. Reynolds and Brown & Williamson used similar approaches.¹¹⁸

The types of products promoted are less clear. However, there is a high rate of menthol cigarette use in some Asian countries and among Asian American youth smokers, second only to African Americans.²⁹

In 1990, Japan Tobacco Inc. began advertising Japan’s best-selling Mild 7 cigarette brand on billboards in the Koreatown and Little Tokyo areas of Los Angeles. Mild 7 packages were stacked in displays in restaurants and stores. Retailers reported that demand for the cigarettes was strong. The marketing manager at JATICO, Japan Tobacco’s U.S.



R.J. Reynolds Tobacco Company advertisement for Kauai Kolada variant of Camel cigarettes

arm, stated that the brand, although originally imported for Japanese tourists, was also wanted by Asian Americans.¹¹⁹

In 2004, R.J. Reynolds began a national advertising campaign for a new Camel brand named Kauai Kolada. The advertisements, which appeared in several magazines, including *Time*, *Sports Illustrated*, *People*, and *Stuff*, featured a hula girl promoting the pineapple- and coconut-flavored cigarette. Although the campaign used Hawaiian imagery, it was likely aimed at a much broader audience. Kauai residents, tobacco control advocates, the governor of Hawaii, and the mayor of Kauai criticized the campaign for being culturally insensitive and using Hawaiian images and the name of Kauai to market cigarettes to young people.^{120–122} “I am appalled that this company has chosen to use the Kauai name to market a product that kills,” said Kauai Mayor Bryan Baptiste. “The word ‘Kauai’ is not just the name of our home. It is representative of our culture and our community.”¹²³

American Indians and Alaska Natives

Despite relatively high rates of tobacco use compared with the general

population,^{111,124} there is almost no published literature on tobacco marketing to American Indians or Alaska Natives. A study by Hodge and colleagues¹²⁵ found that among 1,000 internet sites selling tobacco, 52 were identified as American Indian sites, with 77% of these sites owned by American Indians. These types of tobacco sales outlets provide colorful and appealing advertisements, easily accessible products, and very low costs. In turn, the individual and tribal owners reap profits that may blunt opposition to or critical awareness of the negative effects of tobacco use among American Indians.

There are limited examples of cigarette advertisements that have featured either American Indian themes or images. For example, American Spirit cigarettes liberally use traditional imagery in all their product and promotional materials and provide support for the arts in New Mexico. Joe Camel once sported an American Indian eagle feather headdress.¹²⁶

There have also been some efforts by Philip Morris to fund American Indian leaders, causes, and community groups. Rosenberg and Siegel,⁸⁰ in their study of tobacco company sponsorships during the period 1995–99 (described above), identified 78 tobacco-sponsored events, programs, or organizations related to minorities. Six of the sponsorships are related to American Indians.⁸¹ These gifts, each from Philip Morris, went to the American Indian College Fund, Dull Knife Memorial College, First Nations Development Institute (to alleviate hunger in Native American communities), Joslyn Art Museum (to support an exhibit of drawings by Plains Indians), Red Earth Native American Cultural Festival, and teacher development programs at tribal colleges. However, there is no documentation as yet of clear and persistent targeting of American Indians.

Lesbian, Gay, Bisexual, and Transgender Populations

Advertising aimed at lesbian, gay, bisexual, and transgender (LGBT) populations initially was largely covert, coded to be sexually ambiguous in ways that would resonate with gay audiences and avoid charges of blatant targeting. For example, a Virginia Slims advertisement in the early 1990s featured a man and a woman walking together while the woman looked over her shoulder at a woman behind her. The caption, “If you always follow the straight and narrow, you’ll never know what’s around the corner,” contains language that could be read two different ways by straight women and lesbians.^{127(p.66)}

An ad for Montclair cigarettes (c. 1991) featured a male model who, according to the *Detroit News*, “looked to many like an aging, effeminate homosexual—captain’s cap on head, pinky ring (no marriage ring), dapper ascot—shrieking in pleasure over his cigarette.”^{128(p.158)}

Industry documents reveal another covert effort called Project SCUM (subculture urban marketing), developed by R.J. Reynolds to market Camel and Red Kamel to “consumer subcultures” in the San Francisco area between 1995 and 1997. The special targets were rebellious Generation X’ers (i.e., youth) in the Castro and Tenderloin districts with a large LGBT population, including portions of these populations with high rates of illicit drug use. The plans were apparently not carried out, but the documents reveal the interest in these populations.¹⁵

Gay and lesbian audiences have been an attractive target because smoking prevalence among those populations is substantially higher than among the straight population.^{15,115,129–132} To reach this audience, tobacco companies have directed advertising and promotions to magazines such as *The Advocate*, *Genre*, and *Out*, with a high percentage of gay readers; bars frequented by LGBT crowds;

and outdoor signs featuring images such as the Marlboro Man in predominantly gay neighborhoods. These marketing efforts have been complemented by corporate donations such as Philip Morris's support for LGBT and HIV-related causes or organizations.¹¹⁵ Loyalty to brands and companies advertising through these channels or supporting these organizations is reported to be high, due to neglect of the LGBT market by traditional advertisers and corporate sponsors.^{15,130} LGBT magazines may be more dependent on tobacco accounts because of the historic neglect by other advertising revenue sources.¹³⁰ This population, in turn, may be especially vulnerable because smoking has been sensualized on Internet sites and in magazines featuring gay and lesbian imagery, counterbalanced by relatively thin antitobacco efforts in LGBT communities.¹³⁰

Concerned Smokers

Tobacco corporations work hard to avoid losing customers and they have developed many products and messages to counter the major "health scares" of the past 50 years.^{24,29} The messages are typically not designed to promote all cigarettes as safe, but rather the idea that some brands are less hazardous than others. As noted above, reducing anxiety among smokers has been a major theme in tobacco advertising. In the 1950s, filters emerged with health claims such as L&M's "Just What the Dr. Ordered" and Life's "The Secret to Life is in the Filter," implying that the risks of smoking were greatly reduced, if not eliminated, by these products.²⁴ Menthol filters entered the mainstream in the late 1950s and early 1960s, with Salem, Newport, and Kool first positioned as remedial- or medicinal-type products, then repositioned as providing a positive and refreshing taste.^{24,29} Following the Surgeon General's 1964 report, Philip Morris aimed menthol advertising at women, anticipating that they would be the most receptive to a "health cigarette."²⁴

By 1973, a significant number of brands, characterized by the industry as a "new low-delivery segment" of the market, were designed either to be or to give the illusion of being low-yield cigarettes (low tar and/or low nicotine) or to reduce risk through filtration. The balance was challenging because the products and their claims were intended to assuage guilt and prevent health-conscious smokers from quitting, but the lower nicotine levels made it also likely that the users would be less addicted and thus more able to quit.²⁴

Philip Morris overcame this hurdle with Merit in 1976. The full-page advertisements appeared to proclaim a technological breakthrough that married taste and low tar. The advertisements were text-heavy to give the impression of science news, with headlines that shouted: "National Smoker Study: Merit Science Works!" Even the product name was designed to communicate virtue.²⁴

Other new products, with virtuous-sounding names such as FACT, Real, and Long Life, were launched along with brand extensions such as Marlboro Lights. Models were shown engaging in outdoor activities such as skiing that were in keeping with valuing health. Industry documents suggest it was the marketing impression of well-being, intelligence, and harmony with nature rather than the factual basis that mattered in an era of increasing news about the dangers of smoking.⁴ "Light" and "ultralight" cigarettes were designed to convey the impression of lower yield when the actual absorption of tobacco smoke constituents from these brands was similar to that experienced with regular brands.

For decades, this marketing strategy worked. In 1996, 6 of 10 smokers in California thought that these labels indicated low tar or nicotine or a related health claim, and even more smokers used such brands.¹³³ These results appear to run counter to

industry documents that have suggested most smokers are unconvinced that low-tar cigarettes are safer, instead lumping all cigarettes together as risky.⁴ According to the national Adult Use of Tobacco Surveys conducted in 1970, 1975, and 1986, 21% to 25% of smokers believed that the kind of cigarettes they smoked were less hazardous than others.²

Products have also been designed and promoted to allay concerns about secondhand smoke and to improve the social acceptability of smoke.⁹² Memos from Philip Morris, Brown & Williamson, and R.J. Reynolds in the 1980s and early 1990s describe efforts to develop additives and technologies that could reduce or mask the odor, visibility, and irritation of secondhand smoke. In 1989, R.J. Reynolds introduced Chelsea cigarettes, which were reintroduced as Horizon in 1990;⁹² both brands were marketed with identical claims as “the first cigarette that smells good,” backed up by “scratch ‘n sniff” boxes in their advertisements. Several tobacco products have been introduced to address concerns about secondhand smoke. Newer products such as Omni and Accord convey the impression that they have broken away from the others to offer reduced risk to the



R.J. Reynolds advertisement for Chelsea cigarettes

smoker. R.J. Reynolds claims that Eclipse, a product that looks and can be inhaled like a cigarette, heats rather than burns tobacco. In 2004, its Web site claimed it “may present less risk,” “reduces secondhand smoke by 80%,” and “leaves no lingering odor” and suggested that the best choice for smokers worried about smoking is to quit and the next-best choice may be Eclipse (see chapter 4).¹³⁴

These products—collectively referred to as potential reduced-exposure products (PREPs)²⁷—appear to be a key effort by the industry to protect against smoking cessation in the face of mounting concern about the risks of smoking and exposure to secondhand smoke. PREPs may also



R.J. Reynolds advertisement for Horizon cigarettes



R.J. Reynolds advertisement for Eclipse www.newcig.com, 2004

be intended to allow tobacco companies to reinvent themselves as corporations responsive to the criticisms leveled against the industry.

Religious Groups

Although little research has been published on tobacco industry targeting of religious groups, Blum and Fitzgerald¹³⁵ describe many ways in which tobacco companies “have found religion.” They point out, for instance, that cigarette advertising has appeared in the Jewish-oriented publications *Hadassah Magazine* and *Jewish World Review*. The editor of *Hadassah Magazine* told the *New York State Journal of Medicine* that their policy of accepting tobacco advertising would continue, despite complaints, “unless the people who say there are surely other sources of revenue, can show them to me.”^{135(p.448)} However, the magazine changed its mind two years later, when it published a full-page announcement on the back cover of its January 1987 issue. Below the boxed Surgeon General’s warning ran this headline in huge, bold letters: “We will never print this warning again.” Text at the bottom explained:

HADASSAH MAGAZINE is clearing the air. Starting with this issue, we will no longer accept advertisements for tobacco products. We are quitting cigarette ads cold turkey, with a discomfort similar to that felt by smokers who have just quit; the main withdrawal symptom will be the loss of 20 percent of our annual ad revenue. Our reason for quitting cigarette ads is also the same as that of the smoker—to promote health. We won’t be printing the Surgeon General’s warning again because there will be nothing in our pages to warn against.

The magazine editor elaborated on the decision in a column inside the publication.¹³⁶

A 1969 “study of ethnic markets” by R.J. Reynolds indicates that the company

spent \$206,000 advertising in “Jewish media” in 1969.¹³⁷ The document also notes:

Since 1961, R.J. Reynolds has recognized the existence and importance of the separate and distinct Jewish market by advertising its products with specially directed copy appeals, promotions, sampling, and other merchandising activities. This has been accomplished through the utilization of the Joseph Jacobs Organization. While compensated as Jewish media sales representatives, they have functioned as a Reynolds advertising agency at no extra cost.^{137(Bates no. 501989455)}

In a “Jewish Market 1981 Annual Marketing Plan,” R.J. Reynolds (RJR)¹³⁸ outlined strategies to target low-tar and ultra-low-tar (ULT) cigarette brands to Jews throughout the United States. The “media objective” was to “establish an effective presence for the priority ULT brands in national Jewish media and in the top 10 Jewish markets (70% of the Jewish population).”^{138(Bates no. 506053152)} The document outlined plans to (1) spend \$582,000 on advertising in national Jewish newspapers and national and local Jewish magazines; (2) use the Joseph Jacobs Organization to distribute free cigarette samples “at selected gatherings of Jewish people”^{138(Bates no. 506053168)} (budgeted at \$30 million); (3) use point-of-sale advertising in Jewish retail outlets; and (4) “implement block parties to generate RJR opportunity brand presence in Jewish neighborhoods”^{138(Bates no. 506053168)} (budgeted at \$20 million).

Blum and Fitzgerald¹³⁵ drew attention to a poorly publicized facet of the relationship between tobacco companies and prominent religious organizations. Several Jewish and Christian organizations—including the National Conference of Christians and Jews, Catholic Charities USA, the Anti-Defamation League of B’nai B’rith, the United Jewish Appeal/Federation of Jewish Philanthropies of New York, and the American Jewish

Committee—hosted dinners in honor of tobacco company executives. Full-page ads promoting the dinners were published in the *U.S. Tobacco & Candy Journal* (later renamed the *U.S. Distribution Journal*), a trade publication for tobacco distributors. Blum and Fitzgerald¹³⁵ listed several of these events that were held in 1984. Further examples include the following:

- The National Conference of Catholic Charities honored Vincent and Ellen Buccellato, Vice President/Sales, Philip Morris USA, on April 17, 1990, at a \$300-a-plate dinner at the Marriott Hotel in Chicago.¹³⁹
- The Anti-Defamation League gave a “Man of the Year Award” to Yancey W. Ford Jr., Executive V.P.-Sales, R.J. Reynolds Tobacco Company, on October 28, 1993, at a \$350-a-plate dinner at the Grand Hyatt Hotel in New York City.¹⁴⁰

The religious groups benefit from the funds raised by the dinners themselves—bolstered, presumably, by other financial support from the tobacco companies whose executives were honored. The tobacco companies benefit from the public relations value of the awards, from the opportunity to market their products to a target audience, and from strengthened relationships with important community organizations. As these relationships mature, the religious groups might be expected (or asked by the companies) to side with the industry in opposing tobacco control legislation or to mute their support for it.

Financial support for exhibits, events, or facilities that are important to a religious group is another means by which tobacco companies can align themselves with that group. In 1983, for example, Philip Morris was a \$3 million sponsor of the Vatican Art Tour, which was advertised in *The New York Times*, *The Washington Post*, and other publications (see chapter 6).¹³⁵

Extensive media coverage of the tour included photos of Philip Morris executives with church dignitaries, museum officials, patrons of the arts, politicians, and the First Lady. The ads promoting the tour listed the company’s cigarette brands but did not include the Surgeon General’s warning.

The following year, Philip Morris sponsored the national tour of “The Precious Legacy,” which displayed Jewish artwork confiscated from persons killed in the Nazi holocaust. The exhibition, according to Blum and Fitzgerald,¹³⁵ broke attendance records at the San Diego Museum of Art and other venues. In 1992, Philip Morris sponsored an exhibit at the Jewish Museum at the New York Historical Society, entitled “Bridges and Boundaries: African Americans and American Jews”; the exhibit was advertised in *Jewish Week*.¹⁴¹ In 1993, UST Inc. (now USST), the nation’s largest manufacturer of smokeless tobacco products, gave a 5-year, \$280,000 grant to the Yale Divinity School to underwrite the school’s urban ministries program.^{142,143}

In his study of tobacco company sponsorships during the period 1995–99, Siegel⁸¹ found three religious groups that had received tobacco industry funding: Interfaith AIDS Ministry of Greater Danbury¹⁴⁴ (Danbury, CT), Christian Relief Services Charities¹⁴⁵ (Lorton, VA), and Jewish Community Council of Greater Coney Island¹⁴⁶ (New York City).

In the Philippines, which is predominantly Catholic, images of R.J. Reynolds cigarette brands (Camel, Winston, and More) appear on calendars featuring religious icons such as the Virgin Mary, Jesus (as a baby and an adult), and St. Teresa of Avila.^{147,148}

Other Populations

Tobacco companies have continued to pursue a full range of marketing practices in other countries, especially those where restrictions

on marketing practices fall behind those of the United States. Western brand imagery features heavily in branded cigarette advertising in many other countries, especially low-income nations.^{149–151}

Most of the groups discussed in this chapter have been important targets of tobacco industry marketing activities. However, this list is by no means exhaustive, as many other groups may have been targeted in ways that have largely escaped attention or commentary by health advocates and the media. Some groups may have been targeted with marketing approaches that were less prominent or shorter in duration compared with those aimed at the groups mentioned above.

Prisoners, for example, have been targeted by tobacco companies. Years ago, Lorillard offered free athletic equipment to prison inmates in exchange for empty packages of Newport cigarettes and Beechnut chewing tobacco.¹⁵²

Given the competitiveness of the cigarette market, it is likely that manufacturers will continue to pursue niche markets with targeted communications through narrowly defined channels. Observational research and further analyses of tobacco industry documents are needed to identify targeted marketing activities that are less well known than those described above.

Summary

Targeted advertising and promotion of tobacco products represents an important tool for the tobacco industry in the growth and market share of its products. A symbiotic relationship exists among the development and branding of tobacco products, the segmentation of specific target markets, and the themes and marketing techniques used to effectively reach subpopulations within these market segments.

Themes in tobacco advertising and promotion have evolved over time to focus on areas such as product taste and satisfaction, affinity with desirable social characteristics, and the perception of reduced health risk. These, in turn, are focused on demographic subgroups that include men, women, racial and ethnic minorities, and gays and lesbians, as well as populations seen as likely to smoke, such as military personnel, blue-collar workers, or people undergoing life transitions to places such as work or college. A wide variety of tobacco industry advertising and promotional channels serve to connect these groups with the brand identity of specific tobacco products.

Such targeted marketing efforts represent an important subject for further study. Research in this area will help elucidate the dynamics of subpopulations most susceptible to smoking and the necessity for greater community awareness and policy interventions pertaining to targeted marketing activities. Understanding the successful marketing of tobacco products to specific groups can provide deeper insight into the needs and motivations of those who choose to smoke.

Conclusions

1. Tobacco advertising has been dominated by three broad themes: providing satisfaction (taste, freshness, mildness, etc.), assuaging anxieties about the dangers of smoking, and creating associations between smoking and desirable outcomes (independence, social success, sexual attraction, thinness, etc.).
2. Targeting various population groups—including men, women, youth and young adults, specific racial and ethnic populations, religious groups, the working class, and gay and lesbian populations—has been strategically important to the tobacco industry.

3. The tobacco industry has become increasingly sophisticated in applying market research to population segments in order to design products, messages, communication channels, and promotions more aligned with the needs and susceptibilities of particular market segments. This research results in more efficiency, greater reach, and increased effectiveness for marketing activities aimed at targeted populations.
4. Little attention has been paid to understanding tobacco marketing aimed at American Indians and Alaska Natives, despite their high prevalence of tobacco use.
5. Targeted marketing of tobacco products to specific groups such as youth, women, and minorities has become a focus for monitoring and protest by antitobacco advocates and community groups.

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6

Tobacco Companies' Public Relations Efforts: Corporate Sponsorship and Advertising

Tobacco industry advertising and promotional efforts often are aimed directly toward the sale of industry products. However, corporate public relations activities also can have an important impact on the public images of and attitudes toward individual tobacco companies. This chapter examines the nature and potential impact of such efforts, including

- *Corporate sponsorship of events and organizations, the latter of which often target key segments of the public in areas such as the arts, minority interests, or community relief*
- *Corporate advocacy advertising in areas such as youth smoking, which has been shown to favorably influence public attitudes toward individual tobacco companies*
- *Corporate image advertising, ranging from spotlighting charitable assistance to rebranding the image of a tobacco company and/or its parent corporation, which has also been shown to favorably influence public attitudes toward individual tobacco companies*

Further research is needed on the impact of these types of public relations efforts on antismoking efforts and public attitudes, as well as on how such activities affect global markets for tobacco products.

Introduction

This chapter describes the tobacco industry's use of sponsorship, corporate advertising, and public relations advertising in the United States, particularly when it is intended to cultivate a favorable image of corporate social responsibility. It complements the discussion of the industry's relationship with the news media provided in chapter 9.

Since the 1988 Master Settlement Agreement (MSA), corporate sponsorship and corporate advertising have become increasingly important for tobacco companies. Tobacco companies, as with many companies, are interested in furthering their public images and interests, as well as in building their corporate and product brand identities. Corporate image campaigns have been on the rise among U.S. companies. Corporate social responsibility initiatives, such as corporate philanthropy, community involvement, cause-related marketing, and support for minority programs,¹⁻⁴ have increased in particular. This trend is also described in *Fortune* magazine's cover story in 2004 on "Corporate America's Social Conscience"⁵ and the billions spent annually by companies on social causes.⁶ The Web sites of more than 80% of Fortune 500 companies were found, in 1998, to address corporate social responsibility issues,⁷ and efforts have increased since then. The perception among business leaders is that corporate social responsibility is an economic necessity in today's national and international marketplace.^{8,9} Compared with product-based advertising (discussed in chapters 3, 4, and 5), these types of public relations efforts generally focus on raising the visibility of and defining how the public views the organization itself.¹⁰

Although corporate advertising by tobacco companies has been around for many decades, corporate image campaigns have become more integrated. As reviewed by

Szczyпка and colleagues,¹¹ Philip Morris's first campaign began in October 1999 with the slogan, "Working to make a difference: The people of Philip Morris." It portrayed the company as providing charitable contributions to community-based organizations and preventing the sale of cigarettes to minors. Another campaign, with the slogan, "Things are changing," began in July 2000, one day after the punitive damages verdict in the Engle class-action trial in Miami, Florida.¹² In June 2003, a series of advertisements focused on www.philipmorrisusa.com, directing viewers to Philip Morris's corporate Web site for information about youth smoking prevention, quitting smoking, and the health effects of smoking. Corporate image advertising of Philip Morris was considerably greater in 1998 and 1999 as compared with advertising of its leading brand, Marlboro.¹³ Examples of corporate image campaigns used by Philip Morris are discussed throughout this chapter.

The relative newness of the topic posed certain limitations in preparing this chapter. First, corporate expenditure data are difficult to determine. A footnote to the Federal Trade Commission's (FTC's) annual report on cigarette advertising and promotion summarizes the tobacco industry's expenditures on public entertainment events that display corporate brand names but not cigarette brands or logos (\$806,000 in 2005).¹⁴ The FTC report also includes sponsorship of sports teams and athletes (\$30.6 million in 2005)¹⁴ but does not distinguish dollars spent on events bearing the name of a company (e.g., Philip Morris Mixed Doubles bowling championship) from those bearing the name of a cigarette brand (e.g., Virginia Slims Women's Legend Tennis Tour). As Cruz¹⁵ reports, sponsorship data for individual tobacco companies can be obtained through commercial marketing firms, but such data are expensive to customize and are frequently incomplete. Other sponsorship sources (e.g., newspaper

advertisements, corporate Web sites, and state tobacco control programs) do not reflect systematic monitoring of events.¹⁵ Another difficulty is separating corporate advertising from brand expenditure data. Although tobacco company names typically differ from their cigarette brands, in some cases the corporate entity and its products share the same name (e.g., Fortune cigarettes, sold outside the United States, are manufactured and sold by the Fortune Tobacco Company).

In addition to accurately accessing expenditure data, the newness of the topic of corporate image campaigns poses the problem of limited academic research. Unlike many of the tobacco topics addressed in other chapters of this monograph, answers to questions about the effectiveness of these campaigns are often inconclusive. In fact, only recently have companies (whether in tobacco or other industries) shown increased interest in promoting their company images, and most of the available academic research occurs outside the domain of tobacco marketing. To provide additional insight into corporate public relations strategies for which tobacco industry data are lacking, this chapter includes a description of research findings on corporate social responsibility about companies other than those in the tobacco industry. A call for more research on the tobacco companies' public image campaigns is emphasized throughout this chapter as well as in chapter 15.

Despite the limitations of reviewing research on corporate public relations campaigns, this topic and its potential impact on tobacco product sales and on resistance to tobacco policy legislation warrant careful attention. In addition to an analysis of expenditures by tobacco companies on public relations campaigns, key questions to be addressed in this chapter include (1) whether tobacco corporate image campaigns are successful in improving the public's perceptions of the credibility,

trustworthiness, social responsibility, and/or attitudes concerning tobacco companies; (2) whether enhancing these perceptions of tobacco companies increases sales of tobacco products or reduces the likelihood or urgency of quitting among smokers; and (3) whether corporate sponsorship and corporate advertising have effects on jury perceptions and public or legislative support for tobacco control policies. This chapter also describes how some of the industry's public relations messages are tailored and targeted to opinion leaders, ethnic minorities, and women. The perceptions of these groups could improve tobacco companies' success with the financial community, in state legislatures, during trials, and in the court of public opinion. This chapter examines these key questions in the context of two elements of corporate brand image and public relations that are becoming increasingly common among U.S. companies and that represent two of the more visible approaches used by tobacco companies: *corporate sponsorship* and *corporate advertising*.

For this review, the literature in electronic databases such as PsycINFO and MEDLINE was examined by using the search terms, "tobacco industry attitudes," variations of "tobacco corporate industry with image," "public opinion sponsorship," "social responsibility," and "corporate advocacy." The same search terms were used in tobacco industry documents until the term PM21 ("Philip Morris in the 21st Century," a public relations campaign) was obtained, and then that name was searched as well. Other source materials were forwarded by knowledgeable reviewers. Advertising expenditure data came from *Advertising Age* and the annual FTC reports on cigarette marketing. To locate research outside of the tobacco industry on corporate sponsorship, corporate advertising, and corporate social responsibility, the three primary journals in the marketing discipline (*Journal of Marketing*, *Journal of Marketing Research*,

and *Journal of Consumer Research*) were searched for the 1995–2005 time period. The search was supplemented with a small number of additional papers referenced in selected marketing and advertising articles.

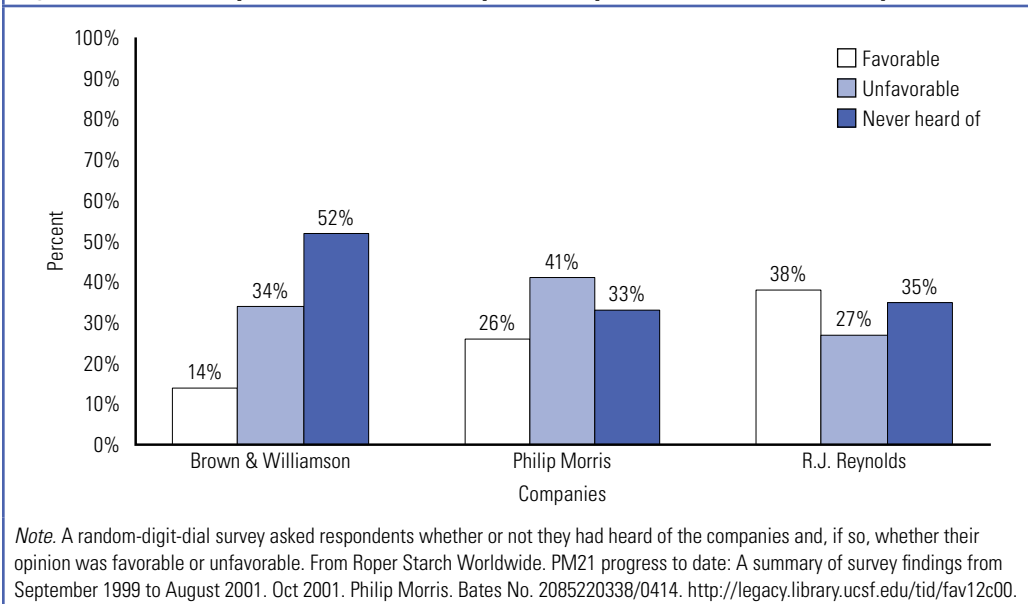
Public-Image Problems of the Tobacco Companies

Negative images of the tobacco industry in the United States and other countries are well documented. An annual Harris public opinion poll (2004) comparing U.S. adults' perceptions of 15 industries found that the tobacco industry was ranked the lowest in the public's esteem.¹⁶ In another survey in California (2002), 83% of 7,000 adults agreed that tobacco companies generally provide some dishonest information about their products to the public.¹⁷ In the same study, 88% of the 15,000 students in grades 8 and 10 who were surveyed agreed that tobacco companies try to get young people to start smoking by using advertisements that are attractive to youth. The American Legacy Foundation's (Legacy's) survey (2004) of approximately 10,000 U.S. adolescents (aged 12–17 years) conveyed a similar impression.¹⁸ Of those surveyed, 78% agreed that tobacco companies lie and 67% said they try to get people to start smoking. In data from Australia published in 1999, 80% of 800 adults expressed their belief that tobacco companies either mostly do not or never tell the truth about smoking and tobacco's addictiveness.¹⁹ In Ontario, Canada, 75% of 1,600 adults (2003) reported that the tobacco industry never or rarely tells the truth about the health effects of smoking.²⁰ In addition, adolescents in Ontario surveyed in 2003 were more distrustful of the tobacco industry than those surveyed two years earlier.²¹

Public opinion about individual tobacco companies is not as uniformly negative. The four largest companies in the U.S.

tobacco industry are Philip Morris USA (owned by Altria Group); R.J. Reynolds, which bought Brown & Williamson to form Reynolds American; the Lorillard Tobacco unit of Loews Corporation; and Liggett Group, owned by Vector Group. Few Americans connect these companies with the tobacco products they produce and market. Henriksen and Fortmann conducted a study about young adults' opinions of Philip Morris and its television advertising.²² They found that between 36% and 43% of the 218 participants failed to identify the corporation with tobacco products, depending upon how this knowledge was measured.²² Some respondents mistakenly associated Philip Morris with light bulbs and electronics (Philips), tools (Phillips head screwdriver), the talent agency (William Morris), or stomach medication (Phillips' Milk of Magnesia). In an opinion poll commissioned by Philip Morris in September 1999, between one-third and one-half of 2,078 adults said they had never heard of the company or its competitors (figure 6.1).²³ Although relatively few adults expressed favorable opinions of any tobacco company, R.J. Reynolds fared better than the others. Its relative popularity in this and other polls has been attributed to aligning its corporate identity with Nabisco, its nontobacco subsidiary until 1999.²⁴

In addition to negative public opinion, tobacco companies have faced increasing litigation and have come under greater scrutiny with the release of corporate tobacco documents under the Master Settlement Agreement. As Szczyпка and colleagues state, two lawsuits filed in 1999 placed significant pressure on the industry, particularly on Philip Morris¹¹—(1) a multibillion dollar suit was filed by the U.S. Department of Justice against the tobacco companies and industry groups for costs due to diseases caused by smoking and (2) the Engle class action suit in Florida asked jurors to award \$200 billion in punitive damages to people suffering from diseases caused by tobacco. In 2006,

Figure 6.1 Public Opinion of Tobacco Companies: Roper Poll of 2,078 Adults, September 1999


a U.S. District Court²⁵ ruled in the first case that the tobacco industry defendants had violated federal racketeering laws and engaged in deceptive practices to market a highly addictive product causing human suffering and loss, but that judgment is under appeal. In the Engle case, although the Florida Supreme Court²⁶ in 2006 upheld a ruling against “excessive” punitive damages and against filing class-action suits against the industry, the court approved findings that smoking causes cancer and other diseases and that tobacco companies marketed “defective and unreasonably dangerous” products. These trials were well publicized and placed additional pressure on the tobacco industry to improve its public image.

In summary, the public has held the tobacco industry in low esteem and perceived it to be dishonest in communicating information about its products. Adolescents, too, report being distrustful of the industry. They believe the industry is dishonest about tobacco’s addictiveness and that tobacco companies try to entice young people to start smoking. Public perceptions

of individual tobacco companies have been less negative, partly due to the lack of awareness by the general public about tobacco company names and their connection to individual cigarette brands. Finally, increased litigation against tobacco companies and potential punitive damage awards made by jurors also has threatened the industry’s reputation.

Against this backdrop of negative public perceptions of the tobacco industry in general, low awareness of individual tobacco companies, and increased litigation, corporate public relations activities on the part of individual tobacco companies represent a means to enhance the public image of the companies and influence public perception. In tobacco trial testimony, Roy Marden, then-director of external affairs of Philip Morris Companies, stated that increasing communications efforts was “particularly imperative in light of the facts that the antis’ vilification ads are back, our negative numbers are up, & the next round of PM 21 [Philip Morris campaign] ads will not be tobacco-related.”²⁷

Building a corporate brand image through public relations is an effort to strengthen and change public perceptions of the company, variously referred to as *corporate image*, *reputation*, and *brand equity*.^{10,28-30} The primary tools of public relations include publications, events, news, speeches, lobbying, public service activities, and identity media.^{29,30} In much the same way that tobacco companies use marketing media to portray positive product imagery (described in chapter 3), they use public relations media to portray positive corporate imagery. A tobacco company, for example, might use public relations media to improve its corporate image by neutralizing negative opinions, by persuading those without opinions of the company to think favorably of it, and/or to improve its company's image relative to competitors or to the industry overall. A tobacco company might also aim to enhance its credibility and legitimacy by redefining or obscuring its association with tobacco products. Industry documents for Philip Morris describe corporate objectives to improve company image, increase company credibility, and establish "a foundation of acceptability" for company actions.³¹ One strategy was to "enhance the position of Philip Morris as the reasonable/responsible industry leader and work to give the company a legitimate 'seat at the table.'"³¹ (Bates no. 2073434686)

Corporate Sponsorship

The sponsorship of sports, arts, entertainment, and social causes (also called *event marketing*) is an established communications tool used by both tobacco and nontobacco companies for building brand equity. Sponsorship refers to investments in causes or events to support corporate objectives, such as increasing brand awareness or enhancing corporate image.³² Creyer and Ross³³ note that sponsorship is viewed more favorably by consumers than other forms of cause-related

marketing, such as giving money or gifts to charity organizations each time consumers purchase a company's product or service (e.g., a charitable donation contingent on a consumer's cigarette pack purchase).^{33,34} According to an Independent Evaluation Group (IEG) Sponsorship Report, a leading national resource for sponsorship research, spending on sponsorship by North American companies increased from \$850 million in 1985 to \$10.3 billion in 2003.³⁵ As noted earlier, separating corporate and brand sponsorship expenditures is difficult. Data that combine them indicate that Philip Morris and R.J. Reynolds ranked 20th and 41st among the top 80 companies for annual sponsorship expenditures in 2003, each spending between \$25 million and \$50 million.³⁵

Much research addresses the costs and consequences of cigarette product advertising and promotions (see chapters 4 and 7). However, comparatively little is known about tobacco industry sponsorship. In one of the more comprehensive studies, a 2001 review by Rosenberg and Siegel,³⁶ data purchased from the International Events Group were combined with Internet research to describe tobacco sponsorships from 1995 to 1999. The five largest tobacco companies at the time spent a minimum of \$365.4 million to sponsor at least 2,733 events or causes, with four times as many sponsorships for Philip Morris as for the other tobacco companies combined. Rodeo, motor, and other sports attracted the largest investment (\$226.8 million), antihunger organizations received the second largest investment (\$104.2 million), and the remainder supported a variety of special audiences (e.g., youth, women, and minorities) or issues (e.g., acquired immune deficiency syndrome, domestic violence, education, the environment, and government).

Chapter 4 reviews sponsorship activities that promote cigarette brand names (e.g., Marlboro, Camel, Newport, and Kool).

The remainder of this section focuses on sponsorship that promotes corporate brand names (e.g., Brown & Williamson, Lorillard, Philip Morris, and R.J. Reynolds).

For decades, tobacco companies have sponsored philanthropic events and causes, such as the arts and minority organizations.³⁷ For example, Philip Morris reported grants totaling \$9.3 million to 295 arts and cultural organizations in 2003, including recipients with obvious appeal to ethnic/racial minorities (e.g., Grupo de Artistas Latinoamericanos, Alvin Ailey American Dance Theater, and Asia Society) and to children (e.g., Big Apple Circus).³⁸ In 1998, Philip Morris contributed \$2.1 million to 57 organizations in the United States to fund meals for the elderly. The program partnered with the National Meals on Wheels Foundation.³⁶ Some sponsorships have led to naming rights. For example, Brown & Williamson made a \$3 million contribution to Kentucky's University of Louisville's athletic department in 1996 for completion of the club level and a training facility, which led to the naming of the stadium's club facility as

the Brown & Williamson Club. Other sponsorships with title associations include the R.J. Reynolds Forest Aviary at the North Carolina Zoological Park, the Philip Morris Mixed Doubles Championship bowling tournament, the Brown & Williamson Derby Fest at the Kentucky Derby Festival, and the Philip Morris Center for Organizational Renewal at Catawba College.³⁶

The rationale behind corporate sponsorship activities is to (1) promote awareness of tobacco company names and/or logos among people in attendance at sponsored events, (2) increase perceptions that the company is socially responsible and decrease perceptions that the company is socially irresponsible, (3) increase overall liking for the company, (4) create or strengthen the identity of the company as being associated with a particular target market or lifestyle, (5) show support for a social issue or community, (6) increase favorable associations with the company's products, and/or (7) increase merchandising or promotional opportunities.²⁹ It may also generate media exposure to reach a considerably larger audience.

Big Tobacco and Vatican Art

A 1983 grant in excess of \$3 million for the Vatican art treasures exhibition at New York City's Metropolitan Museum of Art garnered much publicity for Philip Morris. A company document describes the significance of Philip Morris's sponsorship:

Explaining the exhibition to the general public proved to be an unparalleled opportunity to promote Philip Morris as well as the Vatican Collections. We did it through radio and television interviews, feature stories in newspapers and magazines, public service announcements, films run by the Public Broadcasting Service and placed in over 70 movie houses, and in a brochure given to museum visitors.^a

The year-long exhibit was seen by 2 million people.^b

When the Roman Catholic Archbishop of New York, Terence Cardinal Cooke, led a prayer at a banquet celebrating the Vatican exhibit, a Philip Morris vice president remarked, "We are probably the only cigarette company on this Earth to be blessed by a cardinal."^c

^aPhilip Morris Corporate Relations and Communications. 1983. Washington relations summer jobs '83. http://tobaccodocuments.org/usc_tim/2048090822-0833.html.

^bBlum, A., and K. Fitzgerald. 1985. How tobacco companies have found religion. *NY State Journal of Medicine* 85: 445-50.

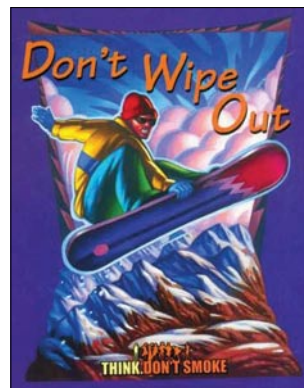
^cRosenblatt, R. 1994. How do tobacco executives live with themselves? *New York Times*, March 20.

Perceptions that the public has about a company, called *corporate brand image associations*, can be formed or strengthened when a brand becomes linked to a sporting event, social issue, or other sponsorship element. In the process, the tobacco company becomes linked with causes or events that are important to a particular target group. The pre-existing associations people have about the sporting event or social issue may become connected in memory to the company or brands that sponsor that event. This is similar to the way an image of a brand benefits from the positive attributes of a celebrity who endorses it (see chapter 10) or an appealing lifestyle associated with the branded product (see chapter 3). The corporate brand associations that transfer from the sporting event or social cause to the company sponsor could include general affective associations (such as fun, exciting, and liking) or more specific associations (such as credible, rugged, health-conscious, and compassionate).

In the special case in which the company name is the same as its product name (e.g., the Philip Morris brand of cigarettes is sold in the Philippines), advertising and sponsorship using the corporate name may benefit the cigarette sales of the brand that shares the corporate name. (See chapter 3 for a discussion of “shell” companies with cigarette brand names and how corporate sponsorship can be used to promote a brand if the brand and company names are the same.) By associating tobacco companies with positive social values and institutions, corporate sponsorship also is expected to cultivate goodwill for perceived generosity. For instance, Yerger and Malone report that radio programming to honor Black History Month associated Philip Morris with African-American accomplishments, and billboards for the National Urban League advertised the R.J. Reynolds logo with that of a prominent civil rights organization.³⁹ Such associations serve to counter negative

perceptions and negative publicity about the industry,⁴⁰ particularly among consumers who may be otherwise difficult to reach.

One type of tobacco sponsorship has involved community and educational programs for youth, including partnerships with the 4-H, Boys and Girls Clubs of America, baseball camps, and other community organizations. In one case, Philip Morris provided schools throughout the country with covers for school books with the message, “Think. Don’t Smoke.” and the name of Philip Morris.⁴¹ The book covers were criticized by some schools as delivering an underlying message about a cigarette, which generated considerable news coverage. In a systematic review of tobacco industry transcripts from tobacco litigation cases from 1992 to 2002, Wakefield and colleagues⁴² present industry responses to this issue. Ellen Merlo, Vice President of Corporate Affairs at Philip Morris, reported that even though the company had changed, they would “think long and hard because maybe people are not yet ready for us to supply something like a book cover.”⁴³ The implication was that the problem rested with the community, who had not yet accepted the new, responsible tobacco company policies.⁴² The book covers were not portrayed as a merchandising tool associated with corporate sponsorship, yet regardless



“Think. Don’t Smoke.” book cover from Youth Smoking Prevention by Philip Morris

of intent, providing book covers to youth would have similar effects as other forms of merchandising: favorable associations with the book covers (such as education-focused or health-conscious) could extend to the tobacco company sponsor.

Tobacco Corporate Sponsorship Effects on Consumer Perceptions and Sales

A question raised at the start of this chapter is whether and how tobacco corporate sponsorships benefit the tobacco companies. Unfortunately, research has not adequately addressed this issue. In particular, more research is needed on whether tobacco corporate sponsorships have been successful in enhancing the public's perception of the credibility, trustworthiness, and social responsibility of the tobacco sponsors. Studies of industries other than tobacco suggest that a company's association with positively perceived events or causes enhances consumers' perceptions of corporate social responsibility.⁴⁴⁻⁴⁷ For example, research on event sponsorships in domains other than tobacco has found that sponsorships increase people's favorable associations to the company sponsor.^{46,47} Socially responsible corporate activity may also represent a competitive advantage because of its positive effects on company reputation,⁴⁸ setting apart one company from others. As Bhattacharya and Sen⁹ argue, efforts by companies to engage in socially responsible actions are more likely to have a positive effect, and set the company apart from competitors, when people view the company as a pioneer in its socially responsible policies and when the company's integrated marketing communications create a consistent message.

Bhattacharya and Sen⁹ also note that a key determinant of the success of corporate social responsibility activity is whether consumers support the cause. For example,

if people support a social cause, sporting event, or cultural activity sponsored by a particular company, they are more likely to view the company's social responsibility favorably. People attending events (whether sponsored by tobacco or other companies) are likely to be strong supporters of those causes and may transfer those positive feelings to the sponsoring company. Consumers attending the event may also identify with the cause as having traits that overlap with the consumer's self-concept (e.g., civic-minded, or compassionate).^{9,49} To the extent that the corporate image campaign signals that the company has the desired traits of the cause and the consumer's self-image, the consumer is more likely to favorably evaluate the company. Overall, when a company behaves in a way that is viewed as socially responsible, people often infer that the company has desirable traits that resemble their own sense of self.¹

A second question posed earlier is whether enhancing corporate social responsibility, trustworthiness, credibility, or attitudes toward the tobacco company increases sales of tobacco products. Further research is still needed in this area, and data pertaining to effects of corporate sponsorships on sales of individual branded tobacco products were not identified in the literature search. However, research in other industries shows that a positive relationship exists between a company's socially responsible actions and consumers' attitudes toward the company and its products.^{33,50,51} Further, the link between corporate social responsibility and financial performance, while mixed, is mostly favorable.⁵² Brown and Dacin⁵⁰ found that a company's record of social responsibility positively increased people's attitudes toward the company, which, in turn, increased people's preferences for a new product by the company. Creyer and Ross³³ found a positive relationship between consumers' preferences for a company's products and the extent to which the company's ethics exceeded their expectations.

Just as corporate social responsibility can enhance a company's image and product sales, the reverse effects may occur when a company is viewed as socially irresponsible. In fact, when people are exposed to events or causes sponsored by a company, sometimes they engage in causal attributions about the motives of the company or message source. In such cases, the positive effects of corporate social responsibility may be reduced or reversed when consumers are suspicious about corporate motives.^{32,48,53} For example, Szykman and colleagues⁵⁴ found that when people viewed a message discouraging drinking and driving that was sponsored by the nonprofit organization Mothers Against Drunk Driving (MADD), they rated the motives of the sponsor as generally positive and serving the society. However, those who viewed the same advertisement sponsored by Anheuser-Busch for Budweiser beer rated the sponsor's motives as negative and self-serving. Consumers' overall attitudes toward the sponsors, that is, overall attitudes toward MADD or toward Budweiser, were left unchanged by the drinking-and-driving advertisement.⁵⁴ Other research is more cautionary and finds that consumers feel less favorably toward spokespersons they regard as having self-serving or suspicious motives.^{55,56} It is, therefore, in the interest of companies—tobacco companies, in this case—to neutralize negative public opinion and make people less skeptical of their motives.

Negative corporate social responsibility associations have also been found to have a negative effect on the company's products.⁵⁰ Goldberg and Hartwick,⁵⁷ in an experiment analyzing the combined effects of a company's reputation and advertisements on product evaluations, found that when participants had a negative evaluation of a company because of a bad reputation, advertisements by the company were viewed as less credible and the products advertised were rated less favorably than when participants had a positive evaluation

of a company on the basis of its reputation. Another study, by Creyer and Ross,³³ found that when a hypothetical cereal company was described as having deliberately deceived consumers, subsequent publicity about the company's sponsorship of a children's charity increased the amount of money consumers were willing to pay for the company's products.³³ Clearly, more research is needed on tobacco sponsorship to determine when such campaigns improve a company's reputation and credibility and when they do harm. Using media to increase the public's awareness of corporate sponsorship may serve to minimize the public's perceptions of a tobacco company's lack of social responsibility in the marketplace.

Some organizations have refused tobacco industry sponsorship. According to Stone and Siegel,⁵⁸ organizations cited two reasons for their opposition: (1) concern that tobacco funds undermine a mission to improve overall health, and (2) concern that public association with a tobacco company would damage the organization's credibility.⁵⁸ Future research should examine whether pairing a tobacco company sponsor with a well-liked cause or event harms the recipient's reputation as much as it is believed to help that of the sponsor. If so, such evidence may further discourage organizations from accepting tobacco money.

In summary, while research on the effects of tobacco corporate sponsorships is limited, research on other industries suggests that sponsorships not only enhance perceptions of the company but also that companies perceived as socially responsible benefit through more positive perceptions of the company's products. Research on companies with negative reputations is only suggestive. While one study suggested that a negative reputation hurts the consumers' perceptions of the company's products, another study suggested that these negative perceptions can be offset by perceptions of a socially responsible sponsorship. On the basis of

findings reported earlier that the public views tobacco companies as dishonest and is distrustful of their motives, tobacco companies may have much to gain in changing these perceptions and presenting their companies as socially responsible.

Tobacco Corporate Sponsorship Effects on Tobacco Control Policy

A third question posed at the beginning of this chapter is whether corporate sponsorships have effects on jury perceptions and other forms of public support for tobacco control policies. While research is limited in this area as well, some evidence exists that tobacco companies have used corporate sponsorship to influence opinion leaders. In opposition to a New York City proposal to ban smoking in most restaurants and public places, Philip Morris threatened to relocate its corporate headquarters and persuaded art institutions to lobby the city council.⁵⁹ Although many arts groups felt obliged to voice support for their corporate patron, the smoking ban passed. In other efforts to defeat tobacco control legislation and promote its policy agenda, the industry has compelled the organizations it supported to write letters on its behalf.³⁹ Corporate philanthropy has been described as improving a company's strategic focus and competitive context.⁶⁰ These examples of sponsorship by the tobacco industry were more strategic than philanthropic.

Corporate Advertising

Corporate advertising is often designed to promote an organization's image or viewpoint, rather than to sell particular products or services.⁶¹ Statements from the senior vice president for communications at Philip Morris serve to illustrate the value of advertising a youth access program: "It wouldn't be a bolt out of the blue that a tobacco company like Philip Morris doesn't

have a lot of credibility. Our short-term goal is to make people aware of our position on youth smoking. Our long-term goal is to raise the credibility of this company."⁶² Even when consumers do not explicitly connect a company's products to the company name, corporate image advertising may be beneficial to a company. In addition to the findings reported about the benefits to the company regarding corporate sponsorship, including building awareness and favorable image associations, corporate advertising may also be used to influence public opinion on issues and make a favorable impression on the financial community.²⁹ Corporate advertising by cigarette companies can also have a broad reach. According to U.S. Nielsen data for 1999–2003, the mean number of monthly exposures to antismoking advertisements was greater for those sponsored by tobacco companies than for those sponsored by public health agencies by a factor of 1.57:1 among households and 1.11:1 among youth.⁶³

Typologies of corporate advertising distinguish between corporate image/institutional advertisements, which aim to establish or enhance the sponsor's reputation as a good corporate citizen, and corporate advocacy advertisements, which aim to influence public opinion and policy on issues that concern the corporation.^{64–66} However, the two categories are not mutually exclusive as advertisers expect audiences to think well of organizations that take appropriate stands on key issues.⁶⁷ Indeed, the broad aim of all corporate advertising is to create an environment that is more favorable to the sponsor.^{68,69}

Direct advocacy takes the form of a persuasive argument, presenting facts or arguments that portray the sponsor positively and its opponent negatively.⁶⁴ An example is the 1954 newspaper advertisement, titled "A Frank Statement to Cigarette Smokers," in which the tobacco industry questioned research implicating smoking as a cause of

cancer, promised consumers that cigarettes were safe, and pledged its cooperation to safeguard the public's health.^{70,71} To defuse negative publicity surrounding accusations that tobacco companies manipulated nicotine in cigarettes, Philip Morris sponsored a newspaper advertisement that dismissed the allegations as innuendo and offered its denials as "facts smokers and nonsmokers should know."^{72,73}

Indirect advocacy typically characterizes a corporation as serving a public interest and its activities as the preferred solutions to issues of public concern.⁶⁴ For example, newspaper advertisements that unveiled a youth access program to enhance the public's perception of the credibility of Philip Morris would be considered indirect advocacy ads. These advertisements helped Philip Morris avoid strong legislation on sales to minors and attempted to persuade lawmakers and opinion leaders that the company did not want minors to have access to cigarettes.⁷⁴

The next sections review the few published studies on this topic to address whether the tobacco industry's youth smoking prevention advertisements have succeeded or failed as public relations tools as well as consider the impact of corporate image advertising on charitable assistance.

Tobacco Corporate Advertising Effects on Company Perceptions and Sales

The first issue addressed in this section is whether corporate image advertising has been successful in enhancing the public's perceptions of the credibility, trustworthiness, social responsibility, and/or attitudes concerning tobacco companies. Although this question was difficult to answer for corporate sponsorship (due to the paucity of research), a few studies have been conducted on corporate advertising,

both with regard to the youth smoking prevention advertisements and with regard to other corporate image advertising. Also addressed in this section is whether corporate advertising influences sales of tobacco products, intentions to start smoking, or intentions to quit smoking.

Youth Smoking Prevention Advertisements

The tobacco industry's forays into youth smoking prevention, and the criticisms of these efforts, are not new.⁷⁵⁻⁷⁸ Mass media campaigns focusing on youth smoking prevention have been sponsored by both Philip Morris and Lorillard. In 1998, Philip Morris launched a \$100 million campaign consisting of several television and magazine advertisements aimed at youth with the slogan "Think. Don't Smoke." and advertisements targeting parents with the slogan "Talk. They'll Listen." These campaigns portray the first positive images of tobacco companies on television in the more than 30 years since televised cigarette advertisements were banned on January 2, 1971.²² The target audience for the "Think. Don't Smoke."



"Think. Don't Smoke." from Youth Smoking Prevention campaign by Philip Morris

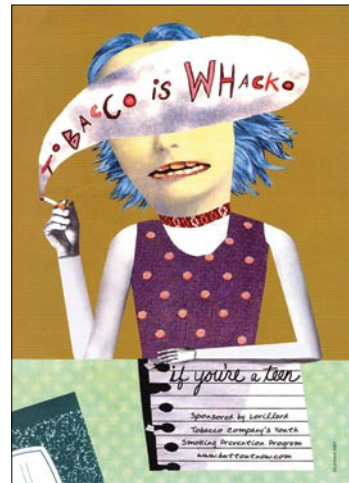
campaign, according to Philip Morris, was youth aged 10–14.⁷⁸ In 1999, Philip Morris launched a campaign with the slogan, “Talk. They’ll Listen.” focused on parental responsibility for talking to children about smoking. In court testimony on the tobacco company youth smoking campaign, Philip Morris witnesses stressed the seriousness of their efforts in trying to reduce smoking among youth, rather than their use of the campaign for public relations purposes.⁴² As evidence for the seriousness of their efforts, witnesses pointed to the amount of funding given to youth smoking prevention. Increases in funding, however, have tended to coincide with increases in tobacco litigation cases.⁴²

In 1999 and 2000, Philip Morris was the single largest antismoking advertiser in the United States, even in states with aggressive antitobacco media campaigns.⁷⁹ Although the “Think. Don’t Smoke.” advertisements ceased in 2002, similar prevention advertisements appeared on Music Television (MTV) in Europe and Australia.

Between 1999 and 2004, Lorillard’s prevention advertisements with the “Tobacco Is Whacko if You’re a Teen” slogan appeared widely in teen magazines and on cable television, including the most popular shows for adolescents on ESPN (Entertainment and Sports Programming Network), MTV, and Warner Brothers stations.⁷⁷ The budget for this campaign was about \$13 million.⁸⁰ Eventually, the company replaced its advertisements aimed at youth with advertisements targeting parents. Formerly known as “Take 10,” the subsequent Lorillard prevention



“Talk. They’ll Listen.” from Youth Smoking Prevention campaign by Philip Morris



From “Tobacco Is Whacko if You’re a Teen” campaign by Lorillard

campaign featured the slogan, “Parents. The best thing between kids and cigarettes.” According to Nielsen data, the tobacco companies’ prevention advertisements aimed at youth appeared as often in all television households as in households with the “target” adolescent audience⁶³ (see chapter 5). The fact that the youth smoking prevention advertising targeted all television households rather than solely youth, along with the emphasis placed on the amount of money spent on youth smoking prevention, seem to indicate the advertising campaign, was, at least in part, a public relations strategy intended to reduce the general public’s negative perceptions of the tobacco companies.

Consistent with the goals of corporate image advertising, the youth smoking prevention advertisements promoted more positive attitudes toward tobacco companies. In a telephone survey of a representative sample of U.S. adolescents (aged 12–17 years), sponsored by the Legacy Media Tracking Studies and analyzed and reported by Farrelly and colleagues,⁸¹ those who reported seeing any one Philip Morris advertisement were significantly less likely than unexposed peers to agree with statements, such as “cigarette

Youth Smoking Prevention: Researching the Tobacco Industry Agenda

Analysis of tobacco industry documents identifies several motivations for tobacco industry youth smoking prevention programs. For example, Landman and colleagues^a reveal that the industry promoted its youth smoking prevention programs to discourage restrictions on marketing and other legislation that it found threatening. In one case, in 1991, Philip Morris stated that “youth initiatives,” if successful, would lead to a “reduction in legislation or banning our sales and marketing activities.”^b

Landman and colleagues also found that industry program themes and messages consistently downplayed the health effects of smoking to frame it as an “adult choice.” As one example, Tobacco Institute Vice President Anne Duffin, in 1985, sought advice from a tobacco industry law firm about how to avoid mentioning the health consequences of smoking in a brochure, called “Helping Youth Decide.” “Because of criticism from the antis [antismokers] on HYD [Helping Youth Decide], I’d like to get our own scenario in on cigarettes—*not touching on any health implications*, but positing that youngsters don’t need to smoke to look ‘grown up,’ needn’t blindly follow the examples of others, etc.” [italics added by Landman and colleagues].^{a(p.919)} Documents revealed that motivations for youth smoking campaigns also included (1) building alliances with third parties, such as youth and tobacco control groups, which had the “youth credibility” that the industry itself lacked, and (2) giving Philip Morris a legitimate reason to continue its research on teenage smoking patterns.^c

Carter’s analysis showed that international efforts with identical strategies were being deployed in Australia, with an ultimate aim of creating a “global brand” for industry youth smoking prevention efforts, with tangible benefits for tobacco industry stakeholders.^d

^aLandman, A., P. M. Ling, and S. A. Glantz. 2002. Tobacco industry youth smoking prevention programs: Protecting the industry and hurting tobacco control. *American Journal of Public Health* 92 (6): 917–30.

^bSlavitt, J. J. TI youth initiative. Philip Morris. 12 Feb 1991. Bates No. 2500082629/2634. <http://legacy.library.ucsf.edu/tid/sj119e00>.

^cPhilip Morris. 2004. Welcome to Philip Morris USA Youth Smoking Prevention’s Teenage Attitudes and Behavior Study. http://www.philipmorris.com/policies_practices/ysp/research.asp.

^dCarter, S. M. 2003. From legitimate consumers to public relations pawns: The tobacco industry and young Australians. *Tobacco Control* 12 Suppl. 3: iii71–iii78.

companies deny that cigarettes cause disease,” and “I would like to see cigarette companies go out of business.”^{81(p.904)} Moreover, exposure to additional Philip Morris advertisements reinforced these attitudes. Because the data are cross-sectional, it also is plausible that adolescents who held more favorable opinions about cigarette companies were more attentive to Philip Morris advertisements (an effect of selective exposure). However, the survey results are consistent with those of a randomized controlled trial, reported by Henriksen and colleagues,⁸² in which California adolescents (aged 14–17 years) who viewed Philip Morris or Lorillard

tobacco use prevention advertisements expressed significantly greater sympathy toward the tobacco industry than did comparison group members who viewed either antismoking advertisements from Legacy or advertisements about drunk driving.⁸² Industry sympathy was measured by agreement with statements such as “cigarette companies get too much blame for young people smoking” and “cigarette companies should have the same right to sell cigarettes as other companies have to sell their products.”^{82(p.15)}

Wakefield and colleagues⁴² argue that, given the sophisticated methods available

to these companies for determining the effectiveness of advertising campaigns, the considerable funding of the youth smoking prevention programs, and the companies' insistence on the seriousness of their efforts, one source of data for the effectiveness of these programs should be the cigarette companies themselves. However, according to court testimony from 1992 to 2003, the companies did not make any assessments about the effects of their campaign on youth smoking. Instead, company witnesses focused on advertising reach as a measure of effectiveness (for example, 90% of 10- to 14-year-olds had seen the advertisements) and on qualitative data.⁴² Industry documents in the 1990s, reported by Landman and colleagues,⁷⁷ also show evidence that tobacco companies measured media "hits," program awareness, and corporate image perceptions, rather than the effectiveness of their programs in reducing teen smoking.⁷⁷

Academic research exists, however, on the effectiveness of these youth smoking campaigns in curbing smoking intentions and behavior. Evidence reviewed in chapter 12 suggests that the tobacco companies' prevention advertisements have failed as antismoking messages.⁸²⁻⁸⁵ Even worse, in the case of advertisements targeting parents, the messages succeeded as prosmoking messages.^{81,86} Following exposure to these advertisements, youth in grades 10 and 12 showed stronger approval of smoking, stronger intentions to smoke in the future, and increased likelihood of smoking.⁸⁶

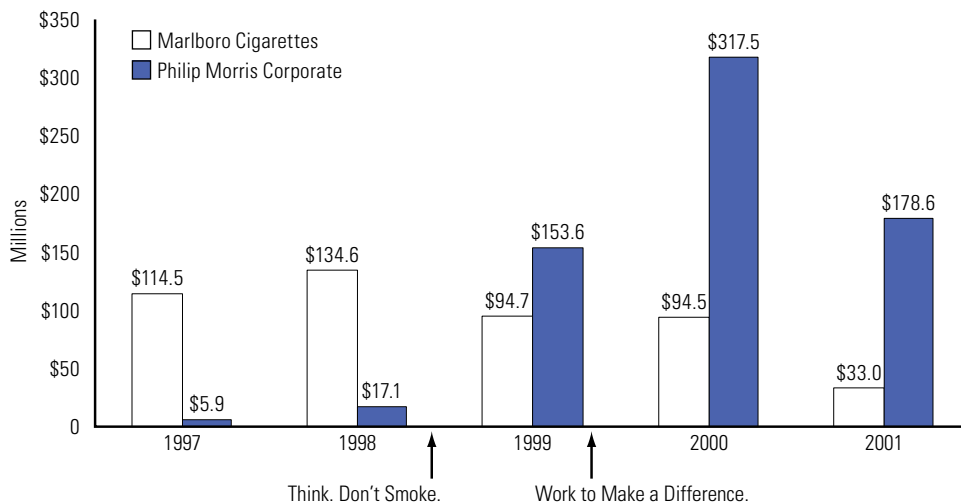
In other research, by Donovan and colleagues,⁸⁷ of Western Australian youth, tobacco industry youth smoking prevention advertisements showed mixed support in effectiveness on reducing desire to smoke in the future, with results varying by message theme and smoker status. However, across both smoker and nonsmoker groups, message believability was high. The authors conclude that these corporate

advertisements increase credibility of the advertising message, which could increase positive attitudes toward the tobacco industry and, in turn, reduce criticism from youth groups in the community.

Other Corporate Image Advertising

Most of the available data on other corporate image advertising involves analysis of various Philip Morris campaigns. In 1999, Philip Morris launched a \$250 million media campaign to advertise its charitable assistance for the elderly and for homeless adolescents, as well as for victims of domestic violence, midwestern floods, and war-torn Bosnia.⁸⁸ Featuring the slogan, "Working to make a difference. The people of Philip Morris," television and magazine advertisements promoted the corporate name and logo, flanked by the more recognizable symbols of its Kraft Foods and Miller Brewing subsidiaries. Combining these advertisements with those about youth smoking prevention accounted for a dramatic increase in Philip Morris corporate advertising, peaking at \$317.5 million in 2000 (figure 6.2).^{13,89,90} Between 1999 and 2001, following the MSA, Philip Morris spent three to five times more money to advertise its corporate brand name than it spent to advertise its top-selling brand of cigarettes. The quantity and content of its advertising suggested an unprecedented effort to increase the company's visibility and cultivate a new corporate image.

In an experimental study, reported by Henriksen and Fortmann,⁹¹ testing the effectiveness of the Philip Morris corporate advertisements, young adults (aged 18–27 years) in California evaluated corporate advocacy advertisements from Pfizer and Chevron followed by either four Philip Morris advertisements about youth smoking prevention, four Philip Morris advertisements about community service, or four Anheuser-Busch advertisements about preventing underage drinking.⁹¹

Figure 6.2 Philip Morris's Annual Advertising Expenditures for its Corporate and Marlboro Brands

Note. Expenditure data for measured and unmeasured media were estimated (by *Advertising Age*) but did not include cigarette marketing expenditures such as price discounts or promotional allowances (which comprise more than one-half of the annual marketing budget). Also note that these data are considerably lower than FTC expenditure data for the same years because the figure estimates expenditures for a single brand from only one of the five tobacco companies summarized in the annual FTC report. *Advertising Age* ceased reporting annual expenditures for Marlboro in 2002. The numbers in the figure do not include marketing expenditures at the point of sale.

Adapted from *Advertising Age*. 1999. The 100 leaders. *Advertising Age*, September 27; *Advertising Age*. 2000. The 100 leaders. *Advertising Age*, September 24; *Advertising Age*. 2002. *Advertising Age's* 100 leaders national advertisers report: Advertiser profile edition. *Advertising Age*, June 24.

Although Philip Morris smoking prevention advertisements were perceived to be less credible than the company's community service advertisements, the two types of advertisements improved corporate image perceptions almost equally well. Groups exposed to any Philip Morris advertisements rated the company's image more favorably than did the comparison group. The advertisements were most effective among those who were unaware that Philip Morris is a tobacco company.

Tobacco industry documents, too, show improved corporate image perceptions due to Philip Morris's corporate advertisements.¹¹ Before launching their "Things are changing" advertisements, focus group data reported in company documents in May 2000 showed

increased beliefs that "Philip Morris is working to change for the better," and "Philip Morris is open and honest about their products and business practices." After launching its Web campaign in June 2003, Philip Morris's public relations firm collected opinion survey data among U.S. adults, oversampling certain target groups (e.g., African Americans, Hispanics, and opinion leaders). The first reported that 81% of people who saw the advertisements had a positive impression of them, and 55% gave Philip Morris a favorable rating for addressing tobacco issues. The advertisements also were reported as more credible than anti-industry advertising and as creating an impression of responsible marketing practices. On the other hand, the public relations firm stated that "acknowledging health risks" is a key

Health-Risk Promotion: A New Tobacco Industry Strategy

In a more radical step for the tobacco industry, particularly relative to older internal documents,^{a,b} self-imposed health warnings have begun to appear. A Philip Morris cigarette pack insert explicitly stated that “Smoking causes many serious and fatal diseases including lung cancer, heart disease, and emphysema. Your risk of getting a disease from smoking is very high. Do not think that smoking won’t affect *your* health.”^c An accompanying advertisement argues that “it also requires education about the serious health effects of smoking, including addiction.”^d Another advertisement explicitly states that low tar is not a safer option and quotes the World Health Organization in support.

Marc Fritsch, Philip Morris head of corporate communications, spelled out the strategy behind this latest campaign: “We are providing information to respond to consumer concerns which is good for long-term business. We’re not telling them something they don’t already know. They simply want us to be more transparent. Yes, it’s frank, but why should we say anything different?”^e

^aNicoli, D. P. Memorandum. 14 Feb 2000. Philip Morris. Bates No. 2073073375. <http://legacy.library.ucsf.edu/tid/ssf60c00>.

^bPhilip Morris. “Steve” PM21 research overall objective. Dec 1999. Philip Morris. Bates No. 2073074117. <http://legacy.library.ucsf.edu/tid/yiv27d00>.

^cPhilip Morris. 2000. Pack “Onsert.” http://www.philipmorrisinternational.com/global/downloads/SH/Feature_30_Swiss_onsert.pdf.

^dPhilip Morris. 2003. Press ads. http://www.philipmorrisinternational.com/global/downloads/SF/Feature_30_press_comms.pdf.

^eJones, M. C. 2003. What doesn’t kill you might even make you stronger. *Brand Strategy* 177:10–11.

driver of corporate reputation and still must be addressed before other messages can improve reputation.⁹²(Bates no. 3000176517)

McDaniel and colleagues⁹³ analyzed industry documents and reported that overall favorability ratings of Philip Morris increased from 23% in 1997 to 39% in 2000, mostly due to changes in the 18–34-year age group (an increase from 19% to 45%). In January 2004, 58% agreed that the tobacco industry was acting more responsibly than in the past. Philip Morris fared better than others; 41% said that Philip Morris was more responsible than other companies. It is difficult to discern which particular campaign may have led to the increases. The authors chose to discuss the changes in connection with a long-term Philip Morris program, called “Project Sunrise.” This project aimed at countering threats to the company’s public credibility and financial success

by distinguishing the company from competitors and forging alliances with certain tobacco control organizations.

Finally, in April 1998, four of the five largest tobacco companies began a \$40 million advertising campaign (including print, radio, and television advertisements) “to inform the American people about both the proposed national tobacco resolution and proposed legislation before Congress.”⁹⁴(p.135) A survey conducted in August 1998 by Princeton Survey Research Associates, working under the direction of the University of Pennsylvania’s Annenberg Public Policy Center led by Communication Professor Kathleen Hall Jamieson,⁹⁴ analyzed public opinion in response to the industry’s campaign as a function of whether media markets received light exposure (an average of 9 exposures), moderate exposure (an average of 25), heavy exposure (57 exposures), or no exposures, during

a period of three and one-half months. The survey found that individuals exposed to heavy advertising judged three of the five message claims as more accurate than did those with less or no advertising exposure, even after controlling for behavioral, attitudinal, and demographic factors. For example, 43% of those exposed to heavy advertising, as compared with 31% exposed to no advertising, agreed that “the tobacco plan Congress considered would create the largest consumer tax in history.”^{94(p.138)} It appears that exposure to protobacco advertisements changed the public's perceptions about claims concerning the tobacco debate in 1998.⁹⁴ Those changes may have enhanced the industry's image and bargaining power as it negotiated the MSA (signed in November 1998) with state attorneys general.

In summary, the research on the tobacco industries' youth smoking prevention and other corporate image campaigns finds that while public opinion of the industry has been very poor (as described earlier in this chapter), corporate advertisements garnered support for the industry, including rating the companies as less dishonest, less culpable for adolescent smoking, more responsible, and more favorable overall. Company data from Philip Morris also indicate that this advertising increased company credibility and gave the impression of responsible marketing. Corporate image advertising benefits from association with prosocial issues in much the same way that corporate sponsorship benefits from association with prosocial issues.⁴⁵ Adolescents and young adults transfer favorable image associations from the prosocial issue to the tobacco companies. As discussed for corporate sponsorship, more research is needed to determine whether the increased support for the tobacco companies translates into increased sales of tobacco company products. However, research on youth smoking prevention programs, in particular,

as discussed in chapter 12, has shown effects on smoking behavior. In a couple of studies, youth showed increased rates of smoking, increased intentions to smoke, and increased approval of smoking following exposure to the tobacco industry's youth smoking prevention advertisements targeting parents.

Future research should investigate the possibility that corporate advertising reduces the effectiveness of ongoing antismoking campaigns by making audiences more resistant to criticism of the tobacco industry. Evidence for this inoculation effect has been demonstrated in other contexts.^{95,96} For example, attitudinal and corporate image effects were measured after varying young adults' exposure to advocacy advertisements from a Mobil Oil campaign and antiadvocacy advertisements on behalf of an opposing position. Consistent with the inoculation theory,^{97,98} prior exposure to advocacy advertising yielded more favorable attitudes toward Mobil's position and more favorable impressions of the company.⁹⁵ In the context of antismoking campaigns, understanding inoculation effects may improve the design and placement of specialized counter-advertising.⁹⁹ Finally, more research is needed on the tobacco industry's outreach to tobacco control organizations—such as appearances at public health conferences, support for potential reduced exposure products (PREPs) as part of industry strategy, and links to tobacco control organizations on tobacco industry Web sites—and the effects these efforts have on the favorability of tobacco corporate images.

Tobacco Corporate Advertising Effects on Tobacco Control Policy

The evidence for the effects of corporate advertising on tobacco control policy is limited, but analysis of industry documents shows that influencing legislation is a goal of corporate advertisements. According to

industry documents, tobacco companies conceived of youth smoking prevention programs as public relations campaigns aimed at generating positive news coverage, encouraging support from business and from parent and teacher groups, and discouraging legislation that would restrict or ban tobacco sales or marketing activities.⁷⁷ In lawsuits filed by people who believed they were affected by problems caused by smoking, tobacco company executives testified about their youth smoking prevention programs to convince jurors that the companies should be viewed sympathetically and to reduce or eliminate punitive damages.¹⁰⁰ Despite the myriad ways in which tobacco companies benefit from their prevention advertisements, participants of focus groups convened to gauge public opinion of the advertisements perceived them to contradict the industry's interests.⁷⁷ As such, the public response to these advertisements, in some cases, may be suspicion. Alternatively, since audiences perceive statements against self-interest to be particularly persuasive,¹⁰¹ the advertisements could potentially enhance the company's ability to garner public sympathy.

Future research is needed to measure the relationship between corporate advertising exposure and public support for tobacco-control policies and to more directly assess the role of corporate advertising in gaining opposition to more restrictive laws and regulations. Studies of the tobacco companies' prevention advertisements have focused primarily on adolescents' reactions to television advertisements aimed at youth. However, since the tobacco industry has shifted its resources for youth smoking prevention messages from targeting adolescents to targeting parents, the effects of the messages on adults becomes important. Research with adult respondents should address whether this shift represents a more effective strategy to forestall legislation that would restrict industry sales and marketing activities.

Corporate Advertising on Tobacco Company Web Sites

The corporate Web sites of the major tobacco companies, such as Philip Morris, provide a wealth of information about the companies' social-responsibility policies and actions. Information includes positions on the health consequences of smoking, youth smoking prevention initiatives, rationales for support or nonsupport for advertising bans, and other social-responsibility positions.

One of the message elements appearing in corporate advertisements by Philip Morris in their "www.philipmorrisusa.com" campaign has been an invitation to visit its corporate Web site. Also advertised on prime-time television, in magazines, in newspapers, and on inserts tucked in its cigarette packs, the corporate Web site has attracted approximately 250,000 visits per month.³⁸ To the extent that consumers are persuaded by corporate advertising to visit a tobacco company Web site address, they will be exposed to further corporate advertising information. As reported by Szczypka and colleagues,¹¹ a company memo in 2001, written by a public relations company hired to review the Philip Morris Web site, suggested that Internet information is more credible than paid media. In 2003, Philip Morris created a search engine plan to increase traffic flow to their Web site, and include a range of information on health issues, addiction, and Philip Morris products, but to do so in "a more user friendly, transparent, credible voice."¹⁰²(Bates no. 300113881) This redesigned Web site targeted opinion leaders and adults 18 years of age and older.¹¹ Philip Morris characterizes, on the Web site, the company's positions on the risks of smoking, without compromising its legal defenses.⁷¹ It seems reasonable to speculate that, in addition to targeted opinion leaders, consumers likely to visit the corporate Web site would be smokers seeking help in quitting smoking. As such, the Web site

provides the tobacco company with a means for targeting specific audiences.

Media Literacy and Corporate Advertising

One means of countering the effects of corporate advertising is media literacy, an “ability to access, analyze, evaluate, and create messages in a variety of forms.”^{103(p.7)} Unfortunately, little research has been identified that examines media literacy in the context of corporate advertising. However, research sponsored by Legacy¹⁰⁴ suggests that youth who were exposed to more Legacy advertisements (critical of the tobacco industry) had more skeptical views about tobacco companies. Furthermore, path analytic data among adolescents aged 12–17 showed that mistrust of individual tobacco companies was linked to mistrust of the tobacco industry overall, that mistrust of the tobacco industry was linked to more negative attitudes toward the tobacco industry, and that negative industry attitudes were linked to a lower likelihood of smoking.¹⁰⁴ Research is needed to determine whether these effects also are found for adults. Teaching audiences about the advertiser’s identity and motives may encourage more skeptical responses to the tobacco companies’ advocacy advertisements.²² However, advertisements that have been designed to discredit the tobacco industry do not typically name a specific company or specific brand. For example, advertisements from the California Department of Health Services refer to “Big Tobacco.” These advertisements mock what a tobacco company might say: “We don’t say anything about cigarettes on the tube. We talk about beer, we talk about cheese, and we talk about community service.” Research is needed to determine whether these types of oblique references to a particular cigarette company, such as Philip Morris, are understood and are sufficient to engender skepticism about a company’s television advertising.

In the next section, the PM21 integrative marketing campaign is described as a case study of corporate public relations campaigns.

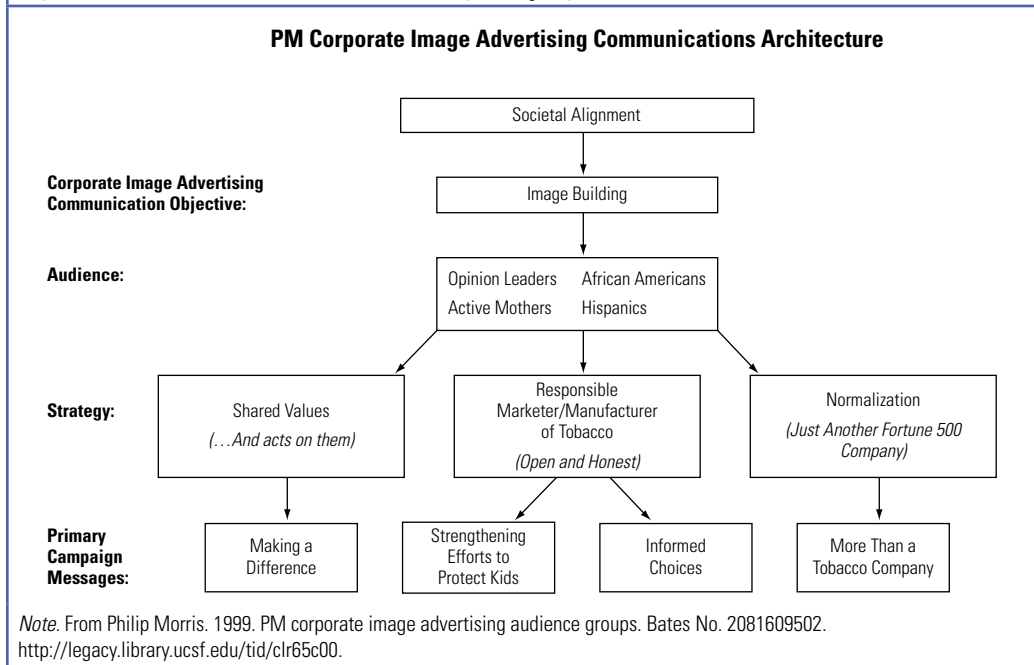
PM21: An Integrated Public Relations Campaign

Although typically regarded as distinct campaigns, Philip Morris advertisements about youth smoking prevention and community service were part of a coordinated public relations campaign called PM21 or “Philip Morris in the 21st Century.” This multifaceted campaign included paid media, a corporate Web site, a charitable giving program, a speakers’ bureau, and an internal toolkit to enhance employee morale.⁴⁰ A 1999 company document summarizes the corporate image advertising and illustrates the central role of its youth smoking prevention advertisements in the company’s image “makeover”¹⁰⁵ (figure 6.3).

Objectives of the PM21 Advertising Campaign

A primary objective of PM21 was to move the public’s opinion of Philip Morris (its corporate image) closer to the company’s view of itself (its corporate identity), a process the company referred to as “societal alignment.”^{105(Bates no. 2081609499)} The public relations campaign had four target audiences: African Americans (aged 25–54 years), Hispanics (aged 25–54 years), opinion leaders, and active mothers. Opinion leaders were defined as adults who voted in the past year; belonged to a club; and either led a company or worked for the federal, state, or local government. Active mothers had at least one child under age 18 in their households and either voted in the past year, entertained guests two to three times per month, held a position on a school/college

Figure 6.3 Overview of PM21 Advertising Campaign



board, took part in a civic issue, influenced others’ purchase decisions, or engaged in fundraising.

Targeted Advertisements Created for PM21

As shown in Figure 6.3, PM21 was designed to persuade target audiences that Philip Morris shares their social values; is an open, honest, responsible marketer/manufacturer of tobacco products; and is just like any other Fortune 500 company. Four types of advertisements represented these key messages: (1) “Making a difference” refers to advertisements about Philip Morris’s community service; (2) “Strengthening efforts to protect kids” refers to advertisements about the company’s support of the MSA (“At Philip Morris, we’re changing the way we do business”) and restricting youth access at the point of sale (“We card”); (3) “Informed choices” refers to the youth

smoking prevention advertisements; and (4) “More than a tobacco company” refers to advertisements that linked Philip Morris with its nontobacco subsidiaries and products. PM21 advertisements used different execution styles, slogans, and source attributions. Nonetheless, all portrayed reasons for audiences to “connect with Philip Morris on a positive emotional level.”¹⁰⁶(Bates no. 2081613330) For example, a company document described its “desired mindset” for active mothers as follows:

I understand they make risky products, but I see in the past few years PM has gotten its act together. They aren’t so duplicitous and they’re being more responsible. They’re actually doing something to help kids and their futures. Working together we’re going to get there. There’s some common ground ... we want some of the same things.¹⁰⁷(Bates no. 2081235877)

Company documents also quote several major Wall Street analysts as praising the

campaign, predicting that the corporate advertisements for “a kinder, gentler Philip Morris”¹⁰⁸(Bates no. 2071041508) would move the company toward the mainstream of corporate America, improve its government lobbying efforts, and reduce the risk of large-scale punitive damage awards during trials.¹⁰⁸

Evaluation of the PM21 Advertising Campaign

As reported in tobacco industry documents, a market research firm evaluated the PM21 campaign by conducting random-digit-dial telephone surveys of a nationally representative sample of adults 18 years and older almost quarterly from September 1999 to September 2001.²³ The survey asked whether respondents had heard of “Philip Morris companies” and, if so, whether their opinion was favorable or unfavorable. It also measured agreement with specific positive statements about the company’s image and its defense in lawsuits. Data collection was suspended on September 11, 2001, before oversample interviews of the four target audiences had begun. Thus, the margin of error was ± 2 percentage points for all adults ($N = 2,078$), but ± 6 points for subsamples of active mothers, African Americans, Hispanics, and opinion leaders.

PM21 persuaded adults without pre-existing opinions of Philip Morris to think favorably about the company. However, the campaign failed to convince those with negative opinions to think otherwise. Between September 1999 and August 2001, the number of adults with favorable opinions of Philip Morris increased from 26% to 38%, but unfavorable opinions were unchanged (41% to 42%).²³ Throughout the campaign, approximately 50% of respondents said the positions the company takes when defending itself in lawsuits were somewhat or very believable. Unaided recall of television advertisements for Philip Morris companies

peaked at 45%, and advertisement awareness was associated with more favorable impressions of the sponsor. For example, compared with other adults, more adults who recalled PM21 advertisements agreed the company “is changing for the better,” “becoming a more responsible corporate citizen,” and “offering solutions to issues related to its products.”²³(Bates no. 2085220389)

However, advertisement awareness also was associated with an increase in unfavorable opinions of Philip Morris (from 37% to 44%), signaling a possible backlash against the campaign.

The campaign’s most dramatic impact was on African Americans, among whom favorable opinions of Philip Morris increased from 18% to 40%.²³ Smaller increases in favorable impressions among active mothers (32% to 37%) and Hispanics (31% to 33%) and a decrease among opinion leaders (41% to 38%) did not exceed the poll’s margin of error (± 6 points). In advertisements about food banks for the elderly and scholarship programs for youth, PM21 depicted tangible benefits to African Americans and used psychographic research about the lifestyles, activities, and passions of this audience to strengthen the emotional impact of these messages.¹⁰⁶

PM21 culminated with the company’s decision to rename itself the Altria Group, which went into effect in January 2003.²⁴ The name change represented the logical conclusion of the long-term efforts by Philip Morris to reposition its company in a more favorable light.

Hostility toward Philip Morris and the industry it represents appears to be softening. In an annual survey of corporate reputations that evaluates products and services, financial performance, workplace environment, leadership, social responsibility, and emotional appeal of the 60 most visible U.S. corporations, ratings for Philip Morris have improved. From

PM21: Preparing for a Backlash

Philip Morris believed criticism of its PM21 public relations campaign was inevitable, and its strategic response plan offered vivid descriptions of what might happen.^a So-called firestorm scenarios anticipated media events, such as the following:

- State attorney general convenes a press conference to “denounce PM21 advertisements as a PR scam, a back-door effort to advertise tobacco products, and a violation of the MSA [Master Settlement Agreement].”^a He demands that television networks refuse to run the advertisements or provide equal, free time for antitobacco advertising, and prohibits sports facilities that receive public funding from selling any Philip Morris products (e.g., Miller, Kraft, and Oscar Mayer).
- Prominent political and public health figures convene a press conference to announce a lawsuit to ban the advertisements, subpoena all records related to the effort, and propose legislative efforts to increase tobacco excise taxes to pay for new antismoking advertisements.
- Popular daytime talk show host devotes an entire week of shows to ask the question, “who are the people of Philip Morris?” and sponsors a “give back dirty money” fundraiser to collect money for organizations that receive Philip Morris contributions.
- Popular nighttime talk show host attacks the advertising campaign by producing mock advertisements with the tagline, “The people of Philip Morris—Sick, fat, drunk & dead.”^a

In fact, a *Tonight Show* spoof of Philip Morris advertising portrayed the demise of an American family brought about by corporate donations of Marlboro cigarettes, Miller beer, and Kraft cheese, but it preserved the original tagline (“Working to make a difference”).^b In addition, the American Legacy Foundation produced a parody of the advertisement about Philip Morris’s support for the MSA, refuting the company’s claim to have significantly changed its business practices.^c

Other media also criticized the hypocrisy of the corporate image advertising. A single television commercial, estimated to cost \$1 million, dramatized the company’s food donation for Kosovar refugees—a five-ton food drop of Kraft macaroni and cheese that was valued at approximately \$125,000.^d Moreover, the company spent substantially less money on annual charitable contributions than it spent to advertise its largesse: \$60 million versus \$108 million, respectively, in 1999;^e and \$125 million versus \$142 million, respectively, in 2000.^{f,g} Ultimately, this type of negative publicity did not engender the boycotts, lawsuits, or tax increases that Philip Morris feared most.

^aPhilip Morris. PM21 overview. 4 Sep 1999. Philip Morris. Bates No. 207823617/6287. <http://legacy.library.ucsf.edu/tid/gds75c00>.

^b*Tonight Show* NBC. 2001. *Request line/tobacco companies*. Videocassette. San Francisco: Video Monitoring Services of America.

^cHealton, C. 2001. Big tobacco’s broken vows. *Advertising Age*, February 5.

^dBranch, S. 2001. Philip Morris’ ad on macaroni and peace: Kosovo tale narrows gap between philanthropy, publicity. *Wall Street Journal*, July 24.

^eDorfman, L. 2001. Polishing its image or preventing domestic violence: What’s Philip Morris really doing? *Off Our Backs*, November.

^fBruno, K. 2001. Philip Morris: Killing to make a difference. <http://www.corpwatch.org/article.php?id=217>.

^gChronicle of Philanthropy. 2001. Gifts and grants: Charitable giving at 96 major corporations. http://philanthropy.com/premium/corpgiving/2001corp_page.php?Corp_ID-1009.

its 1999 designation as having “the worst reputation in America,” the company rose to 48th place in 2004, surpassing companies such as AT&T and American Airlines.¹⁰⁹ In previous years, Philip Morris never ranked above 52 out of 60. In 2003, its reputation surpassed only those tainted by the specter of bankruptcy or criminal indictment (e.g., Martha Stewart Living Omnimedia, Kmart, Global Crossing, WorldCom, and Enron, in descending order) and that of another tobacco company (R.J. Reynolds).¹¹⁰ Moreover, public opinion regards the tobacco industry as less culpable than it once did. The percentage of U.S. adults who describe tobacco companies as completely or mostly to blame for health problems caused by smoking decreased from a high of 30% in 1999 to 22% in 2004, the lowest percentage yet reported.¹¹¹ Fewer than one-half of U.S. adults surveyed think that tobacco companies require more government regulation—the percentage decreased from 44% in 2003 to 42% in 2004.¹¹⁰

In summary, the PM21 campaign is an integrated marketing campaign designed to improve public perceptions of the Philip Morris company. Key segments were targeted, including African Americans, Hispanics, opinion leaders, and active mothers. Public opinion research showed high overall awareness of the campaign (45% unaided recall). Among those with prior existing negative opinions of Philip Morris, opinions remained unchanged. However, adults without prior existing opinions of Philip Morris revealed an increase in positive associations with the company. African Americans, in particular, showed an increase in favorable opinions as a result of the integrated campaign. The combination of evidence from industry documents about PM21 and other research reviewed in this chapter indicate that U.S. tobacco companies have used corporate sponsorship and advertising to enhance their credibility. Tobacco industry documents should be examined to learn

what strategies were used to accomplish these goals, to aid the design of effective tobacco control campaigns.

Summary

Compared with many consumer product manufacturers, the very nature of the tobacco industry's product leaves it with substantial challenges in public image and perception. Studies have found that both adults and adolescents perceive the tobacco industry as dishonest and hold it in low esteem. In response to these concerns, tobacco companies have moved aggressively toward corporate public relations efforts aimed at building the public images and brand identities of their firms, spending hundreds of millions of dollars in the process. This chapter examines two such areas whose impact has been studied through research: corporate sponsorship and corporate advertising.

Research reviewed in this chapter suggests that corporate image campaigns have been successful in reducing negative perceptions of the tobacco industry. While research investigating the role of tobacco sponsorship in reducing negative perceptions has not been done, in other industries research shows that sponsorships build positive brand associations and reduce negative brand associations. Evidence for the effects of corporate advertising on perceptions does exist for the tobacco industry. Studies reviewed in this chapter have found that corporate advertising reduces perceptions among adolescents and young adults that the tobacco companies are dishonest and culpable for adolescent smoking, and, among adults, increases favorability ratings for the individual company, such as Philip Morris.

Also important are the effects of corporate sponsorship and corporate advertising on the sale and use of tobacco products,

intentions to start smoking, intentions to quit smoking, and susceptibility of smokers to claims about “lower risk” cigarettes. In studies of youth smoking prevention programs (reported in more detail in chapter 12), those programs advertised by tobacco companies and targeted to parents were found to be ineffective, or in some cases, were found to increase older adolescents’ intentions to smoke, increase approval of smoking, and result in a higher likelihood of smoking behavior. More research is needed to determine the effects of other forms of corporate advertising and tobacco sponsorship on smoking intentions and behavior. In industries other than tobacco, increased consumer perceptions of corporate social responsibility and other favorable associations with a company have been linked to increased interest in and sales of products made by those companies. In the tobacco industry, the effect of public relations campaigns on adolescents’ and young adults’ intentions to start smoking, on smokers’ intentions to quit smoking, and on sales of tobacco products are important issues for future research.

Perhaps most important are the effects that softening negative attitudes and improving public image perceptions of cigarette companies may have on legislation, jury awards, public support, and consumer activism. Some evidence exists that patrons of corporate sponsors have felt an obligation, or even felt compelled, to voice support for the tobacco sponsor in opposing smoking bans. Industry documents show that the tobacco industry motives for youth smoking prevention programs include discouraging legislation that restricts or bans tobacco sales or marketing activities. Tobacco companies’ public relations efforts may be a key strategy for providing the legal and regulatory buffer against anti-industry legislation. These efforts could have tangible effects on tobacco companies’ ability to fight legislation and litigation affecting their sales and marketing activities, which,

in turn, ultimately may affect the public’s exposure to tobacco. The effects of tobacco public relations efforts on public resistance to tobacco control policies also need further study.

Discussions are needed about how to acquire accurate and topical data on corporate sponsorship and corporate advertising. Tobacco product advertising has been increasingly restricted over time. It remains subject to substantial monitoring by federal agencies (most notably the FTC) and some control through the MSA. A similar level of surveillance and oversight does not exist for corporate image advertising and public relations efforts, which, nonetheless, may affect public attitudes and behavior toward smoking through their effects on company credibility, social responsibility, or other favorable associations.

Given its history of corporate image concerns and investment of significant resources to improve its image, the tobacco industry’s use of the media for public relations purposes warrants greater scrutiny. One possible direction is for the FTC or another agency to monitor the tobacco companies’ annual expenditures to advertise and promote their corporate brands as it does for their cigarette brands (see chapter 8 for a discussion of government regulation). Future research should continue to measure public opinion of tobacco companies, public support for tobacco control policies, and their relationship to corporate advertising exposure. Combined with research on the impact of these corporate public relations efforts, here and abroad, it is possible to better understand the relationships among tobacco industry public relations efforts, smoking, and public health.

Finally, the global impact of these types of public relations activities represents another important area for future study. This chapter focuses on examples from the U.S. media, and these lessons may or may

not be applicable worldwide. Similar work is needed in other countries and especially in Asia and Africa, where smoking prevalence is increasing and a dramatic rise in morbidity and mortality is anticipated.¹¹² Future research should examine how multinational tobacco corporations use public relations advertising to manage corporate images in other markets and compare the reputation and performance of the tobacco industry in the United States and other countries.

Conclusions

1. Corporate sponsorship of events and social causes represents a key public relations strategy for major tobacco companies, which spent more than \$360 million on these efforts in 2003. Key targets included sporting events, antihunger organizations, and arts and minority organizations. These efforts have been used, in certain cases, to influence opinion leaders who benefit from such sponsorship.
2. Corporate image campaigns by tobacco companies have highlighted their charitable work in the community and have promoted their youth smoking prevention programs; at times, corporate spending on these campaigns has vastly exceeded the amount actually given to the charities. These campaigns have reduced perceptions among adolescents and adults that tobacco companies are dishonest and culpable for adolescent smoking, and among adults, have increased perceptions of responsible marketing practices and favorable ratings for the individual companies.
3. Tobacco industry youth smoking prevention campaigns have been generally ineffective in reducing youth smoking. Moreover, they may even have increased smoking in some subgroups of youth.
4. Tobacco industry public relations efforts such as corporate sponsorship and advertising may make audiences more resistant to criticism of the industry, may mitigate jurors' negative views toward the industry, and may weaken public or legislative support for tobacco control policies.
5. Systematic monitoring and descriptions of tobacco companies' activities and expenditures for corporate sponsorship and advertising are needed to better understand the impact of these activities on the public image of tobacco companies, on consumers' smoking intentions and behaviors, and on the image of sponsored events and causes.

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7

Influence of Tobacco Marketing on Smoking Behavior

The relationship between tobacco marketing and smoking behavior, particularly among adolescents, has been extensively researched. This chapter examines the evidence base for how these marketing efforts affect initial uptake and continued use of tobacco by adolescents and by the general population. Data from a multitude of studies using a range of methodologies were examined along with tobacco industry source documents in assessing the role of marketing in tobacco use. Specific areas discussed include

- *The relationship between cigarette marketing and identifiable adolescent needs, such as peer acceptance, rebelliousness, risk taking, and stress relief*
- *The impact of cigarette marketing on adolescents' self-images and their perceptions of smokers*
- *The effects of exposure to cigarette marketing on adolescent smoking*
- *The relationship between tobacco marketing expenditures and tobacco consumption in the general population, including time-series and cross-sectional studies, as well as studies of the impact of advertising bans on consumption and use*

Numerous studies find a strong connection among advertising exposure, adolescent initiation to tobacco use, and progression to regular tobacco use. Cross-sectional econometric studies also show a correlation between tobacco advertising and increased cigarette consumption. As a whole, the evidence base indicates a causal relationship between tobacco advertising and increased levels of tobacco initiation and continued consumption.

Introduction

Although the tobacco industry has asserted that its marketing efforts are not aimed at creating new demand but rather at increasing brand market share, internal industry documents contribute to the evidence refuting this claim. The ability of tobacco marketing to create new demand by encouraging smoking initiation among youth and adults is a critically important aspect of the role of the media in tobacco use. Researchers have studied whether the level of tobacco advertising is related to aggregate cigarette demand: When exposed to high levels of tobacco industry marketing, do more people start using tobacco, do smokers smoke more, and are they less likely to quit? Alternatively, would the absence of cigarette advertising have the opposite effect?

This chapter reviews evidence of the influence of cigarette marketing on adolescent smoking initiation—many start to smoke before the legal age for purchasing cigarettes¹—and on cigarette consumption in the general population. Other chapters in this monograph review advertising theory (chapter 2), types and extent of tobacco advertising and promotions (chapter 4), themes and targets of tobacco advertising (chapter 5), and media influences in preventing and controlling tobacco use (chapter 12). For a discussion of the effects on adolescent behavior of the depiction of smoking in movies, see chapter 10. Below is a brief overview of the topics covered in the main sections of this chapter.

Three lines of evidence regarding adolescent smoking are considered. The first includes literature describing adolescent psychological needs and how tobacco marketing suggests that smoking can help satisfy these needs. Subsections under the main heading of adolescent needs show

that adolescents have such needs, cigarette marketing communicates to them that smoking will help fulfill these needs, and that adolescents who smoke or who do not rule out smoking in the future are more likely to believe that smoking can fulfill these needs. Of course, marketing for many other products also aims to convince adolescents that product use can help satisfy these needs.

The second related line of evidence focuses on development of self-image during adolescence² and involves many factors, such as popularity, masculinity/femininity, rebelliousness, acceptance by peers, confidence in interacting with others, and so forth. For example, a boy who feels he is masculine and rugged is a little more confident in interactions with others. If his peers see him in this way, he is more likely to gain admiration from others. If he perceives that smoking can bolster this image, he may more readily adopt this behavior. Further, there is evidence that those with personal images similar to the images they have of smokers will be more prone to smoke.

The third line of evidence measures exposures of adolescents to tobacco advertising and promotions and any association between those exposures and smoking behavior, including the likelihood of future smoking. First, methodological issues including study design, measures of smoking behavior, and measures of exposures and receptivity to cigarette advertising and promotions are described. Then, this section reviews the evidence that these measures are associated with higher levels of both intentions to smoke and actual smoking in both cross-sectional and longitudinal studies.

A final section of this chapter addresses various types of time-series studies that relate the level of tobacco marketing expenditures to population-based cigarette consumption. It also discusses studies

that correlate novel advertising and promotional campaigns with changes in the incidence of adolescent smoking initiation and brand preference.

For the review of research on the relationship between cigarette advertising and promotions and adolescent smoking behavior, the American Psychological Association's PsycINFO database³ was searched for the period from index inception in 1809 to May 2007. Three search terms—marketing, tobacco, and teenagers—were combined for each search using as many forms of each word as possible, such as singular and plural, synonyms, shortened forms, and so on. After eliminating studies that clearly were not relevant (for instance, studies that mentioned the issue but addressed another topic), copies of the remaining 216 publications were reviewed, and more were eliminated as lacking actual data analysis for association between tobacco marketing and adolescent needs, self-image, smoking attitudes, or behavior. Ultimately, the list was pared down to 96 studies. This list then was checked against several published and unpublished bibliographies in this area, and another 23 relevant articles were included. Of the articles directly relating cigarette marketing practices to smoking behavior, 52 were cross-sectional and 16 were longitudinal. Of these, 22 studied the relationship between tobacco marketing and smoking intention or susceptibility to smoking among never smokers.

This chapter also includes a review of tobacco companies' documents related to marketing to adolescents, including research on the impact of brand advertising on images of the brand and the smoker of the brand. Many citations in this chapter were gathered as part of the U.S. Department of Justice lawsuit against the tobacco companies.⁴ The reference notations identified as Bates numbers refer to identifying numbers stamped on document pages that can be used to access

the documents catalogued in various tobacco company depositories.

Adolescents' Psychological Needs and the Influence of Cigarette Marketing

This section reviews important adolescent psychological needs, such as popularity; peer acceptance; gender identity; rebelliousness; sensation seeking; risk taking; having fun; and alleviating stress, anxiety, and depression. This review provides a basis for considering whether cigarette marketing suggests that smoking can help meet these needs, as some theorize, thus increasing the likelihood of their smoking. Studies that addressed more than one of these needs may be mentioned multiple times.

Psychological Needs of Adolescents

Changes during adolescence result in intertwined and powerful adolescent needs. Most adolescents want to be popular and gain peer approval.⁵ Boys commonly experience strong needs to feel and be seen as masculine, tough, and independent. On the other hand, girls may become concerned about being seen as attractive, thin, and feminine.⁶ Some adolescents become rebellious and may want to defy mainstream, adult-imposed norms.⁶ The need for new experiences and sensations increases in adolescence, especially among boys,⁷ and is closely associated with increased risk taking.⁸ Many adolescents experience stress and depression for the first time.⁹

Subsections address each important adolescent need. Where available, three sources of evidence are reviewed relevant to how each of these needs influences behavior: (1) whether adolescents perceive that smoking can fulfill the respective

Attracting Young Smokers: A View from the Tobacco Industry

As a 1973 R.J. Reynolds planning memorandum stated, “If our Company is to survive and prosper, over the long term, we must get our share of the youth market.”^a Comprehensive analyses of thousands of U.S. tobacco industry documents demonstrate that tobacco companies researched youth smoking initiation patterns, developed brand images to appeal specifically to youth, and used euphemisms such as “younger adult smokers” over the past 20 years to disguise the focus of these efforts.^{b,c,d,e,f} Similarly, tobacco industry documents show that advertising for Camel cigarettes was revised in the late 1980s to communicate to young consumers that the brand had been reformulated to reduce harshness and deliver a smooth smoke.^g Some documentary evidence suggests that the tobacco industry cooperated with manufacturers of candy cigarettes, which were designed and packaged to look like popular cigarette brands, to appeal to children.^h Tobacco industry documents in the United Kingdom reveal similar thinking.^{d,i} The Health Select Committee inquiry into the U.K. tobacco industry^j disclosed documents from the industry’s principal advertising agencies that show that the young are a key target and that discuss psychosocial drivers as the way to reach them. In many instances, the industry refers to “young adult smokers.” However, being “youthful and exciting,” attracting “new entrants,” and “gaining a disproportionately large share of new recruits to the market” are recognized as vital to commercial success.^k Young people’s lifestyles, motivations, and aspirations are the subject of detailed and continuous market research. Everything possible is done to attract and retain their interest. Specifically, the conclusion is drawn repeatedly in these documents that young people smoke for emotional reasons and cigarettes can meet these needs by being aspirational and acting as “a badge” and a “sign of maturity, discernment and independence.”^l The job of advertising, therefore, is to help build and reinforce these qualities in the product.

^aTeague, C. E. Research planning memorandum on some thoughts about new brands of cigarettes for the youth market. 2 Feb 1973. R.J. Reynolds. Bates No. 502987357/7368. <http://legacy.library.ucsf.edu/tid/act68d00>.

^bCummings, K. M., C. P. Morley, J. K. Horan, C. Steger, and N. R. Leavell. 2002. Marketing to America’s youth: Evidence from corporate documents. *Tobacco Control* 11 Suppl. 1: I5–I17.

^cPerry, C. L. 1999. The tobacco industry and underage youth smoking: Tobacco industry documents from the Minnesota litigation. *Archives of Pediatrics and Adolescent Medicine* 153 (9): 935–41.

^dHastings, G., and L. MacFadyen. 2000. A day in the life of an advertising man: Review of internal documents from the UK tobacco industry’s principal advertising agencies. *British Medical Journal* 321 (7257): 366–71.

^eCarter, S. M. 2003. Going below the line: Creating transportable brands for Australia’s dark market. *Tobacco Control* 12 Suppl. 3: iii87–iii94.

^fPollay, R. W. 2000. Targeting youth and concerned smokers: Evidence from Canadian tobacco industry documents. *Tobacco Control* 9 (2): 136–47.

^gWayne, G. F., and G. N. Connolly. 2002. How cigarette design can affect youth initiation into smoking: Camel cigarettes 1983–93. *Tobacco Control* 11 Suppl. 1: I32–I39.

^hKlein, J. D., and S. S. Clair. 2000. Do candy cigarettes encourage young people to smoke? *British Medical Journal* 321 (7257): 362–65.

ⁱAnderson, S., G. Hastings, and L. MacFadyen. 2002. Strategic marketing in the UK tobacco industry. *Lancet Oncology* 3 (8): 481–86.

^jUnited Kingdom. Parliament. House of Commons. 2000. *The tobacco industry and the health risks of smoking*. Health Select Committee, sess. 1999-00, 2nd report. Vol. 1. Report and proceedings, June 14, 2000. Vol. 2. Minutes of evidence and appendices, June 14, 2000. HC papers 1999-00 27-I and 1999-00 27-II. London: Stationery Office. <http://www.parliament.the-stationery-office.co.uk/pa>.

^kCollett Dickenson Pearce and Partners. 1995. Hamlet market share. <http://www.tobaccopapers.com/PDFs/0001-0099/0041.pdf>.

^lCollett Dickenson Pearce and Partners. 1995. Benson & Hedges 1995 creative briefs. <http://www.tobaccopapers.com/PDFs/0001-0099/0052.pdf>.

The Dynamics of Adolescence

Adolescence is a period of change related to puberty, increasing independence from parents, educational environment (elementary to middle school to high school), and greater importance of peers. These changes contribute to the development of important psychological needs. The onset of the physical changes of puberty, such as rapid growth, development of primary and secondary sex characteristics, and physical changes that contribute to increased strength and endurance, varies by as much as five years.^a However, puberty typically begins between the ages of 10 and 15 years, so within a school grade, students can be at very different stages in this development. These changes affect body image,^b particularly for girls.^c Adolescent physical changes bring increasing interest in the opposite sex and a desire for independence, including autonomy in decision making.^d In many families, these desires create conflict that can result in rebelliousness and defiance. This, in turn, can lead parents to give up attempts to monitor and set limits on their teenagers' activities and behavior.

At school, more is demanded of adolescents academically, with changing levels of support from teachers, the possibility of more competition among students, and increased importance of peer group relationships.^e Such changes may contribute to lowered self-esteem and lead adolescents to become less interested in academics and more interested in social success.^{d,e,f} Students, particularly those less competent academically, may become more focused on their abilities relative to their peers rather than on mastery of educational material. These adolescents will search for other ways to define themselves.

^aSteinberg, L. D. 1999. *Adolescence*. 5th ed. New York: McGraw-Hill.

^bStice, E. 2003. Puberty and body image. In *Gender differences at puberty*, ed. C. Hayward, 61–76. New York: Cambridge Univ. Press.

^cCompian, L., L. K. Gowen, and C. Hayward. 2004. Peripubertal girls' romantic and platonic involvement with boys: Associations with body image and depression symptoms. *Journal of Research on Adolescence* 14 (1): 23–47.

^dEccles, J. S., C. W. A. Midgley, C. M. Buchanan, D. Reuman, C. Flanagan, and D. M. Iver. 1993. Development during adolescence. The impact of stage-environment fit on young adolescents' experiences in schools and in families. *American Psychologist* 48 (2): 90–101.

^eEccles, J. S., A. Wigfield, C. Midgley, D. Reuman, D. MacIver, and H. Feldlaufer. 1993. Negative effects of traditional middle school on student's motivation. *Elementary School Journal* 93 (5): 553–74.

^fWigfield, A., and J. S. Eccles. 1994. Children's competence beliefs, achievement values, and general self-esteem. *Journal of Early Adolescence* 14 (2): 107–38.

^gAnderman, E. M., M. L. Maehr, and C. Midgley. 1999. Declining motivation after the transition to middle school: Schools can make a difference. *Journal of Research and Development in Education* 32 (3): 131–47.

need, (2) whether adolescents who believe smoking will fulfill a need are more likely to smoke cigarettes, and (3) evidence from tobacco company documents about whether cigarette marketing for brands popular among youth conveys that smoking can help satisfy the need.

Marlboro (manufactured by Philip Morris), Camel (R.J. Reynolds), and Newport (Lorillard) cigarettes have reigned as the top three brands smoked by adolescents since

the 1980s, when many of the studies in this chapter were conducted. While Marlboro has remained by far the most popular, according to data from the national Teenage Attitudes and Practices Surveys, from 1989 to 1993 Marlboro lost some youth smokers while Camel and Newport gained.¹⁰ A majority of African American adolescent smokers purchased Newports.^{10,11} Data from the 2005 National Household Survey on Drug Abuse indicate that, among smokers aged 12–17 years, 48.0% cited Marlboro, 23.2%

cited Newport, and 10.1% cited Camel as the brand smoked most frequently in the month preceding the survey.¹²

A methodology subsection of the main section below relating exposure to tobacco advertising and promotions to adolescent smoking defines the smoking status variables mentioned throughout the chapter.

Need for Popularity and Peer Acceptance and Smoking

Do teenagers think smoking helps make them popular with their peers? Do social needs such as popularity and acceptance, for instance, play a role in encouraging smoking initiation and tobacco use among adolescents?

Perception That Smoking Contributes to Popularity

Evans and colleagues¹³ surveyed 3,536 California never smokers aged 12 to 17 years regarding what tobacco advertisements convey to them about smoking. A majority of participants—60.5% of those aged 12 to 13 years, 69.2% of those aged 14 to 15, and 72.9% of those aged 16 to 17—perceived that cigarette advertisements claimed



Newport Pleasure advertisement associating smoking with popularity

smoking would help them feel comfortable in social situations.

Romer and Jamieson¹⁴ conducted telephone surveys of 2,002 14- to 22-year-olds to assess exposure to cigarette advertisements and perceptions of smokers. Respondents rated smokers as popular, happy, and attractive. These ratings were higher for adolescents with greater exposure to cigarette advertisements.

Barton and colleagues¹⁵ asked students to rate pictures of youth that were identical except for the presence or absence of a cigarette. Youth pictured with a cigarette received higher ratings as having an interest in the opposite sex and being in a group—traits considered desirable—than those pictured without a cigarette.

Association of Social Needs with Smoking

Perry and colleagues¹⁶ found that 7th, 9th, and 10th graders who thought smoking would help them make friends were more likely to be smokers. Koval and colleagues¹⁷ examined whether 8th graders with high levels of social conformity (measure of compliance and susceptibility to social influence) were more likely to smoke. They found that high-conforming boys (but not girls) were more likely to be smokers.

In a longitudinal study among high school students, Chassin and colleagues¹⁸ found that a belief that smoking can have positive social outcomes was a predictor of whether an adolescent began smoking cigarettes in the following year.

Themes of Popularity and Peer Acceptance in Cigarette Advertising for Youth-Popular Brands

A review of tobacco company marketing research indicates that youth-popular brands

convey an image of smokers of those brands as popular and admired. Documents also indicate that the companies believe that conveying that popular people smoke their brand motivates the choice of that brand. A 1981 memorandum by Philip Morris senior economist Myron Johnston emphasizes this advertising strategy with the statement, “At least a part of the success of Marlboro Red during its most rapid growth period was because it became the brand of choice among teenagers.”¹⁹(Bates no. 1000390808) Philip Morris also studied the need for peer acceptance as a factor in choosing Marlboro cigarettes. For example, a 1998 report concluded that “hollow followers”—those with a high desire for acceptance—were particularly likely to buy Marlboro products.²⁰ Philip Morris research and marketing documents indicate that the company closely tracked whether the brand conveyed an aura of popularity. The company generally has been successful in conveying that (1) Marlboro is popular,^{21–25} (2) Marlboro is “growing in popularity,”^{21,22,26–28} (3) the Marlboro smoker is popular,^{29,30} and (4) Marlboro’s core brand personality includes “popular.”^{25,31–35} Adolescents who are concerned with being popular, therefore, might be likely to perceive that smoking Marlboro cigarettes could help them achieve this outcome.

R.J. Reynolds also understands the importance of popularity and peer acceptance in motivating adolescent smoking. For example, a July 3, 1974, memorandum on what causes smokers to select their first brand discussed the role of smoking in gaining peer acceptance.

Men, particularly, report that ... they took up smoking because they wanted to impress and be accepted by other young men who smoked. Often the motivation is to be less the target of group aggression. Smoking is often a way to gain entree to a group by effecting an appearance of being mature, sophisticated, sexy or manly.³⁶(Bates no. 500574162)

With its Joe Camel campaign, R.J. Reynolds was highly successful in conveying that others would like and admire the Camel smoker. For example, in a series of focus groups conducted for the company in October 1991 with 18- to 24-year-old Camel cigarette smokers, respondents were unusually outspoken about their liking and admiration for the Joe Camel character:

He’s someone you can hang out with— He makes you feel comfortable ... That’s a real knack ... I wish I could be so easy to talk to ... I guess it’s ‘cause he’s done and seen everything ... He’s what guys really want to be—a man’s man but not super macho ... He’s a natural leader—not pushy, but people just sort of follow his lead ...³⁷(Bates no. 514340431)

Lorillard documents show that its marketing of the Newport brand conveys that the Newport cigarette smoker will be popular. A January 1994 Lorillard report described the results of eight focus groups of menthol cigarette smokers. The report stated that African Americans smoke Newport cigarettes “because they perceive Newport as an ‘in’ cigarette that is popular among their friends and peers.”³⁸(Bates no. 91950199)

Boys and Masculinity, Girls and Femininity

Smoking and sex appeal: what role do they play in the adolescent psyche? This section addresses the multifaceted relationship between tobacco advertisements and smoking and adolescents’ perceptions of and needs associated with their masculinity or femininity.

Perception That Smoking Contributes to Masculinity or Femininity

Many adolescents value success with the opposite sex, often perceived as tied to an adolescent’s masculinity or femininity.

Did Joe Camel Attract the Attention of Children and Youth?

While a marked increase in youth smoking became apparent during the height of the Joe Camel advertising and promotions campaign in the early 1990s,^a a necessary but not sufficient condition to link this upswing to the Joe Camel campaign was to demonstrate that children and adolescents were aware of it. Three studies published concurrently in a 1991 issue of *JAMA: The Journal of the American Medical Association* demonstrated that Joe Camel was well recognized among young people.^{b,c,d}

Fischer and colleagues^b had young children aged 3–6 years match logos to product categories. Among 3-year-olds, 30.4% successfully matched an image of Old Joe to the cigarette category, and among 6-year-olds, 91.3% did, not significantly different from the percentage of 6-year-olds who matched a silhouette of Mickey Mouse (logo for the Disney Channel) to the Disney Channel. The study by DiFranza and colleagues^c showed Camel advertisements featuring Old Joe, but with all product and brand information removed, to youth aged 12–19 years and adults age 21 years or older. The youth were more likely to say they had ever seen the Joe Camel character than were the adults (97.5% vs. 67.0%), and among those who had seen it, youth were more able to associate the image with the Camel cigarette brand (98.0% vs. 70.1%). Youth were also significantly more likely than were adults to rate the Joe Camel character as “cool” or “interesting,” or wanted “to be friends” with him. Finally, Pierce and colleagues^d computed the percentage of respondents to the 1990 California Tobacco Survey that named Camel or Marlboro as the brand most advertised. Camel was named about as frequently as Marlboro by those aged 12–13 years (34%–35%), with the percentage citing Camel declining steadily with age, so that less than 10% of those age 65 years or older cited Camel as the most advertised brand. Marlboro was cited by increasing percentages by age, peaking among those aged 16–17 years (48%), and then declining to about 20% among those age 65 years or older. Youth, then, seemed to be more attuned to advertising than were adults.

More information regarding the Joe Camel saga is presented in chapters 3, 5, and 8. Also, two articles explore in detail the rise and fall of Old Joe Camel,^{e,f} with numerous additional citations from tobacco industry documents and news media.

^aJohnston, L. D., P. M. O'Malley, and J. G. Bachman. 2002. *Monitoring the Future: National survey results on drug use, 1975–2001. Vol. 1: Secondary school students* (NIH publication no. 02-5106). Bethesda, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Institute on Drug Abuse.

^bFischer, P. M., M. P. Schwartz, J. W. Richards Jr., A. O. Goldstein, and T. H. Rojas. 1991. Brand logo recognition by children aged 3 to 6 years. Mickey Mouse and Old Joe the Camel. *JAMA: The Journal of the American Medical Association* 266 (22): 3145–48.

^cDiFranza, J. R., J. W. Richards, P. M. Paulman, N. Wolf-Gillespie, C. Fletcher, R. D. Jaffe, and D. Murray. 1991. RJR Nabisco's cartoon camel promotes camel cigarettes to children. *JAMA: The Journal of the American Medical Association* 266 (22): 3149–53.

^dPierce, J. P., E. Gilpin, D. M. Burns, E. Whalen, B. Rosbrook, D. Shopland, and M. Johnson. 1991. Does tobacco advertising target young people to start smoking? Evidence from California. *JAMA: The Journal of the American Medical Association* 266 (22): 3154–58.

^eCohen, J. B. 2000. Playing to win: Marketing and public policy at odds over Joe Camel. *Journal of Public Policy and Marketing* 19 (2): 155–67.

^fCalfee, J. E. 2000. The historical significance of Joe Camel. *Journal of Public Policy & Marketing* 19 (2): 168–82.

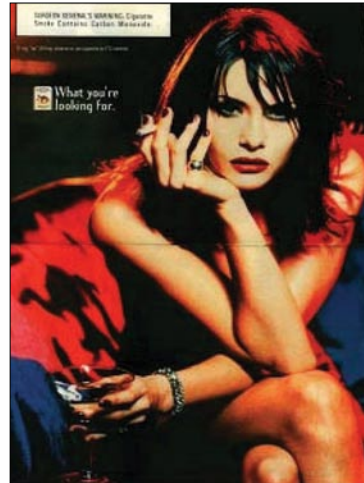
Enhancing these attributes is appealing to teenagers. Barton and colleagues¹⁵ found that, on average, adolescents viewed smokers as tougher, an attribute they viewed positively. Evans and colleagues¹³ reported that 43.9% of 12- to 17-year-old female

never smokers perceived that cigarette advertisements conveyed that smoking would help them stay thin.

In two samples of adolescent never smokers 11–17 years old, Shadel and colleagues³⁹



Advertisements associating femininity and masculinity with cigarettes



assessed positive advertisement effect ($n = 29$) and personal relevance ($n = 101$), respectively. In the smaller study, adolescents viewed a balanced random sample of 24 protobacco advertisements, 24 antitobacco advertisements, and 24 neutral advertisements for other products. The researchers previously had categorized the advertisements' valence as masculine, feminine, or gender neutral. In the larger study, participants were asked whether 11 tobacco advertisements did or did not remind them of themselves. Girls were more likely to show a positive affect toward the cigarette advertisements (smaller study) and judge them as self-relevant (larger study) if the advertisements were female valenced. No such relationship was found for boys in either study. The authors concluded, "Female-valenced cigarette advertising imagery may have specific effects on never smoking female adolescents by enhancing positive affect and suggesting that women who smoke hold the same characteristics as do the young women themselves."³⁹(p.1735)

Association of Masculinity and Femininity with Smoking

Chassin and colleagues⁴⁰ found that adolescents who rated their ideal selves

similarly to smokers as "tough," "foolish," "acts big," "disobedient," and "interested in the opposite sex" were more likely to report an intent to smoke. Boys who believe these characteristics will make them more attractive to the opposite sex may see smoking as a way of acquiring or strengthening them.

A number of similar studies have been conducted with adolescent girls, focusing on attractiveness and weight control. French and Perry⁴¹ identified several influences toward smoking that young women focus on, including being attractive and well dressed, having sex appeal, and experiencing weight concerns. Koval and colleagues¹⁷ found that 8th grade girls were more likely to smoke cigarettes if they believed smoking would improve their appearance. French and colleagues⁴² found that girls who smoke were significantly more likely than were nonsmokers to try to lose weight, fear gaining weight, want to be thin, and have eating disorders. They found that girls with substantial concerns about their weights were about twice as likely (compared with girls without weight concerns) to begin smoking during the following year. Charlton⁴³ surveyed 16,000 9- to 19-year-olds in northern England. This researcher found that smokers were more likely, and never smokers were less likely, to agree

that smoking controls weight. More girls than boys among 13- to 16-year-olds agreed with this statement. Finally, a survey of 14- to 22-year-olds found that girls who smoked were significantly more likely than nonsmokers to believe that smoking would reduce weight.¹⁴

Themes Relevant to Masculinity and Femininity in Cigarette Advertising

Krupka and colleagues⁴⁴ found that cigarette advertisements targeting women were significantly more likely than those not targeting them to show lean, attractive smokers. King and others⁴⁵ found images of young women as attractive, sexy, independent, and sociable to be common in cigarette advertising. A third study found that billboard advertisements for tobacco depicted models as having sex appeal more often than did those for other products except alcohol.⁴⁶

Much cigarette advertising, especially for Marlboro and Camel, has focused on conveying that smokers of those brands are masculine, tough, and rugged. Marketing research by Philip Morris consistently has shown that its audience perceives the Marlboro man as masculine, independent, and rugged. Since 1992, a marketing research organization has conducted biennial research to monitor the appeal of the Marlboro campaign. For its 1999 report, that organization interviewed 76 young adult male smokers between June and August 1999. It found that “core brand values of freedom, independence/self-sufficiency, and ruggedness clearly come through.”⁴⁷(Bates no. 2072468465) A 1999 Philip Morris marketing report lists features of the Marlboro image to include “individualism, adventurousness, freedom, confidence, excitement and mastery”,⁴⁸(Bates no. 2080930013) “the masculine ideal”; and “masculinity, freedom, adventure, limitless opportunities, self-sufficiency,

mastery of destiny, harmony with nature.”⁴⁸(Bates 2080930017) Other Philip Morris documents point to the success of the Marlboro campaign in representing the masculine ideal.^{49–51}

An October 1991 report to R.J. Reynolds regarding focus groups conducted on Camel advertising indicated the strong impact of the Joe Camel campaign. A footnote in the report commented on the extraordinary power of the Joe Camel campaign:

The details recalled and the strength of the favorable CAMEL advertising commentary were considerably beyond what is typically heard in focused groups—be it for cigarettes or other packaged goods—when awareness of/attitudes toward advertising—in the absence of stimuli—are explored.⁵²(Bates no. 509045392)

Additional quotes from the report already mentioned earlier illustrate the impact of the campaign on perceptions of Camel smokers as attractive to members of the opposite sex.⁵³ In contrast, a review of Lorillard documents regarding its marketing of Newport cigarettes does not show that the company uses a theme of masculinity in marketing this brand.

Rebelliousness

This section addresses the dynamic mix of adolescent rebelliousness, smoking, and tobacco advertisements.

Perception That Smokers Are More Rebellious

Chassin and colleagues⁵⁴ studied high school student ratings of photographs of boys holding chewing tobacco, a pack of cigarettes, or a bag of corn chips. Compared with the boy with corn chips, the students rated the boy with the cigarettes as significantly more rebellious.

Cigarettes and Sex Appeal

R.J. Reynolds documents indicate that the intent of the Joe Camel campaign was to convey that the Camel smoker was a successful ladies' man. For example, a June 21, 1988, document proposed ways to use promotions to communicate that the Camel smoker would "get the girls."

Nothing quite captures the imagination for our target as the opposite sex. The CAMEL CONNECTION takes ... "Connection" between Camel and one of the main focuses of our target's life.

The program features an endless variety of premiums, give-aways, etc. that play our "Camel Guy" as a real ladies' man, the Camel equivalent of the Playboy bunny, all relatable and done with a very light, funny, fantasy orientation to our target.

Of course, there will be infinite attention paid to the focus of our target's fascination: women. Beautiful, desirable, the kind of females who you wouldn't care if they'd never read Julia Childs.

Yes, this is disgustingly chauvinistic. And yes, it is a very dead-end bullseye with our target.

He's a blond beach god. Well, blond leaning camel.^a

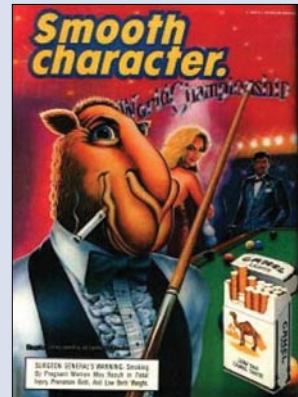
A 1989 document indicated that in a "consumer ad test," 61% of male smokers aged 18–24 found Joe Camel to be "attractive to opposite sex."^b

Several Joe Camel ads—some of which were described by the U.S. Department of Justice as part of a racketeering act—featured "smooth moves" and "dating advice."^c(p.33)

^aKNT Plusmark. Camel project big idea concept development. 21 Jun 1988. R.J. Reynolds. Bates No. 515686724/6729. <http://legacy.library.ucsf.edu/tid/yln92d00>.

^bR.J. Reynolds. "Smooth character" campaign. 1989. R.J. Reynolds. Bates No. 507244164/4184. <http://legacy.library.ucsf.edu/tid/lpi54d00>.

^c*United States vs. Philip Morris, et al.* Appendix to complaint. U.S. District Court for the District of Columbia. 1999. <http://www.justice.gov/civil/cases/tobacco2/appendix.pdf>.



Relationship between Rebelliousness and Smoking

A study of 6th graders found that rebelliousness was correlated with smoking behavior for both boys and girls, even when investigators controlled for parental smoking.⁵⁵ A study of 8th-grade students revealed that rebelliousness was associated with student smoking. Here, too, variables controlled for parental and peer smoking. Thus, it can be inferred that rebelliousness is associated with smoking over and above any influence of parents or peers.¹⁷ In a longitudinal study of 3,130 5th graders, those high in rebelliousness at baseline were significantly more likely to have smoked by the 12th grade.⁵⁶

Rebelliousness in Cigarette Marketing Images

Camel advertising (and perhaps Marlboro with its emphasis on independence and masculinity), but not Newport, has relied on the rebelliousness theme. In March 1986, R.J. Reynolds issued a report, *Camel New Advertising Campaign Development*. The report stated that the objective of the advertising is to "leverage the non-conformist, self-confident mindset historically attributed to the CAMEL user ... so that the brand becomes a relevant, appealing choice for today's younger adult smokers."⁵⁷(Bates no. 503969239) The report outlined R.J. Reynolds's plan for achieving this objective: "The advertising will create



Joe Camel rebelliously riding a motorcycle

the perception that CAMEL smokers are non-conforming, self-confident ... younger smokers who project a cool attitude which is admired by peers.”⁵⁷(Bates no. 503969241)

A December 1988 report, *Current/Projected Perceptions of Camel among Target Smokers*, states, “the most important user image attributes to target 18–24 year old male smokers are to be perceived as having an independent/individualistic personality, followed by being masculine, admired/accepted by friends. ...”⁵⁸(Bates no. 506864590)

In a January 1991 evaluation of a later version of Joe Camel, R.J. Reynolds reported, “The Evolved Smooth Character campaign is particularly effective among smokers who reject traditional values.”⁵⁹(Bates no. 509042746)

In 1994, R.J. Reynolds continued its pursuit of the rebellious audience. A document, *CAMEL DBM [database marketing] Programs: Learning Perspective*, notes that one development objective is to “provide readers with provocative articles that have an attitude of rebellion, adventure, individualism, humor and a lust for living.”⁶⁰(Bates no. 525511595)

Sensation Seeking, Risk Taking, and Having Fun

The following discussion considers the appeal to adolescents of having fun, seeking excitement, and taking risks. These themes are prevalent in tobacco advertising and

there is evidence that they likely encourage adolescent smoking.

Perception That Smoking Is Associated with Excitement, Danger, or Fun

The literature review did not reveal any studies that specifically evaluate adolescent perceptions related to sensation-seeking and risk-taking behavior as cigarette advertising themes. Evans and colleagues¹³ found that 68% to 76% of nonsmoking California teenagers perceived cigarette advertisements as conveying that smoking is enjoyable.

Relationships between Smoking and Sensation Seeking, Risk Taking, or Having Fun

In a study of 1,841 17- to 19-year-olds, Kraft and Rise⁶¹ found sensation seeking to be significantly related to smoking. In a study of 8th- and 11th-grade students, Kopstein and colleagues⁶² found that cigarette smoking prevalence was significantly higher among students with a high rating on sensation seeking, even when controlled for measures of peer and parental influences on smoking.

A study of 1,051 10th graders found that those high in novelty seeking were more likely to smoke cigarettes.⁶³ In a longitudinal study,⁶⁶ 5th grade students who rated high in risk taking were found to be more likely

to be daily smokers by 12th grade. This is noteworthy because of the length of time between the measurement of risk taking and the smoking assessment. Skara and colleagues⁶⁴ found that males in extended high school were more likely to smoke regularly if they were high in sensation seeking and violence. A study of 1,071 high school freshmen found that higher levels of novelty seeking were associated with greater receptivity to tobacco advertising.⁶⁵ Sensation or novelty seekers appeared particularly likely to encounter and like cigarette advertising.

Perry and colleagues¹⁶ found that adolescent smokers were more likely than nonsmokers to say smoking will help them have fun.

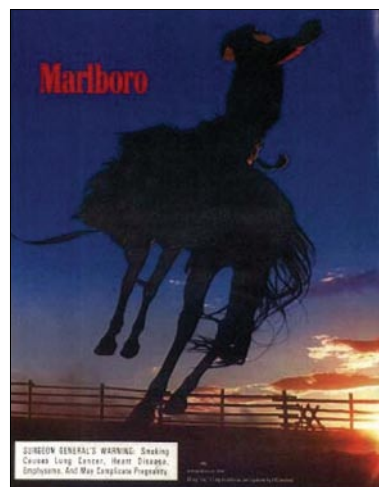
Themes of Risk, Sensation, or Fun in Cigarette Marketing

Tobacco companies conduct extensive research to ensure that their advertisements communicate that smoking cigarettes can provide excitement, fun, and adventure. Public health research finds that adolescents get the message. There is evidence that billboard cigarette advertisements—when they still were permitted—associated smoking with fun or exciting activities, including vacationing, recreation, sports, an active lifestyle, and adventure or risk.⁶⁶ A study of magazine cigarette advertisements in both male- and female-oriented magazines found recreation and adventure to be common themes.⁴⁵

Philip Morris's marketing of Marlboro has long conveyed that the Marlboro smoker leads an exciting and adventurous life. A June 18, 1999, Philip Morris memorandum concerning its direct mail marketing magazine, *Unlimited*, stated, "the magazine has an action/adventure format and tries to represent the core equities of the brand."⁶⁷ A 1998 marketing research study found that 67% of "prime prospects" rated themselves as "exciting,"

implying that themes of excitement would be appealing to them.²⁹ A November 1999 Philip Morris study, *Marlboro Direct Mail Equity Study*, discusses direct mail marketing efforts, including *Unlimited*; young adult smoker (YAS) equity; and YAS promotional, savings/coupons/mainline mailing, and gear.⁶⁸ The report stated that these programs contribute to higher ratings on "active, likes action/excitement, lives life to the fullest."⁶⁸(Bates no. 2073318229)

R.J. Reynolds documents indicate that the company often designed its marketing of the Camel brand to associate the brand with having fun and excitement. In February 1985, R.J. Reynolds conducted focus groups among "Camel younger adult smokers." It learned that, "the executions [of the advertisements] were too 'tame' in that they did not elicit enough excitement or enthusiasm."⁶⁹(Bates no. 504585738/5739) Three years later, in a November 1988 Winston/Camel Pack Action Study, R.J. Reynolds noted, "Younger adults center their lives on having fun in every way possible and at every time possible."⁷⁰(Bates no. 512544536) By 1990, an April review of Camel's performance noted, "the CAMEL 'Smooth Character' campaign seems to deliver that sense of excitement and appeal to its target."⁷¹(Bates no. 507302638)



Marlboro advertisement with the theme of risk taking

Cigarette Marketing Strategy: Going to the Races

Philip Morris assessed respondents' reactions to communication materials related to marketing activities such as advertising at racing events or promotional give-aways of attractive gear. The aim was to determine what each added to the core image of Marlboro. Philip Morris found that, after being exposed to racing marketing communications (mostly auto racing, but horse and human racing as well), respondents rated the following items higher than they had rated the Marlboro core personality: active, adventurous, likes action/excitement, aggressive, a leader, macho, energetic, driven to succeed, masculine, mechanically oriented, upscale, and discriminating/demanding. The report concluded, "Racing is a rich source of excitement, energy and competitive spirit for Marlboro."^a This study shows how Philip Morris expands Marlboro's core image through its racing programs, which allow it to add the dimensions of excitement and adventure to the brand.^a



^aPhilip Morris. Marlboro marketing mix study. Feb 1996. Philip Morris. Bates No. 2062311535/1551. <http://legacy.library.ucsf.edu/tid/nsl27a00>.

Two months later, a Perception Tracking Study targeting 18- to 24-year-old males added, "ads in emphasis markets were successful in getting targets to see Camel as 'for people who lead exciting life styles.'"⁷²(Bates no. 509042491) By November 1990, R.J. Reynolds seemed to have achieved the strategy designed five years earlier. A report, *Summary of Findings on Reactions to Camel Advertising and Pack Exchange Program among Competitive Exchange Initiative Smokers*, indicates that Joe is "constantly on an adventure which contains the element of danger."⁵³(Bates no. 509043739)

Lorillard's marketing of Newport cigarettes also employs themes of fun and excitement. A November 11, 1993, presentation to Lorillard, titled *Newport Promotional Concepts*, outlined a number of advertising and marketing strategies that involved communicating fun and excitement:

- Build excitement around Newport as an integral part of the urban center lifestyle

- Develop exciting innovative program concepts and overlays with involving and dynamic features that pull the consumer to the brand
- Reinforce brand image and equity in the "pleasure" positioning as developed through previous advertising campaigns⁷³(Bates no. 91949808)

A January 1994 Lorillard report addressed the results of eight focus groups with menthol cigarette smokers. It presented a number of findings showing that the *Alive with Pleasure* campaign communicates that Newport smokers have fun:

Black Salem/Kool Smokers relate Newport to fun and excitement.... **Black Newport Smokers** believe that Newport ads send strong, positive messages because they incorporate happiness, togetherness, and people taking part in fun things.... The strength of "Alive with Pleasure [AWP]" is that it depicts settings where fun situations that could include smoking

are presented.... The strength of "Newport Pleasure" is that the theme centers on the benefits [fun] of a specific brand [bracketed "fun" appears in the original].... AWP ... communicates: life, energy, activities, happy times, couples, togetherness, wholesomeness, and fun.... AWP seems to set more of a mood of being upbeat, happy, full of life and energy.³⁸(Bates no. 91950196/0200)

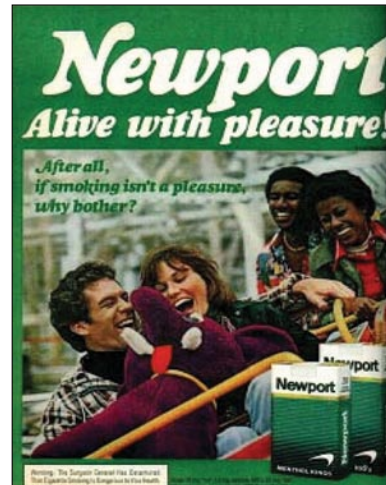
Stress, Anxiety, and Depression

The following considers themes among cigarette advertisements that communicate to adolescents that smoking can help solve some personal and emotional problems by relieving stress and promoting relaxation. In reality, addicted smokers can experience stress, anxiety, irritability, and depression when deprived of nicotine.⁷⁴ Thus, adolescents may observe that smokers in their social environment self-medicate these symptoms by smoking cigarettes. As discussed below, cigarette marketing conveys themes suggesting that smoking has a positive emotional benefit.

Perception That Smoking Reduces Anxiety or Depression

When Evans and colleagues¹³ studied nonsmoking California teenagers, they found that 60% to 73% (depending on age) felt cigarette advertisements communicated that smoking would help them relax. Of the participants, 58% to 67% said these advertisements indicated smoking could help reduce stress. In addition, 45% to 51% said the advertisements communicated that smoking would reduce boredom.

In another study, among those 14 to 22 years old, Romer and Jamieson¹⁴ found that the perception or image of smokers as relaxed rose during adolescence, significantly for those citing exposure to cigarette advertisements. Those with an image of smoking cigarettes as being



Newport "Alive with Pleasure" advertisement associating smoking with fun

relaxing also saw it as less risky and had more favorable feelings toward smoking.

Relationship between Smoking and Distress Reduction

Perry and colleagues¹⁶ found that middle and high school students were more likely to smoke if they thought smoking would alleviate boredom or loneliness or would be of benefit when they had to solve personal problems or needed personal energy.

Several researchers examined the link between high levels of distressing emotions and smoking. Two studies of the same sample (one among 6th graders⁵⁵ and one among 8th graders¹⁷) found that young people under stress were more likely to smoke cigarettes. In a longitudinal study of students in extended high school, Skara and colleagues⁶⁴ found that adolescents facing higher levels of stress were more likely to become regular smokers.

Some studies report that depressed adolescents are more likely to smoke cigarettes. A study in a nationally representative sample of 4,023 12- to 17-year-olds found depressed girls more likely than nondepressed girls to smoke.⁷⁵

Another found a relationship between depression and smoking for boys, but not for girls.^{17,55} A third study found that high school freshmen with depression were more likely to smoke.⁷⁶ This was especially true for those receptive to cigarette advertising. Researchers measured teenagers' receptivity to advertising on the basis of whether they had a favorite advertisement or owned a cigarette promotional item. The study found depressed adolescents to be particularly receptive to cigarette advertising. In contrast, two longitudinal studies failed to establish a link between depression and future smoking;^{77,78} they found instead that adolescent smokers at baseline were more likely to report depression in the future than were nonsmokers.

Cigarette Marketing Conveying Themes of Relaxation or Stress Reduction

In the past, Philip Morris used television advertising to associate Marlboro with relaxation. Some television advertisements for Marlboro featured Julie London singing the *Marlboro Song*. The lyrics included “why don't you settle back and have a full flavored smoke. Settle back with a Marlboro. Make yourself comfortable, whenever you smoke, have a Marlboro cigarette. You get a lot to like with a Marlboro, filter, flavor, pack, or box.”⁷⁹

Philip Morris continues to associate the Marlboro brand image with relaxation through its print advertisements. A December 1999 report assessing Marlboro advertising among young adult male smokers (YAMSs) stated, “Commonly, YAMS are thought to crave excitement and novelty. But, based on their reaction to ‘relaxing’ imagery, they also seem to be looking for escape from daily stress.”⁴⁷(Bates no. 2072468453)

Philip Morris also used advertisements conveying relaxation for its line extension Marlboro Milds. A Philip Morris document that summarizes research on Marlboro Milds stated, “The laid back tone of the advertising

is clearly recognized.”⁸⁰(Bates no. 2073178944)

The study obtained ratings on “relaxed/laid back” and “tranquil.”⁸⁰ A September 15, 1998, internal Philip Morris memorandum titled *Marlboro Milds Research Findings* described research on Marlboro Milds advertising involving six focus groups with African American smokers aged 21 to 29 years old. The memorandum stated that “the ads strongly communicated that Marlboro Milds would leave them with a ‘mellow feeling’ and a sense of ‘relaxation.’”⁸¹(Bates no. 2061701079)

A May 12, 1999, marketing research study for Philip Morris reported that a point-of-sale Marlboro advertisement called *Boots* clearly communicated relaxation and kicking back, while another advertisement called *Windmill* “seemed to convey a strong sense of relaxation.”⁸²(Bates no. 2073373193)

In 1993, Philip Morris promoted Benson & Hedges cigarettes with a slogan—“Take the edge off”—that promised relief from anxiety.⁸³ The slogan appeared on all of the items in a Benson & Hedges clothing line.⁸⁴

R.J. Reynolds's Joe Camel campaign communicated that the Camel smoker was able to relax and handle stressful situations with ease. The focus group research conducted for R.J. Reynolds elicited numerous statements from Camel smokers indicating their perceptions that the Camel smoker was cool and laid back. A focus group member described Joe Camel as follows: “Never gets stressed out ... He can deal with whatever comes his way.... If something doesn't work out ... he just does something else ... goes with the flow.... No big deal to someone real flexible like he is.”³⁷(Bates no. 514340432)

Lorillard also associates relaxation—a theme closely related to the theme of having fun—with Newport cigarettes. Documents indicate that Lorillard marketing effectively associates the Newport brand and Newport smokers with relaxation. For example, the

September 1988 Newport Image Study reported that 48% of respondents said that Newport smokers were relaxed.⁸⁵ A January 1994 Lorillard document reported on the results of eight focus groups with 18- to 29-year-old menthol smokers. It stated, “Black Newport Smokers relate Newport to relaxing situations or ‘chillin’ in pleasant surroundings.”³⁸(Bates no. 91950195)

Role of Image Enhancement from Cigarette Marketing

This section presents empirical evidence regarding the role of adolescents’ self-images and their images of smokers in their motivation to smoke or in actual smoking. Four types of images are relevant: adolescents’ self-image, image of smokers in general, particular brand image, and image of smokers of particular brands. Attributes such as “tough,” “cool,” “masculine,” or “adventurous” could apply to each of these image types. The idea is that when the image of the smoker of a specific brand embodies traits adolescents seek, they will want to smoke that brand. For example, a youth who wants to be manly and rugged and believes Marlboro smokers are rugged will smoke Marlboro cigarettes to be manly. The following section addresses adolescents’ self-image and image of smokers, describes evidence that the tobacco industry is aware of the issue, and presents experimental evidence from nonrandomized and randomized studies that measured the influence of tobacco marketing on images of smokers.

Self-Image and the Image of Smokers

Table 7.1 summarizes information about eight studies that examined the role of self-image and the image of smokers in influencing adolescents to smoke. Barton and colleagues¹⁵ first examined differences

in adolescents’ perceptions of smoking and nonsmoking youth by systematically comparing adolescents’ ratings of pictures of youth that were identical except for the presence of a cigarette. Sixth graders saw the images of youth with cigarettes as tougher, wanting to be with the group, drinking more, more interested in the opposite sex, less obedient, less good, trying to act older, less likely to do well at school, less wise, less desirable as a friend, and less healthy. Tenth graders viewed the images of the presumed youth smokers as more tough, more likely to drink, more likely to act big, liking to be with the group more, older, less good, less healthy, and less wise. The majority of youth at each age saw some of these characteristics—being tough, having an interest in the opposite sex, and being in a group—as desirable.

The study also examined whether adolescents were more likely to state an intent to smoke if they had an ideal self-image that more closely resembled that of a smoker than that of a nonsmoker (on certain attributes). No such relationship existed for 6th grade boys. However, for 6th grade girls, intent to smoke was higher if a girl’s self-image was closer to her image of a smoker on five attributes: wise, relaxed, is good, drinks, and obeys. Among 10th graders, both genders were more likely to intend to smoke if they saw smokers as closer to their ideal as having an interest in the opposite sex.

Chassin and colleagues⁵⁴ conducted a similar study, mentioned briefly in an earlier section, examining high school student ratings of photographs of boys holding chewing tobacco, a pack of cigarettes, or a bag of corn chips. Compared with the boy with corn chips, the boy holding the cigarette seemed more rebellious, brave, rough/rugged, likely to use drugs and alcohol, phony, unhappy, lazy, unhealthy, less good at school, and getting along less well with family. Girls who admired the

Table 7.1 Studies of the Relationships among Self-Image, Smoker Image, and Adolescent Smoking

Study	Setting/ sample size	Measure of advertisement exposure (IV)	Outcome measures (DV)	Findings
Aloise-Young et al. 1996 ⁸⁶	1,222 nonsmokers assessed in grades 5–8 and again in the next academic year	Composite score ratings of self-image and smoker image on three traits: cool, sociable, and smart	Any smoking by follow-up (longitudinal study)	Looking at individual traits, young people whose self-image was consistent with the way they had rated smokers on the traits involving “cool” and “smart” were significantly more likely to initiate smoking.
Amos et al. 1997, ⁸⁷ Amos et al. 1998 ⁸⁸	897 adolescents aged 12–19 years	Pictures of youth from youth and style magazines, altered to create one version in which the person held a cigarette and the other in which the young person did not have a cigarette	Ratings of the pictures on a set of attributes	The presence of a cigarette affected how youth rated the photographs. Smoking images were rated as being more druggy, wild, and depressed. In contrast, nonsmoking images were rated as more healthy, rich, nice, fashionable, slim, and attractive. Smokers and nonsmokers differentially rated themselves in the same way they differentiated between smokers and nonsmokers in the photographs. “It is argued that these magazine images of smoking may be acting to reinforce smoking among young people.” ^{88(p.491)} The authors suggest some adolescents use smoking as a strategy for gaining entry to certain groups, e.g., wild, rebellious, not interested in school, or into taking risks.
Barton et al. 1982 ¹⁵	286 6th graders and 248 10th graders	Rated pictures of adolescents in which the presence of a cigarette was systematically manipulated	Ratings of the pictures on 12 adjective rating scales (e.g., tough/timid)	A majority at each age saw some attributes—being tough, having an interest in the opposite sex, and being in a group—as good things to want. For 6th-grade girls, intentions to smoke were higher if their self-image was closer to the image of a smoker on each of 5 attributes: wise, relaxed, good, drinks, and obeys. Both male and female 10th graders were more likely to intend to smoke if they saw smokers as closer to their ideal than nonsmokers were on being interested in the opposite sex.

Study	Setting/ sample size	Measure of advertisement exposure (IV)	Outcome measures (DV)	Findings
Burton et al. 1989 ³⁹	122 7th graders	Ratings of self-image, ideal self-image, smoker image, and images in cigarette advertisement. Rated on healthy, wise, tough, and interested in the opposite sex	Rated intention to smoke	Intention to smoke was highest for those with the least difference between self-image and image of smokers. Results indicate these youth had less positive self-images and more positive images of smokers than other students did. The authors argue, "...youth with relatively lower self-concepts, who do not perceive themselves as distinctive in terms of being especially healthy, wise, tough, or interested in the opposite sex, may be drawn toward smoking as a way of 'adding something' to their identity." ^(p.661)
Chassin et al. 1981 ⁴⁰	175 9th and 10th graders	Rated attributes of actual self, ideal self, ideal date, smokers, and nonsmokers	Monthly smoking and intentions to smoke	Smokers were more likely than nonsmokers to have a self-concept like that for the image of smoking adolescents (than like that for the image of the nonsmoking adolescent). Nonsmokers whose ideal date was closer to that of the smoker than nonsmoker were more likely to intend to smoke. Those who rated their self-image as closer to the smoking than nonsmoking image in terms of toughness, foolishness, acts big, disobedient, and interested in the opposite sex were significantly more likely to report an intention to smoke.

Note. IV = independent variable; DV = dependent variable.

Table 7.1 Studies of the Relationships among Self-Image, Smoker Image, and Adolescent Smoking (continued)

Study	Setting/ sample size	Measure of advertisement exposure (IV)	Outcome measures (DV)	Findings
Chassin et al. (1988) ⁵⁴	429 high school students	Pictures of a boy holding (1) a can of chew, (2) a pack of cigarettes, or (3) a bag of corn chips	Ratings of the pictured boy on adjective rating scales (e.g., timid/brave; rough, rugged, vs. gentle, delicate); compared monthly smokers to never smokers	The smoker was seen as more rebellious, more brave, more rough/rugged, more likely to use drugs and alcohol, as well as more phony, less good at school, more unhappy, more lazy, more unhealthy, and getting along less well with family. Girls who admired the smoker image most were more likely to smoke, and boys who admired the nonsmoker image most were less likely to smoke compared to never smokers.
Perry et al. 1987 ¹⁶	1,286 7th graders, and 2,587 9th and 10th graders	Ratings of the functional meanings of smoking (e.g., how much you could get over feeling bored or lonely by smoking)	Ever smoked	Participants were more likely to have ever smoked if they felt that smoking made them feel older.
Shadel et al. 2004 ⁹⁰	101 never smokers aged 11–17 years	Rated ads with brand information removed: whether the ad did or did not remind them of themselves	Self-conflict scale score	Younger (aged 11–13 years) but not older (aged 14–17 years) adolescents associated the self-conflict scale with ratings that the ads reminded them of themselves, thus suggesting that they looked to the ad imagery for help in defining themselves

Note. IV = independent variable; DV = dependent variable.

smoker image more than the nonsmoker image were more likely to smoke cigarettes ($p < .001$). Boys who admired the nonsmoker more than the smoker image were less likely to smoke ($p < .05$).

Shadel and colleagues⁸⁶ assessed the level of self-conflict (i.e., conflicts between personality attributes experienced as part of self-concept development) related to the personal relevance of cigarette advertisements among 101 never-smoking volunteers aged 11–17 years. Brand identification was removed from 11 cigarette advertisements, and volunteers were asked if the advertisements did or did not remind them of themselves. The level of self-conflict was significantly related to advertisement relevance for younger (11–13 years) but not older (14–17 years) adolescents. The findings suggested that younger adolescents appeared “more likely to look to the powerful images displayed in cigarette advertising for help”^{86(p.463)} in defining themselves.

Amos and colleagues⁸⁷ compared adolescents' ratings of photographs of youth differing only in whether the young person held a cigarette. Adolescents rated those holding cigarettes as higher on tough/hard, tart/tarty, druggie, wild, and depressed. They rated those without a cigarette higher on healthy, rich, nice, fashionable, slim, and attractive. Smokers and nonsmokers differentially rated themselves in the same way they ranked smokers and nonsmokers. The self-images of adolescent smokers were more like adolescents' images of pictured smokers than like their images of the pictured nonsmokers.

In the 1981 study by Chassin and colleagues,⁴⁰ 9th and 10th graders rated their real and ideal selves, images of smokers and nonsmokers, and an ideal date. Those rating self-images as closer to smoking than nonsmoking images in terms of tough, foolish, acting big, disobedient,

and interested in the opposite sex were significantly more likely to report an intent to smoke. Nonsmokers whose ideal dates more closely resembled smokers than nonsmokers were more likely to intend to smoke. Finally, smokers differed from nonsmokers in having self-images and ideal dates closer to images of smokers than to nonsmokers.

In a longitudinal study, Aloise-Young and colleagues⁸⁷ examined a sample of 1,222 5th through 8th graders who rated themselves and an image of a smoker on the attributes cool, sociable, and smart. Those with a self-image consistent with their image of a smoker on any two of these traits were significantly more likely to start smoking cigarettes in the next school year. For individual traits, when a self-image was in line with the way they rated smokers on cool and smart, adolescents were significantly more likely to initiate smoking.

In another study, Burton and colleagues⁸⁹ examined 7th graders' ratings of self-image, ideal image, smoker image, and smoker image depicted in advertising. Intent to smoke was highest for those with the least disparity between self-image and smoker image. Analyses indicated that these youth had less-positive self-images and more-positive smoker images than did other students. The authors state, “Youth with relatively lower self-concepts, who do not perceive themselves as distinctive in terms of being especially healthy, wise, tough, or interested in the opposite sex, may be drawn toward smoking as a way of ‘adding something’ to their identity.”^{89(p.661)} Perry and colleagues¹⁶ studied how 7th, 9th, and 10th graders felt about smoking. Participants were more likely to smoke if they felt smoking made them feel older.

These studies indicate that many adolescents have certain positive images of smokers (e.g., tough, sociable). They are more apt to start smoking if they see smokers having

traits they desire or that are in line with their self-views. Some traits that smokers are perceived to have would be seen by many people as negative (e.g., druggie, rebellious). However, for a subset of adolescents, these are desirable traits. Thus, adolescents see smokers in terms of traits that some typically consider negative. This finding is consistent with the thesis that adolescents are motivated to smoke, in part, by the images they feel they can achieve or reinforce.

Impact of Marketing on Adolescents' Images of Smokers

Many studies show that adolescents are motivated to smoke cigarettes to achieve the images they have of smokers. Yet, these studies do not demonstrate that cigarette marketing influences adolescents to have these favorable images of smokers. However, a number of nonrandomized and randomized experimental studies in the empirical literature indicate a role for marketing in influencing adolescents' images of smokers. While these experimental

studies can establish such a link in the laboratory, it is possible that in a natural setting, not specifically cued to advertising imagery, subjects might have different perceptions of and reactions to smokers and tobacco advertising and promotions.

Nonrandomized Studies

Aitken and colleagues⁹¹ examined whether 6- to 17-year-olds could identify cigarette brands after viewing advertisements with no brand showing. Across three brands, 38% to 83% of those age 12 and 13 years and 52% to 95% of older teenagers could identify the brands. They matched advertisements to thumbnail sketches of the type of person who smoked a brand. By age 10 years, students could match brands to thumbnail sketches of the brand's smoker at better-than-chance levels, showing that they had formed an image of each brand's smoker.

Arnett and Terhanian⁹² presented advertisements for five brands of cigarettes (Camel, Marlboro, Kool, Benson & Hedges,

Targeting the Young Smoker's Self-Image

Cigarette companies understand the need of adolescents to adopt and enhance their chosen image. In a 1973 document from R.J. Reynolds, executive Claude Teague wrote:

The fragile, developing self-image of the young person needs all the support and enhancement it can get. Smoking may appear to enhance that self-image in a variety of ways. If one values ... an adventurous, sophisticated adult image, smoking may enhance one's self-image.^a

The Philip Morris Marlboro Marketing Mix Study from February 1996 notes that "young adult male Marlboro Red smokers" are the "most image-conscious segment." The study involved 2,203 personal interviews in 40 geographically dispersed markets. The sample consisted of 18- to 34-year-olds who smoked Marlboro Red or Marlboro Lights. Without seeing any marketing materials, participants answered the question, "What comes to mind when you think of Marlboro?" After answering, they reviewed a list of statements people use to describe cigarette brands and were asked to rate how well each statement applied to Marlboro. Finally, participants viewed a list of descriptions of different types of people, and researchers asked them "to rate each item on how well it describes Marlboro, the person." Philip Morris used these data to define the Marlboro core image.^b

^aTeague, C. E. Research planning memorandum on some thoughts about new brands of cigarettes for the youth market. 2 Feb 1973. R.J. Reynolds. Bates No. 502987357/7368. <http://legacy.library.ucsf.edu/tid/act68d00>.

^bPhilip Morris. Marlboro marketing mix study. Feb 1996. Philip Morris. Bates No. 2062311535/1551. <http://legacy.library.ucsf.edu/tid/ns127a00>.

and Lucky Strike) to 534 adolescents in grades 6 through 12 from seven schools in four U.S. states. They obtained ratings for each advertisement of how frequently the adolescents had seen the advertisement, how well they liked it, and the degree to which the advertisement made smoking appealing. These adolescents saw Marlboro and Camel advertisements more frequently than they saw advertisements for other brands. A larger proportion of these students liked these advertisements (44% Marlboro and 64% Camel) more than the other advertisements and found them more appealing than advertisements for other cigarettes. The findings suggest that brands whose advertising is seen more favorably by youth are more popular with youth. However, none of these comparisons included a statistical analysis.

Arnett⁹³ conducted a study indicating that the more youth-popular cigarette brands were perceived more positively by adolescents than was advertising for a brand not popular with youth. He presented two advertisements for each of five youth-popular brands (Marlboro, Newport, Camel, Kool, and Winston) and one for a non-youth-popular brand (Merit) to 400 12- to 17-year-old American adolescents. They rated how much they liked the advertisements and how much they thought the advertisements made smoking appealing. The adolescents liked all but two of the advertisements for the youth-targeting brands significantly more than they liked the Merit advertisements. They rated one Marlboro advertisement, two Camel advertisements, and a Kool advertisement as making smoking significantly more appealing than did the Merit advertisement. They liked the Marlboro advertisements significantly more than they liked advertisements for Newport cigarettes.

Unger and colleagues⁹⁴ assessed brand recognition among 386 8th-grade students for cigarette, alcohol, and other advertisements that had brand information

removed. Students were able to identify the brands for Camel (71.7%), Marlboro (62.5%), and Newport (31.4%) more than for Capri, Kool, Misty, and Virginia Slims. Like the Arnett study cited above, this study suggests that adolescents more readily recognize the advertisements for the cigarette brands that are more popular with youth.

Randomized Experimental Studies

Table 7.2 summarizes information in five studies that experimentally manipulated adolescent exposure to cigarette marketing by randomly assigning adolescents to different study groups. These evaluations of cigarette advertising's impact on adolescents control for other possible influences by randomly assigning adolescents to receive or not receive exposure. This makes it highly likely that adolescents in each condition are equal at the outset. By experimentally manipulating marketing exposure, researchers eliminate the possibility that differences arise from the adolescents' prior experiences. If one group has a more positive attitude or image of smokers, it is due to the exposure (intervention).

Two of the studies evaluated the impact of cigarette advertisements in magazines. Turco⁹⁵ experimentally evaluated the impact of cigarette magazine advertisements on adolescents' attitudes toward smoking. She randomly assigned 178 5th, 7th, and 9th graders to look at a magazine with four cigarette advertisements or at the same magazine without any cigarette advertisements. The students had only five minutes to review the entire magazine, but researchers asked them to look at all advertisements. Adolescents who saw the magazines containing cigarette advertisements rated a woman shown smoking more positively than did adolescents who were not exposed to cigarette advertisements. Adolescents who had ever tried smoking and who saw the magazine containing cigarette

Promotion of Smokeless Tobacco Use

Smokeless tobacco is marketed extensively (chapter 4) and is visible at the point of sale in many stores.^a CDC data for 2005^b indicate that among U.S. adults, 6.0% of men and only 0.4% of women used smokeless products. Among high school students in 2005, 13.5% of boys and 2.2% of girls reported current use, and among middle school students in 2004, 4.0% of boys and 2.0% of girls currently used smokeless products. Use of smokeless products carries significant health risks,^{c,d} and evidence from the national Teenage Attitudes and Practices longitudinal survey suggests that adolescent boys who use smokeless products become cigarette smokers at more than three times the rate compared with nonusers.^e

Smokeless tobacco products have been heavily promoted among professional athletes, especially baseball players, who provide important role models for children and adolescents.^{f,g} Advertising imagery for smokeless products features rugged, good looking, athletic models,^{h,i} which are relevant to adolescent image needs. Some advertisements for these products suggested that they could be used without parental awareness, one indication, among others,^j of specific targeting to youth. Adolescent boys' images of a smokeless tobacco user and self-image were significantly more alike for users than for nonusers.^k One cross-sectional study related receptivity to smokeless tobacco advertising (being able to name a smokeless brand as most advertised) to product use among adolescent boys, adjusting for smokeless tobacco use by family and friends.^l This analysis also found a positive association between participation in athletics and smokeless tobacco use. While the data are limited, there is no reason to believe that the effect of advertising and promotions for smokeless products on product use by adolescents is different than that for cigarettes.

^aDiFranza, J. R., M. Coleman, and D. St Cyr. 1999. A comparison of the advertising and accessibility of cigars, cigarettes, chewing tobacco, and loose tobacco. *Preventive Medicine* 29 (5): 321–26.

^bCenters for Disease Control and Prevention. 2007. Smoking & tobacco use fact sheet: Smokeless tobacco (updated April 2007). http://www.cdc.gov/tobacco/data_statistics/Factsheets/smokeless_tobacco.htm.

^cNational Cancer Institute. 1989. *Smokeless tobacco use in the United States* (Monograph no. 8, NIH publication no. 89-3055). Bethesda, MD: National Cancer Institute.

^dNational Cancer Institute. 1992. *Smokeless tobacco or health: An international perspective* (Smoking and tobacco control monograph no. 2, NIH publication no. 92-3461). Bethesda, MD: National Cancer Institute.

^eTomar, S. L. 2003. Is use of smokeless tobacco a risk factor for cigarette smoking? The U.S. experience. *Nicotine & Tobacco Research* 5 (4): 561–69.

^fBlum, A. 1983. Using athletes to push tobacco to children: Snuff-dippin' cancer-lipped man. *New York State Journal of Medicine* 83: 1365–67.

^gConnolly, G. N., C. T. Orleans, and A. Blum. 1992. Snuffing tobacco out of sport. *American Journal of Public Health* 82 (3): 351–53.

^hChassin, L., C. C. Presson, S. J. Sherman, and S. Margolis. 1988. The social image of smokeless tobacco use in three different types of teenagers. *Addictive Behaviors* 13 (1): 107–12.

ⁱErnster, V. L. 1989. Advertising and promotion of smokeless tobacco products. In *Smokeless tobacco use in the United States* (Monograph no. 8, NIH publication no. 89-3055), 87–94. Bethesda, MD: National Cancer Institute.

^jU.S. Department of Health and Human Services. 1992. *Spit tobacco and youth* (OEI publication no. OEI 06-92-0050). Washington, DC: U.S. Department of Health and Human Services, Office of Inspector General.

^kChassin, L., C. Presson, S. J. Sherman, L. McLaughlin, and D. Gioia. 1985. Psychosocial correlates of adolescent smokeless tobacco use. *Addictive Behaviors* 10 (4): 431–35.

^lChoi, W. S., A. J. Farkas, B. Rosbrook, J. P. Elder, and J. P. Pierce. 1995. Does advertising promote smokeless tobacco use among adolescent boys? Evidence from California. *Tobacco Control* 4 Suppl. 1: S57–S63.

Table 7.2 Studies Involving Randomized Experimental Manipulation of Exposure to Cigarette Marketing

Study	Setting/ sample size	Experimental design	Findings
Donovan et al. 2002 ³⁷	100 10- through 12-year-olds	Subjects were randomly assigned to either (1) exposure to a photograph of a pack of Benson & Hedges and a point-of-sale advertisement for Marlboro or (2) exposure to a photograph of a pack of Marlboro and a point-of-sale advertisement for Benson & Hedges.	Compared with seeing the pack, looking at the poster increased positive perceptions of the brand user. In the case of Benson & Hedges, the students who saw the advertisement rather than just the pack were more likely to describe the users as relaxed, interesting, cool, rich, adventurous, and classy. Those who saw the Marlboro point-of-sale advertisement rated Marlboro smokers as more adventurous than did students who saw only the picture of the pack.
Henriksen et al. 2002 ³⁸	385 8th and 9th graders from 5 ethnically diverse schools	Classrooms assigned to 1 of 4 cells of a 2 × 2 design. The first 2-level factor was (1) exposure to photographs of a convenience store containing tobacco advertisements and displays or (2) exposure to pictures of a convenience store without tobacco advertising. The second 2-level factor was (1) newspaper clipping about a tobacco policy issue, or (2) newspaper clipping about youth food purchases.	Those exposed to cigarette advertising: (1) perceived that it would be easier to purchase cigarettes in the pictured stores, (2) perceived that it would be easier to purchase cigarettes in other stores, (3) perceived a higher prevalence of adolescent smoking, and (4) expressed less support for policies to control tobacco use. The type of story students read had no effect on these variables.
Pechmann and Knight 2002 ³⁹	718 9th graders from 4 ethnically diverse California high schools	Students were individually assigned at random to 1 of 8 12-minute videotapes about teenagers, using a 4 × 2 design. The tapes differed in advertisements they contained. There were four levels of the advertisement condition: (1) 4 cigarette advertisements, (2) 4 antismoking advertisements, (3) 4 cigarette advertisements and 1 antismoking advertisement, and (4) 4 control advertisements not involving smoking. The tapes also varied in that they either (1) showed a smoking teenager or (2) showed a nonsmoking teenager. According to the authors, the videotapes did not make the advertisements conspicuous.	Students exposed to cigarette advertisements had significantly more positive beliefs about smokers. Those who saw both cigarette advertisements and adolescents smoking had significantly more positive beliefs about smokers and more positive intentions to smoke in the future. The impact of exposure to cigarette advertisements and to smoking adolescents on intentions to smoke was mediated by its effect on their beliefs about smokers. Those who saw the advertisements with the teenage smokers remembered the advertisements significantly more than those who did not see the smokers. The impact of exposure to advertisements and to smoking adolescents on beliefs and intentions was significant even when students did not recall seeing advertisements. There were no differences found depending on whether or not the student was susceptible to smoking.

Table 7.2 Studies Involving Randomized Experimental Manipulation of Exposure to Cigarette Marketing (continued)

Study	Setting/ sample size	Experimental design	Findings
Pechmann and Ratneshwar 1994 ⁹⁶	304 7th graders	Students were assigned at random to 1 of 6 cells of a 3 × 2 design. Three levels of advertisement type (cigarette, antismoking, or unrelated to smoking) were used. Students were asked to rate a pictured student who was described as either a smoker or nonsmoker. Students were exposed to (1) magazine advertisements for Newport, Virginia Slims, and Camel or (2) three advertisements unrelated to smoking.	Students who saw cigarettes advertisements had a greater proportion of positive thoughts about smokers (e.g., “has lots of friends,” “likes to do exciting things”) than did students who saw the unrelated advertisements.
Turco 1997 ⁹⁵	178 5th, 7th, and 9th graders	Participants were randomly assigned to review for 5 minutes either (1) a magazine with 4 cigarette advertisements or (2) a magazine without 4 cigarette advertisements.	Adolescents who had ever tried smoking and were exposed to cigarette advertisements expressed more positive attitudes toward smoking than those not exposed to advertisements. Adolescents exposed to advertisements also rated a woman shown smoking more positively than did adolescents not exposed to advertisements.

advertisements expressed more positive attitudes toward smoking than did such adolescents who were not exposed to the advertisements. Pechmann and Ratneshwar⁹⁶ compared the impact of magazine advertisements for Newport, Virginia Slims, and Camel cigarettes with the effect of three advertisements unrelated to smoking in randomized groups of 304 7th-grade students. The authors prepared a magazine especially for the study by inserting advertisements into the magazine. Exposure to the cigarette advertisements influenced participants to have more positive thoughts about smokers (e.g., “has lots of friends,” “likes to do exciting things”) than was true for students who saw the unrelated advertisements.

Point-of-sale advertisements also have been studied. Donovan and colleagues⁹⁷ randomly assigned 100 10- to 12-year-olds to see either a photograph of a Benson & Hedges cigarette pack and point-of-sale advertisements for Marlboro or a photograph of a Marlboro pack and Benson & Hedges point-of-sale advertisement. Seeing a point-of-sale advertisement instead of just a picture of a cigarette pack led to more positive descriptions of the brand user. With Benson & Hedges, 10- to 12-year-olds seeing the advertisement rather than just the photograph of the pack were more likely to describe users as relaxed, interesting, rich, and adventurous. Ten- to 12-year-olds who saw the Marlboro point-of-sale advertisement rated Marlboro smokers as more adventurous than students who saw only the pack picture. Thus, in both cases, compared with seeing a pack, looking at a single point-of-sale advertisement increased positive perceptions of a cigarette brand’s user. This provides evidence that cigarette advertising influences adolescents to view smokers more positively and fosters peer acceptance for those influenced to smoke.

Whether adolescents misattribute the influence of advertisements as an influence

of smokers in the social environment also has been studied.⁹⁹

A positive smoker stereotype that is activated by cigarette ads may cause youth inadvertently to seek out favorable evidence about smokers. Seemingly due to this favorable evidence, but in actuality because the cigarette ads drove perceptions to be favorable, youth may gradually come to believe that smokers have desirable traits.... Accordingly, they may become interested in smoking themselves.... Since this process is nonconscious, youngsters may be unable to protect themselves.^{99(p.6)}

These researchers randomly assigned 718 9th-grade students from four ethnically diverse California schools to view one of eight videotapes depicting a “slice of life” of people their age. Each videotape described students studying advertising and with assignments to videotape advertisements. Videotapes varied in terms of advertisements shown, with four possibilities: (1) four cigarette advertisements, (2) four antismoking advertisements, (3) four cigarette advertisements and one antismoking advertisement, and (4) four control advertisements not involving smoking. The videotapes varied in terms of whether they showed teenagers as smokers or nonsmokers. In a 4 × 2 design, one-half in each condition saw teenagers depicted as smokers and the other one-half as nonsmokers. These researchers created a scale of stereotypical beliefs about adolescent smokers. The scale included 12 items to consider: fun/boring, well-liked/disliked, sexy/not sexy, desirable/undesirable to date, successful/unsuccessful, smart/dumb, intelligent/stupid, healthy/unhealthy, well/sickly, natural smelling/stinky, cool/uncool, and winner/loser. Those exposed to cigarette advertisements and nonsmoking teenagers in the videotapes rated adolescent smokers significantly more positively on this scale of beliefs. This finding shows that advertisements alone can influence

a favorable view of smokers. As predicted, those who saw both cigarette advertisements and adolescents smoking had significantly more positive beliefs about smokers and had a more likely intent to smoke. These findings indicate that, in addition to its direct impact on adolescents’ views of smokers, cigarette advertising primes adolescents’ reactions to smokers in ways that improve their attitudes toward smokers and increase their own intent to smoke. This is consistent with the Romer and Jamieson¹⁴ study of cigarette advertising influencing adolescents to view smoking more favorably, making it more likely peers will accept them if they smoke cigarettes.

Pechmann and Knight⁹⁹ also found that students’ beliefs about smokers and intentions about smoking changed. They found a significant effect of exposure to advertisements and to smokers on beliefs and intentions, even when a student did not recall seeing the advertisements. They write

Cigarette advertising can augment the impact of peer smokers by enhancing perceptions of individuals. Youth may mistakenly assume that they have been swayed by smokers, not by ads, because smokers are the more obvious influence agent. Hence, self-reported reasons for smoking may be misleading.^{99(pp.14–15)}

Another experimental study shows that marketing affects adolescents’ perceptions of the availability of cigarettes and the prevalence of adolescent smoking. Henriksen and colleagues⁹⁸ showed a random one-half sample of 9th graders photographs of a convenience store with no cigarette advertisements and the other one-half a store with several cigarette advertisements. Those who saw the store with advertisements perceived that they could more easily buy cigarettes there, thought they could more easily purchase cigarettes in general, perceived a higher prevalence of adolescent

smoking, and expressed less support for policies to control tobacco use.

Together, these experimental studies provide strong support for the inference that cigarette marketing influences adolescents to have images of smoking and smokers that are more positive, and affects adolescents' perceptions of how many of their peers smoke—factors shown to predict smoking initiation.¹⁰⁰ Under these experimental conditions, just one exposure to cigarette advertising influences the images adolescents have of smokers. Typically, adolescents are exposed to a multitude of cigarette advertisements. Key motivating images adolescents have of smokers are exactly the ones conveyed in advertisements for youth-popular brands. Thus, to the extent that tobacco companies shape adolescents' images of smokers through advertising, they influence adolescents to smoke.

Evidence of Effects of Exposure to Cigarette Marketing on Adolescent Smoking

This section reviews the considerable body of empirical evidence accumulated over the past 30 years about the influence of exposure to cigarette marketing on adolescent smoking behavior. The first section addresses methodological issues including study design and the measurement of both smoking behavior and exposure to advertising. Subsequent sections describe the findings from cross-sectional and longitudinal study designs.

Methodological Issues

Study Design

From a methodological perspective, three types of studies may be applied to

examine the relationship between cigarette advertising and smoking behavior:

(1) cross-sectional, (2) longitudinal, and (3) experimental (discussed earlier in “Randomized Experimental Studies”). In contrast to experimental studies, surveys capture information about exposure to tobacco advertising and promotions in a more natural setting. Also, if conducted on a population sample and appropriately weighted, survey findings can be generalized to the population. Cross-sectional studies examine the relationship between one or more measures of exposure to cigarette marketing and a measure of smoking behavior obtained at the same time. These studies provide relatively weak support for a causal inference. This is because the observed relationship can be due to the fact that those who smoke or have a greater inclination to smoke pay more attention to cigarette marketing after the development of their interest in smoking. Longitudinal studies provide stronger evidence regarding the influence of cigarette marketing on adolescent smoking. They can demonstrate that exposure occurred before the changes in smoking behavior. The main limitation in longitudinal studies is that typically not all people in the original sample are successfully followed, and generally, those most likely to smoke are lost from the sample. Although appropriate sample weighting can ameliorate this bias, the statistical power to identify an association is reduced. Also, a longitudinal relationship could be due to some other variable that influenced both exposure at the first assessment and later smoking behavior.

A number of the cross-sectional and longitudinal studies that examined an association between cigarette advertising and smoking behavior included other variables suggested by existing theory or evidence to influence smoking. For example, social influences such as family or peer smokers may both model smoking behavior and lead adolescents to encounter cigarette marketing. An older sibling may give an

adolescent a cigarette promotional item that influences the teenager to experiment with smoking. This would not necessarily mean that marketing had no influence, since without exposures to marketing, social influences could be less effective. Controlling statistically for social influences and finding that tobacco marketing exposure is related to or predicts future smoking provide greater confidence that the social influences do not account entirely for the exposure-smoking relationship.

The most definitive evidence of the influence of cigarette marketing on youth smoking would involve experimental manipulation of adolescents' long-term exposure to cigarette marketing and assessment of its impact on adolescents' initiation of smoking. With appropriate randomization, such a study would control for preexisting differences among adolescents in prior exposure to marketing as well as social influences to smoke. In that way, one could be confident that the exposure led to the smoking. However, such a study would be unethical or infeasible. One way to conduct this type of experiment would be to randomly assign a group of young people to receive high levels of cigarette marketing while others would experience the environment as it normally exists. Given existing evidence of the impact of cigarette marketing on adolescents, a study of this nature would risk addicting adolescents to cigarettes and would thus be unethical. Alternatively, one group could be assigned to experience the prevailing advertising environment, and the other could receive no advertising at all. However, attaining a control group with no exposure to cigarette marketing would not be feasible, since it would require the cooperation of tobacco companies.

Measures of Smoking Behavior

The smoking initiation process consists of a continuum of stages or phases.^{1,101-103} Many young children unexposed to smoking in

their immediate social environment are not even aware of it. As they become older, inevitably it will enter their consciousness, and they may or may not be curious about it. Because of education about the dangers or social undesirability of smoking, some will adamantly deny that they would ever try a cigarette. However, their curiosity may lead them to pay attention to tobacco advertising and promotions, and both factors may play a role in their developing a susceptibility to smoking and/or experimenting in the future. For some, a few puffs or a single cigarette may be the extent of their smoking experience because their curiosity is satisfied. However, for others, experimentation will continue, perhaps intermittently, for months or even years. Eventually many of these experimenters develop a regular or established pattern of smoking. Regular smokers can smoke daily or occasionally.

Some researchers examine forward movement along this continuum as an outcome. When adolescents no longer adamantly deny that they would try a cigarette (even if offered by a friend), researchers consider them susceptible to smoking.¹⁰⁴ Other studies reviewed below have further validated the susceptibility measure as highly predictive of future smoking.^{103,105} Some researchers consider ever smoking (even a few puffs) as smoking initiation. Others focus on current smoking, usually defined as smoking on any day in the past month.¹ A common measure of established smoking is a report of having smoked at least 100 cigarettes in one's lifetime.¹⁰⁶

Measures of Exposure to Marketing

As background, this section describes various constructs used to measure different facets of exposure to tobacco marketing. It gives the conceptual name to each one as typically applied by investigators. Different researchers sometimes use the same

constructs but different terms to designate them. Many studies use more than one of these measures.

- **External estimates of exposure.** Exposure to marketing stimuli is estimated on the basis of external (to the adolescent) measures of potential adolescent exposure to a source of advertising, such as what magazines they read or what types of advertising appear in stores they are likely to frequent.¹⁰⁷ Knowing the level of advertising in these external sources allows an indirect and external measure of likely adolescent exposure to tobacco advertising.
- **Self-reported exposure to marketing.** These are adolescent reports of exposure to various types of marketing (e.g., billboards, point-of-sale advertisements). Respondents do not indicate if they recall specific advertisements or brand advertising.¹⁰⁸ The frequency of such exposure may or may not be assessed. This category includes measures of awareness of advertising (e.g., can you name a cigarette brand).¹⁰⁹
- **Self-reported recall.** Reports of advertisements or other marketing stimuli that respondents specifically recall seeing.¹¹⁰
- **Brand recognition.** The ability to name a brand when such information is missing or deleted from sample advertisements.⁹⁴
- **Attitudes toward, liking for, or opinions or beliefs about advertising.** Respondents rate their favorability or unfavorability toward tobacco advertising in general.¹¹¹
- **Beliefs about the impact of cigarette advertising.** Respondents rate how much they believe that cigarette advertisements affect them or others.¹¹²
- **Receptivity to tobacco marketing.** This is a multicomponent index of adolescents' disposition toward tobacco marketing. Evans and colleagues¹³

included five components in their index of receptivity: (1) the number of positive messages that they indicated advertising conveyed, (2) naming a brand of a favorite advertisement, (3) naming a brand they would buy if they bought cigarettes, (4) ownership of a cigarette promotional item, and (5) willingness to use a cigarette promotional item. Levels beyond the first are more than just exposure; they reflect a positive attitude toward cigarette marketing. Feighery and colleagues¹¹³ defined receptivity in terms of “see” (recall of reported exposure to magazines, billboards, or convenience stores), “want” (desire for promotional items or saved coupons), and “own” (ownership of a promotional item).

On the basis of the theoretical concepts regarding media effects presented in chapter 2 of this monograph, measures that capture attitudes, liking, beliefs, or receptivity are more likely to be related to present or future smoking behavior than are measures of external exposure, self-reported exposure, or recall or brand recognition.

One study explored the relationships among some of these various measures. Unger and colleagues¹¹⁴ factor analyzed relationships among various measures of protobacco and antitobacco advertising. They identified four factors: (1) perceived pervasiveness of protobacco advertising, (2) perceived pervasiveness of antitobacco marketing, (3) recognition of specific antitobacco marketing, and (4) receptivity to protobacco marketing.

The variety of measures of exposure is not necessarily a weakness in this body of research. To the extent that diverse measures of exposure have a relationship with diverse measures of smoking behavior or susceptibility to smoking, there is greater confidence that the findings are not simply due to artifacts of a particular method of measurement.

Cross-Sectional Studies

Table 7.3 presents summary information about cross-sectional studies of the relationship between various measures of exposure to cigarette marketing and adolescent smoking behavior measures. Altogether, 52 such studies were located using the search procedures described earlier. The summary of the findings of these studies is organized according to the measures of exposure the investigators used. Some studies are mentioned more than once, because they analyzed multiple exposure measures in different categories.

External Estimates of Exposure

Four studies estimated adolescents' exposure to cigarette marketing on the basis of exposure to settings known to contain marketing stimuli. Wakefield and colleagues¹⁰⁷ derived estimates of adolescents' exposure to marketing of Marlboro and Camel cigarettes from direct observation measures of the amount of advertising and promotions these brands had in a population-based sample of convenience stores. They then related the share of voice for these brands (share of total cigarette advertising) in the convenience stores with the brand choice of high school students attending schools near each convenience store. Adolescents were more likely to smoke Marlboro cigarettes when their schools were near convenience stores with a greater share of the interior and exterior cigarette advertising for that brand and when the stores had more Marlboro advertising for a "gift with purchase." Adolescents were more likely to be Camel cigarette smokers if the stores near their schools had a greater share of interior advertising devoted to Camel. However, share of exterior advertising for Camel had a negative relationship to smoking Camel cigarettes.

Henriksen and colleagues¹³⁴ estimated adolescents' exposure to marketing

stimuli in convenience stores by obtaining student reports of the frequency of their visits to these stores. They found that weekly exposure to convenience stores was associated with a 50% increase in the odds of ever smoking. The study controlled for social influences on smoking. Ledwith¹³⁷ reported that adolescents' exposure to televised snooker (a game similar to pool) competitions sponsored by cigarette brands was associated with greater knowledge of cigarette brands. However, Sin¹⁴⁷ found that adolescent-reported exposure to print media that contained cigarette advertising was not associated with smoking status. Smokers and nonsmokers reported similar levels of exposure.

Finally, Carson and colleagues¹²³ asked 967 12th graders how many hours per week they read magazines and watched television or videotapes. Four types of magazines were queried: fashion, entertainment/gossip, health/fitness, and sports/activities. In a path analysis, exposure to fashion and entertainment/gossip magazines had an indirect effect on smoking behavior through a drive for thinness and tobacco advertisement receptivity.

Self-Reported Exposure, Awareness, or Recall of Specific Advertising

Of 23 studies that measured adolescents' self-reported exposure to advertising, awareness of cigarette advertising, or recall of advertisements,^{46,91,93,108,114,116–119,121,122,124,130,132,134,136,138–140,147–150} 8 studies reported on nine samples in which there was a significant positive relationship between exposure, awareness, or recall and susceptibility to smoking or positive intention to smoke.^{114,117,119,121,122,130,132,150} Further, these 23 articles reported 17 significant positive relationships between measures of exposure, recall, or awareness and smoking status. One replicated the relationship between exposure and smoking status at two different times.¹²² As an example of a

Table 7.3 Cross-Sectional Studies of the Association of Tobacco Marketing with Adolescent Smoking

Study	Setting/sample size	Measure of advertisement exposure (IV)	Outcome measures (DV)	Findings
Ahsan et al. 1998 ¹⁵	667 males (555 in 2 metropolitan high schools and 112 from urban slums) in Dhaka, Bangladesh	Recognition of brand for cigarette advertisements that lacked brand information	Current smoker: smoked at least 1 cigarette or bidi per week	Middle-class student smokers could better recognize tobacco advertisements than could nonsmokers (by the authors' definition of smoker, this would include experimenters or occasional users). Among slum youth, a higher proportion of nonsmokers than smokers recognized all three advertisements. Half of students said cigarette advertisements influence young people to start smoking.
Aitken and Eadie 1990 ¹⁶	848 11- to 14-year-olds in Glasgow, Scotland	Recall (number of brands seen advertised) and attitudes toward, recognition of cigarette advertising	3 levels of smoking experience: (1) nonsmokers—never tried; (2) triers—at least 1 cigarette, but do not smoke now; and (3) smokers—smoke now	Smokers were better at recalling and recognizing cigarette advertisements than were nonsmokers. A discriminant analysis showed that smokers differed significantly from nonsmokers on ability to recognize cigarette advertisements and in attitudes toward advertisements. Triers were intermediate, between smokers and nonsmokers. The analysis also included social influences on smoking.
Aitken et al. 1987 ⁹¹	726 6- to 17-year-olds in Glasgow, Scotland	Recall (whether they had seen an advertisement before—labeled recognition in this study) and recognition of cigarette brand (labeled identification in this study)	3 levels of smoking experience: (1) nonsmokers—never tried; (2) triers—at least 1 cigarette, but do not smoke now; and (3) smokers—smoke now	Proportionally more smokers or triers than nonsmokers said they had seen the cigarette advertisements. Proportionally more smokers or triers than nonsmokers could name the brand for advertisements without brand information. At age 10 years, children could match a smoker image description to brands at greater-than-chance levels. This ability was not related to smoking status.
Altman et al. 1996 ¹⁷	1,047 12- to 17-year-olds contacted via random-digit dialing in CA	Awareness of tobacco promotions, knowledge of friend owning promotional item or taking part in a promotion, and receipt of free samples or direct mail from tobacco companies	3-level smoking status: (1) never smoker, not susceptible; (2) noncurrent smoker, susceptible; and (3) current user, also considered susceptible	A strong association was found between awareness of and involvement with tobacco promotions and being susceptible to tobacco use or already using tobacco products. Evidence was found of a dose-response relationship between susceptibility index and subsequent tobacco use.

Study	Setting/sample size	Measure of advertisement exposure (IV)	Outcome measures (DV)	Findings
Aloise-Young et al. 2006 ¹¹⁸	242 middle and high school students surveyed in health class in one school district in CO	Index of exposure to magazines containing (and extent of) tobacco advertising; self-report of level of attention paid to the tobacco advertising; recognition of advertisements with brand information removed	Multi-level composite measure of smoking status, frequency, and consumption level	Attention to advertising and advertisement recognition was significantly related to smoking after adjusting for passive peer pressure index. Magazine advertising exposure index was significantly related to smoking index only among 7th graders. Significant interaction exists between exposure and passive peer pressure and smoking as well as a similar significant interaction for attention paid and for advertisement recognition and passive peer pressure.
Arnett 2001 ⁹³	400 12- to 17-year-olds (100 smokers; 300 nonsmokers) surveyed in shopping malls in AZ and WA (200 in each state)	Awareness of and response to advertisements for several youth and 1 adult brands of cigarettes. Questions included how often seen (recall), how much liked; and does it make smoking appealing.	Any smoking in the last 30 days	All adolescents were more likely to like and find the youth brands (but not the adult brand) appealing. Smokers (in past 30 days) were more likely to like, and find the advertisements for most of the youth brands more appealing, than were the other adolescents.
Arnett and Terhanian 1998 ⁹²	534 11- to 18-year-olds in a convenience sample of 7 schools in 4 states: NY, PA, OH, and TX	Print advertisements for 5 brands shown; ratings of how often seen (recall), liking, whether it made smoking appealing, and whether it made them want to smoke	Ever smoking	Ever smokers reported seeing Marlboro cigarette advertisements more than nonsmokers. Smokers liked advertisements for all 5 brands significantly more than did nonsmokers. Smokers rated Marlboro and Camel advertisements more appealing than did nonsmokers. Smokers rated all brands higher than did nonsmokers on making them want to smoke.
Audrain-McGovern et al. 2003 ⁹⁵	1,071 high school freshmen from 5 public high schools in northern VA	Receptivity to tobacco advertising and marketing	Ever smoking and novelty-seeking personality	Having ever smoked was positively associated with receptivity to tobacco advertising as was a novelty-seeking personality. The study controlled for social influences.

Note. IV = independent variable; DV = dependent variable.

Table 7.3 Cross-Sectional Studies of the Association of Tobacco Marketing with Adolescent Smoking (continued)

Study	Setting/sample size	Measure of advertisement exposure (IV)	Outcome measures (DV)	Findings
Borzekowski et al. 1999 ¹¹⁹	571 7th graders from 5 middle schools in San Jose, CA	Self-reported exposure to prosmoking messages, including family, friends, acquaintances, and strangers who seem to condone smoking, and media messages (e.g., billboards, magazines, in stores, promotional materials)	4 categories of smoking susceptibility, based on both smoking experience and intent—"lack of firm resolve not to smoke in the future": (1) no smoking experience, no intent; (2) experience, but no intent; (3) experience and intent; and (4) current smokers; also perceived influence of advertising	Those with high exposure to cigarette marketing had higher ratings of perceived influence of advertising. Exposure to cigarette marketing was associated with smoking susceptibility (according to the four categories as shown), even when controlling for social influences to smoke.
Botvin et al. 1991 ¹²⁰	375 students (146 7th graders, 121 8th graders, and 108 9th graders) from 2 junior high schools in a suburban NY community	Recognition of brands for advertisements that had the brand information removed	3-level status: (1) nonsmokers—never and not in past 12 months; (2) experimenters—1 or 2 cigarettes in past year or a few times per month; and (3) smokers—a few times each week to >1 pack/day	Adolescents with higher advertisement recognition were more likely to be smokers.
Botvin et al. 1993 ¹²¹	602 adolescents (28% in 7th grade; 72% in 8th grade; 48% male; 82% white) in middle-class, suburban schools	Self-reported exposure to cigarette advertising	7-level scale of smoking experience, from never to current smoking and amount of current smoking. Also, intent to smoke in next 2 years	Exposure to cigarette advertisements was associated with current level of smoking experience and intentions to smoke, even when controlling for friends smoking.
Braverman and Aaro 2004 ¹²²	Two samples of Norwegian youth aged 13–15 years. In 1990, $n = 4,282$; in 1995, $n = 4,065$	Self-reported exposure to any advertisements for tobacco products	Current smoking status (daily, occasionally, and never) and expectation that would smoke at age 20 years (definitely yes, probably yes, probably no, and definitely no)	In both samples, smokers (both daily and occasional) and those who expected to smoke were significantly more likely to report exposure to tobacco advertising, even when exposure to social influences was controlled.

Study	Setting/sample size	Measure of advertisement exposure (IV)	Outcome measures (DV)	Findings
Carson et al. 2005 ²³	967 12th graders in 5 northern VA public high schools	Hours/week reading various types of magazines, receptivity to tobacco advertising and promotions, and drive for thinness	5-level scale of smoking experience: (0) never, (1) puffer, (2) whole cigarette, (3) current but <100 cigarettes in lifetime, and (4) current established, ≥100 cigarettes in lifetime	A path analysis showed that fashion/entertainment magazines had an indirect affect on smoking level through tobacco receptivity and drive for thinness, with a dose-response relationship through this link, while controlling for social influences to smoke.
Chang 2005 ²⁴	1,490 Taiwanese high school students	Attention paid to cigarette advertising in magazines and at point of sale, and attitudes toward cigarette advertising	Smoking in the past 30 days	Both attention paid and attitudes toward cigarette advertising were significantly related to smoking. A "hedonistic" factor derived from a factor analysis of values-based questionnaire items was positively associated with both smoking status and the advertising variables.
Chapman and Fitzgerald 1982 ²⁵	1,195 7th and 8th graders in Sydney, Australia	Recognition of tobacco brands and slogans through use of blinded advertisements	Smoking: any smoking in the past 4 weeks	In every case but one, nearly twice the proportion of smokers than nonsmokers could correctly recognize tobacco advertisements and slogans.
Chen et al. 2002 ²⁶	20,332 randomly sampled 12- to 17-year-old boys and girls in CA	Receptivity to protobacco media (having favorite brand advertisements, having ever received a promotional item, willingness to use a promotional item, and having formed a preference to buy particular cigarette brand)	Smoking: any smoking in past 30 days	A consistent dose-response relationship was found between receptivity to protobacco media and 30-day cigarette smoking, even when controlling for social influences to smoke. Having a cigarette brand preference also was associated with smoking.
Diaz et al. 1998 ²⁷	1,003 Spanish schoolchildren (aged 11–13 years)	Were asked: "Do you believe that it is [all right] that there is tobacco advertising?"	Smoking status: never, experimenter, regular (weekly or daily)	A significant association was found between affirmative response to questions about advertisements and ever smoking (experimenters and regular smokers) and regular smoking. However, in a multivariate logistic regression adjusting for other attitudes and beliefs about smoking as well as smokers in the social environment, opinions about tobacco advertising were not related to smoking.

Note. IV = independent variable; DV = dependent variable.

Table 7.3 Cross-Sectional Studies of the Association of Tobacco Marketing with Adolescent Smoking (continued)

Study	Setting/sample size	Measure of advertisement exposure (IV)	Outcome measures (DV)	Findings
Emri et al. 1998 ¹²⁶	1,093 children aged 7–13 years, from grades 2–5 in Ankara, Turkey	Recognition—matched logos and brand names to product type	Ever smoking	Camel logo and Samsun (Turkish cigarette) and Marlboro brand names were most highly recognized of all products tested. Rates of recognition for cigarette brands were not related to ever smoking.
Evans et al. 1995 ¹³	3,536 adolescent never smokers contacted via random-digit dialing in the California Tobacco Survey	Receptivity to tobacco advertising and exposure to smokers	Susceptibility to smoking: never smokers who do not rule out trying a cigarette or taking one from a friend, if offered	Receptivity to tobacco advertising and exposure to smokers were independently associated with susceptibility to smoking among never smokers, but the relationship appeared stronger for receptivity to advertising.
Feighery et al. 1998 ¹¹³	571 7th graders from 25 randomly selected classrooms in 5 middle schools in San Jose, CA	Receptivity to tobacco marketing strategies	3-level status: (1) never smoker resolved not to smoke; (2) has smoked, but resolved not to smoke again; and (3) has smoked but no clear resolve not to smoke again/susceptible	Receptivity to tobacco marketing materials was found to be strongly associated with susceptibility, even when controlling for social influences.
Gilpin et al. 1997 ⁷²⁹	5,531 youth (aged 12–17 years) surveyed in 1993; 1,735 youth (aged 12–17 years) and 4,170 adults surveyed in 1994	Possession of and willingness to use cigarette promotional items	Current smokers (in past 30 days) vs. nonsmokers. Never smokers not susceptible vs. susceptible to smoking (does not rule out trying a cigarette soon, in the next year, or accepting one if offered by best friend)	Among adolescents, current smokers were significantly more likely than nonsmokers to report possession of cigarette promotional items. Among adolescent nonsmokers, having cigarette promotional items appeared to be associated with smoking susceptibility. Thirty percent of susceptible adolescent never smokers were prepared to use a cigarette promotional item. Overall, a strong relationship was found between smoking status and willingness to use a promotional item.

Study	Setting/sample size	Measure of advertisement exposure (IV)	Outcome measures (DV)	Findings
Goldberg 2003 ³⁰	Over 1,700 14- to 17-year-old Hong Kong students	Recall of cigarette advertising, brands, promotional products, and American movies	3-level smoking behavior: (1) never smokers' smoking intentions in next year (definitely not, probably not, probably yes, or definitely yes); (2) exploratory puffing; and (3) current smoking (in last 7 days)	All levels of smoking behavior (including intention) were significantly higher for those who recalled cigarette advertising.
Goldstein et al. 1987 ³¹	306 students in 9th through 12th grades in the United States	Cigarette advertising recognition of missing brands and missing slogans	4-level status: (1) nonsmoker—never experimented or tried; (2) experimenter—tried but smokes less than 1 cigarette/week; (3) light smoker—1 cigarette to 1 pack/week; and (4) regular smoker—1 pack or more/week	A positive relationship was found between smoking level and cigarette advertising recognition.
Gunther et al. 2006 ³²	818 6th graders in 2 WI middle schools	Scale combining perception of peer exposure and tobacco attention to protobacco and antitobacco advertising in the past 30 days	4-level status: (1) nonsusceptible never smoker; (2) susceptible never smoker; (3) experimenter; and (4) established smoker	Path analysis indicated that both protobacco and antitobacco media may have a significant indirect effect on adolescent smoking through their effects on peer norms. Peer norms and other social influences were included in the model. The positive effect for protobacco advertising was greater than the negative effect for antitobacco advertising.

Note. IV = independent variable; DV = dependent variable.

Table 7.3 Cross-Sectional Studies of the Association of Tobacco Marketing with Adolescent Smoking (continued)

Study	Setting/sample size	Measure of advertisement exposure (IV)	Outcome measures (DV)	Findings
Hawkins and Hane 2000 ¹³³	843 middle/junior high-school-age students from a large midwestern metropolitan area	Ratings of opinions about what cigarette advertising conveyed (e.g., "Cigarette advertisements make it look like smoking cigarettes will help you to get a girl/ boyfriend." This was labeled as recall, but the authors of this chapter define it as a measure of opinions about advertising. Also assessed beliefs about smoking/smokers.	3-level status: (1) never tried, (2) tried, and (3) occasional and regular smokers	Smoking status was not associated with respondents' opinions about the content of print cigarette advertisements. However, those who smoke at least occasionally were more likely to rate smoking as having a variety of positive benefits.
Henriksen et al. 2004 ¹³⁴	2,125 middle-school students in Tracy (a mid-sized town in central CA); surveys completed in spring 2003	Exposure to tobacco marketing in stores (based on students' report of visits to convenience, liquor, or small grocery stores), owning a promotional item, seeing tobacco advertisements in magazines, or seeing someone smoke on television/film in past week	Ever smoking (even a puff)	Weekly exposure to retail tobacco marketing was associated with a 50% increase in the odds of ever smoking, even when controlling for parent and peer smoking. Retail marketing exposure was second only to owning a cigarette promotional item in increasing the odds of ever smoking. These results held, even when social influences on smoking were controlled.
Kaufman et al. 2002 ¹³⁵	A nationally representative sample of 17,287 13- to 19-year-old students, conducted in 1996	Receptivity to advertising (no favorite advertisement and does not own a cigarette promotional item; has favorite advertisement only; owns/would use a cigarette promotional item only, and has a favorite advertisement and owns/would use cigarette promotional item)	4-level status: (1) never smoker, not susceptible; (2) never smoker, susceptible; (3) experimenter; and (4) regular smoker. Susceptibility was based on answers to 3 questions: If one of your best friends were to offer you a cigarette, would you smoke it? At any time during the next year do you think you will smoke a cigarette? Do you think you will ever smoke a cigarette in the future?	All levels of receptivity to advertising were significantly associated with being a susceptible never smoker and with being an experimenter (never tried or experimented, even a few puffs) or a regular smoker. These analyses controlled for social influences. Being an experimenter was not significantly associated with owning an item, and being a regular smoker was not associated with having a favorite advertisement.

Study	Setting/sample size	Measure of advertisement exposure (IV)	Outcome measures (DV)	Findings
Klitzner et al. 1991 ¹³⁶	295 subjects in 3 grade groups: 5th to 6th (35%); 7th to 9th (35%); and 10th to 12th (31%) in 3 separate school districts in an east coast urban/suburban area of the United States	Samples of advertisements (with brand information removed) from 42 magazines and 2 newspapers for measuring (1) recall (proportion of cigarette, perfume, or alcohol advertisements previously seen by students), (2) proportion of cigarette advertisements for which product was recognized, and (3) proportion of advertisements for which the brand was recognized	Ever smoking	Ever smoking was associated with cigarette product recognition. Further, those who recalled more advertisements were more likely to be smokers.
Lam et al. 1998 ¹⁰⁸	6,304 students aged 12–15 years from 61 randomly selected secondary schools in Hong Kong	Self-reported exposure to various cigarette-marketing stimuli; attitude toward cigarette advertisements as attractive (liking)	5-level status: (1) never smoked; (2) tried; (3) used to smoke but not now; (4) sometimes, but less than once/week; and (5) 6+ cigarettes/week	Exposure and liking for advertisements were associated with current smoking (even less than once per week), even when controlling for parent and peer influences.
Ledwith 1984 ¹³⁷	Two representative surveys, each with 880 students from secondary schools in Greater Manchester, UK. The first survey included 5 secondary schools; the second survey included only 3 of the original 5 schools but surveyed 880 students from the same number of classes selected at random	Self-reported exposure to snooker championships on British television, the first sponsored by Benson & Hedges and the second sponsored by Embassy brand	Knowledge of sport sponsorship. Naming of cigarette brands. Children also listed the amount of their viewing time of recent snooker championship on British television	At the time of the first survey, Benson & Hedges sponsored the snooker championship. The majority of children surveyed had watched the coverage. The cigarette brands best known to the children and most associated by them with sports were the ones most heavily promoted by television sponsorship, including brands other than Benson & Hedges. The second study took place 2 months later, right after the British television showing of the Embassy brand's sponsorship of snooker on television. It found an increase in adolescents' knowledge of that brand and the brand's association with sports. The authors contend that sports sponsorship serves as cigarette advertising to children.

Note. IV = independent variable; DV = dependent variable.

Table 7.3 Cross-Sectional Studies of the Association of Tobacco Marketing with Adolescent Smoking (continued)

Study	Setting/sample size	Measure of advertisement exposure (IV)	Outcome measures (DV)	Findings
Maassen et al. 2004 ¹³⁸	282 students aged 14–18 years in school-based survey in Gambia	Whether have seen cigarette brand names on television, billboards, in newspapers or magazines, or at community events; ever offered a free cigarette by a tobacco company representative	4-level status: (1) never, (2) less than monthly, (3) monthly, and (4) weekly	A linear regression of the smoking status scale found an offer of a cigarette by a tobacco company to be the strongest associate with smoking level for any of the multitude of factors (including social influences) examined. With this variable in the model, none of the individual exposure variables was significant.
Maziak et al. 2003 ¹³⁹	School-based surveys of 12- to 15-year-olds (3,934 in 1994–95 and 4,028 in 1999–2000) in Muenster, Germany	Tobacco advertising awareness (can you name a cigarette or tobacco brand?) and appreciation (do you think and appreciate (do you think that cigarette advertisements are well made?)	4-level smoking status: (1) never; (2) occasional; (3) daily ≤10 cigarettes/day; and (4) daily >10 cigarettes/day	In 1994–95, appreciation of advertising was significantly greater among those who were smokers (including occasional). Awareness of advertising was high, but authors did not report a relationship between awareness and smoking status. Appreciation was not measured in 1999–2000.
MacFadyen et al. 2001 ¹³⁹	629 15- and 16-year-old students in northeast England	Awareness of and involvement with tobacco marketing (e.g., advertisements, coupons, point-of-sale advertisements, sponsorship, direct mail, brand extension, or merchandising)	3-level smoking status: (1) never, (2) trier, and (3) current (not defined)	Awareness of and involvement with tobacco marketing were both significantly associated with being a current smoker, even when controlling for social influences. Further, the higher the level of awareness and involvement with tobacco marketing, the higher was the smoking status level, indicating a dose-response relationship.
Meier 1991 ¹⁴⁰	School-based surveys of 1,085 7th- and 11th-grade students in Middletown, NJ	Awareness of cigarette sponsorship of sporting events and opinion about whether cigarette advertising should be allowed	3-level status: (1) never smokers, (2) triers, and (3) smokers; attitudes toward smoking: Likert scale of 16 questionnaire items about attitudes toward smoking	There were significantly less negative attitudes toward smoking among those who thought cigarette advertising should be allowed. Greater awareness of sporting event sponsorship and agreement that advertising should be allowed were reported among smokers and triers than among nonsmokers (latter 2 associations not tested statistically).

Study	Setting/sample size	Measure of advertisement exposure (IV)	Outcome measures (DV)	Findings
Mowery et al. 2004 ¹⁴¹	1999 (<i>N</i> = 15,056) and 2002 (<i>N</i> = 35,828) U.S. National Youth Tobacco Surveys. These school-based surveys interviewed students from 11 to 18 years old	Ownership or willingness to use a cigarette promotional item, analyzed as separate variables	Susceptibility to smoking among never smokers and any smoking among all respondents	For both outcomes, both ownership and willingness to use a cigarette promotional item were significant, after controlling for social influences to smoke.
O'Connell et al. 1991 ¹¹¹	6,000 10- to 12-year-old primary schoolchildren in Hunter Health Region, New South Wales, Australia	Attitude toward tobacco advertising	4-level status: (1) never, (2) triers, (3) recent, and (4) regular	In order of strength of association, smoking (both recent and regular) was positively associated with friends' smoking, approval of advertising, siblings' smoking, money to spend per week, gender, age, and parents' smoking.
Otake and Shimai 2002 ¹⁴²	409 7th graders and 348 8th graders in an urban area of Japan	Attitude (liking) toward advertising	Stages of smoking acquisition (precontemplation, contemplation, preparation, and action) based on 4 smoking questions: (1) interested in smoking? (2) think you might smoke in future? (3) smoked in past year? and (4) smoked in past month? Not specified how questions were used to classify students into stages.	Liking for cigarette advertising increased from the precontemplation to the action stage. Social influences and access to cigarettes were controlled.
Peters et al. 1995 ¹⁴³	Primary school students (8–13 years) in Hong Kong	Being able to give a brand name for logos presented in a survey instrument. Cigarette and other product logos were presented.	Ever smoked	Ever smokers were significantly more successful at providing brand names for the cigarette logos than were never smokers.
Pimilla et al. 2002 ¹⁴⁴	1,877 students from 30 secondary schools on the Island of Gran Canaria, Spain	Attitudes toward cigarette advertising and awareness of cigarette prices	4-level smoking status: (1) never; (2) less than once/week; (3) weekends only; and (4) daily	Attitudes toward cigarette advertising were not significantly related to smoking status.

Note. IV = independent variable; DV = dependent variable.

Table 7.3 Cross-Sectional Studies of the Association of Tobacco Marketing with Adolescent Smoking (continued)

Study	Setting/sample size	Measure of advertisement exposure (IV)	Outcome measures (DV)	Findings
Potts et al. 1986 ⁴⁵	258 5th-form pupils (aged 15–16; 137 boys, 121 girls) in city of Nottingham, UK	Attitude—opinions of cigarette advertisements as exciting, interesting, eye-catching, glamorous, or witty	5-level status: (1) never, (2) tried once, (3) used to smoke, (4) infrequent smoker/less than once/week, and (5) regular smoker/more than once/week	Significantly more regular smokers than nonsmokers rated advertising as exciting, interesting, and eye-catching.
Sargent et al. 2000 ⁴⁶	1,265 6th- to 12th-grade students in NH and VT public schools	Receptivity—ownership of cigarette promotional items, specification of favorite brand	5-level smoking uptake continuum: (1) nonsusceptible never smoker, (2) susceptible never smoker, (3) nonsusceptible experimenter, (4) susceptible experimenter, and (5) smoker—≥100 cigarettes in lifetime	Being a smoker or being further along the smoking uptake continuum was more likely if a participant owned a cigarette promotional item, even when controlling for social influences to smoke. The more cigarette promotional items owned, the further along the initiation continuum the students were.
Schooler et al. 1996 ⁴⁶	571 ethnically diverse 7th graders in San Jose, CA	Self-reported exposure to cigarette advertisements in magazines, on billboards, in stores, or at sports or community events, and of receiving advertisements or promotions through the mail; also ownership of promotional items	Any experimenting with smoking	Even when controlling for social influences to smoke, experimentation was significantly greater for those with more exposure to magazine advertisements or in-store advertisements, receipt of mailings from a cigarette company, or ownership of promotional items.
Sin 1997 ⁴⁷	588 11- to 16-year-old students (grades 7 through 9) in 4 secondary schools in Hong Kong	Levels of exposure to printed media and attitude toward cigarette advertising	2-level status: (1) smokers—at least 1 cigarette/day and (2) nonsmokers—never smokers or <1 cigarette/day	Although smokers and nonsmokers had the same level of exposure to media, in each case smokers had more favorable evaluations of the cigarette advertisements than did nonsmokers. Attitude toward cigarette advertisements was significantly related to smoking status, even when controlling for friend and family smoking.

Study	Setting/sample size	Measure of advertisement exposure (IV)	Outcome measures (DV)	Findings
Smith and Stutts 1999 ⁴⁸	246 junior/middle school, high school, and college students in a medium-sized metropolitan area in the southwest U.S.	Exposure to cigarette advertisements, attention paid to cigarette advertisements, and familiarity with cigarette characters and brand names	Smoking level: regular smokers vs. at-risk smokers (experimenters and social smokers)	The hypothesis that adolescents who smoke are more likely to have been exposed to cigarette advertisements was not supported for any grade level nor for all students combined. However, for junior high/middle school students and for all students combined, those who smoke (regular and at-risk) were more likely than were nonsmokers to pay attention to cigarette advertisements. Regular smokers were significantly more familiar than were nonsmokers with cigarette characters and brands.
Sovinova and Csery 2004 ⁴⁹	4,149 7th–9th graders in Czech Republic participating schools	Exposure to protobacco messages in newspapers and magazines, possession of a cigarette promotional item, and offer of a cigarette by a tobacco company representative	Never vs. current (in past 30 days)	No difference shown between never and current smokers' exposure to protobacco messages (~80%). Significantly more current smokers owned a tobacco promotional item and had been offered a cigarette by a tobacco company representative compared with never smokers.
Straub et al. 2003 ⁵⁰	1,229 nonsmoking 9th graders at 7 public schools in the San Francisco Bay Area, CA	Exposure to, recognition of, and receptivity and attitudes toward tobacco advertising	Intention to smoke	Brand recognition/favorite tobacco advertisements and willingness to wear or use tobacco-branded products were found to be associated with intention to smoke. These associations remained significant in a multivariate analysis that included social influences. Self-reported exposure to advertisements was not related to intention when other measures of exposure to advertising (e.g., receptivity) were included in the model.
Sun et al. 1998 ¹²	100 public junior high school students (48 females and 52 males) in Sunset Park, Brooklyn, NY	Beliefs about cigarette advertising	3-level smoking status: (1) never smokers, (2) former smokers, and (3) current smokers; classified both former and current smokers as smokers	Most smokers (8 of 12) preferred a brand that advertised heavily near the school. Twenty-seven percent believed the advertisements influenced them, and 66% supported banning cigarette advertisements. Beliefs about whether advertising influenced them to smoke did not differ between smokers and nonsmokers.

Note. IV = independent variable; DV = dependent variable.

Table 7.3 Cross-Sectional Studies of the Association of Tobacco Marketing with Adolescent Smoking (continued)

Study	Setting/sample size	Measure of advertisement exposure (IV)	Outcome measures (DV)	Findings
Tercyak et al. 2002 ⁷⁶	1,123 high school freshmen from 5 public schools in northern VA	Receptivity to tobacco advertising	2-level status: (1) never, even a few puffs; and (2) ever, at least a partial or whole cigarette; within ever, current smokers defined as any smoking in last 30 days	Exposure to other smokers, high receptivity to tobacco advertisements, and clinically significant depressive symptoms were independently associated with ever smoking. Adolescents with high levels of depressive symptoms and high receptivity to tobacco advertisements were more likely to smoke currently than were their counterparts without elevated symptoms.
Unger and Chen 1999 ⁵¹	10,030 adolescents contacted via random-digit dialing in the California Tobacco Survey	Receptivity to protobacco media; having a favorite advertisement, having received a promotional item, and willingness to use promotional items	Self-reported age at which respondent smoked first cigarette	Younger age of smoking initiation was associated with all three measures of receptivity, even when sibling, parent, and friend smoking were controlled.
Unger et al. 1995 ⁹⁴	386 8th graders (54% female; 46% male) in Southern CA (never smokers)	Advertisement rating and liking; recognition of tobacco and alcohol brands, liking of these advertisements; liking of advertising, assessed with 3-point-scale answer to "How much do you like the advertisement (not the product)?" and a 4-point-scale answer to "Does this advertisement make you want to buy and try this product?"	3-level status: (1) nonsusceptible nonusers—have never used and do not intend to do so, (2) susceptible nonusers—have not used but have not made a firm commitment not to experiment in the future, and (3) users—have tried the substance	Smoking susceptibility was a significant correlate of brand recognition across all cigarette brands. Susceptible nonsmokers liked the tobacco advertisements at a significantly greater level than did nonsusceptible nonsmokers and at a level comparable to that of smokers. Smoking susceptibility was significantly associated with liking for Marlboro cigarette advertising.

Study	Setting/sample size	Measure of advertisement exposure (IV)	Outcome measures (DV)	Findings
Unger et al. 2001 ¹¹⁴	5,870 8th graders contacted via random-digit dialing in the California Tobacco Survey	Factor analysis of exposure measures identified 4 factors: perceived pervasiveness of both protobacco and antitobacco marketing, recognition of specific antitobacco marketing, and receptivity to protobacco marketing.	4-level status: (1) never, (2) susceptible—might accept from friend or try in next year, (3) experimenter, and (4) established smokers—100 or more cigarettes in lifetime	Factor analysis of measures of protobacco and antitobacco media identified two factors involving protobacco media: perceived pervasiveness of protobacco marketing and receptivity to cigarette marketing. Higher levels of receptivity were associated with higher levels of smoking. Perceived pervasiveness of protobacco marketing was significantly higher among established smokers than among susceptibles, and the susceptibles were significantly lower in this measure than never smokers, experimenters, and established smokers.
Wakefield et al. 2002 ¹⁰⁷	3,890 U.S. high school smokers, matched to 196 convenience stores that they frequented	Estimated exposure to advertising: brand-specific advertising and promotions in convenience stores for Marlboro and Camel cigarettes; examined share of voice in stores	Choice of usual brand among high school student smokers	The choice of Marlboro cigarettes was associated with the presence of a gift with the purchase and greater brand share of interior and exterior advertising voice. The choice of Camel cigarettes was associated with a greater share of interior advertisement voice but unrelated to a gift with purchase and negatively associated with a greater share of exterior advertising voice.

Note. IV = independent variable; DV = dependent variable.

positive study, Schooler and colleagues⁴⁶ obtained data from an ethnically diverse sample of 571 7th-grade students in San Jose, California. Participants rated how often they saw advertisements in magazines, on billboards, in stores, or at sporting or community events. They also reported whether they had received mailings from cigarette companies and whether they owned cigarette promotional items. Even when controlling for social influences to smoke, experimentation with cigarettes was significantly greater for those with more exposure to magazine or in-store advertisements, receipt of mailings from a cigarette company, or ownership of cigarette promotional items.

In addition to the study by Schooler and colleagues,⁴⁶ 10 other studies of this type controlled for social influences to smoke. Like that study, they found that exposure to cigarette advertising was associated with smoking even when the influence of peers and/or family members on smoking was controlled statistically.^{91,108,116,118,119,121,122,132,134,139} Gunther and colleagues¹³² tested the hypothesis that advertising will influence many people regarding what is fashionable or attractive and that, as a result, people may adopt these

new fashions themselves. In a sample of 818 6th and 8th graders in two Wisconsin middle schools, these researchers used a path analysis and showed that both protobacco and antitobacco advertisements had a significant indirect effect on adolescent smoking through their effects on peer norms.

Five papers reported finding no significant relationship.^{138,147–150} No paper reported a negative relationship. One did not perform a statistical test, although the trend was for a positive relationship.¹⁴⁰ One “negative” study of 282 adolescents aged 14–18 years included a four-level smoking status measure as the dependent variable in a linear regression analysis. The study involved a total of 72 independent variables (7 regarding social influences) and found that none of the exposure variables (television, billboard, newspapers and magazines, community events) was related to smoking level.¹³⁸ However, the variable—an offer of a cigarette by a tobacco industry representative—was the most related to smoking level. The invasiveness of this marketing practice may have eclipsed the exposure variables. This study should have employed extensive data reduction and chosen a more appropriate analytic method.

Identifying a Dose-Response Relationship between Marketing Exposure and Youth Smoking

One of the studies profiled here^a examined young people’s awareness of, and involvement in, all existing forms of tobacco marketing communications. The investigators conducted regression analyses to examine whether any association existed between these measures and smoking status. Young people were very aware of all forms of tobacco marketing communications; more than one-half of all of the smokers studied had participated in some form of promotion. The first regression analysis showed that some individual marketing communication techniques (coupon loyalty offers and brand stretching) were associated with being a smoker. Perhaps more important, from an integrated marketing communications perspective, a second analysis found that the greater the number of tobacco marketing techniques a young person was aware of, the more likely he or she was to be a smoker. In other words, the investigators identified a dose-response relationship for marketing communications exposure and smoking behavior.

^aMacFadyen, L., G. Hastings, and A. M. MacKintosh. 2001. Cross sectional study of young people’s awareness of and involvement with tobacco marketing. *British Medical Journal* 322 (7285):513–17.

Bivariate analyses from a study from the Czech Republic¹⁴⁹ indicated that both current smokers and never smokers had similar high levels of exposure to protobacco messages in magazines and newspapers. However, smokers were significantly more likely to possess a cigarette promotional item and to have been offered a cigarette by a tobacco company representative. Another study that included multiple exposure measures did not find recall significantly related to smoking, but found other measures (e.g., attitudes and receptivity) to be significant.¹⁵⁰ Smith and Stutts¹⁴⁸ found exposure to cigarette advertisements unrelated to smoking, but smokers were more likely to pay attention to the advertisements and were more familiar with cigarette characters and brand names. Finally, a study of Hong Kong students also showed no difference in smoking behavior for those exposed and not exposed to cigarette advertising, but found that smokers viewed the advertisements more favorably than did nonsmokers.¹⁴⁷

Recognition of Brands or Products

During the review period, 12 studies assessed how well adolescents could name the product or specific brand in an advertisement even when researchers had obscured the brand name from the advertisements.^{91,92,94,115,116,118,120,125,128,131,136,143} Only one study¹²⁸ did not find that brand recognition was associated with smoking status, in a sample of 1,093 Turkish children aged 7–13 years.

As an example of a “positive” study, Unger and colleagues⁹⁴ had 386 8th-grade students from Southern California attempt to identify the brand advertised in six cigarette advertisements, five alcohol advertisements, and nine other product advertisements. The researchers found smoking status to be significantly related to cigarette brand recognition for the brands depicted (Marlboro, Kool, Newport, Virginia Slims, Camel, and Capri).

While 10 of the studies found a positive relationship between brand recognition and smoking or smoking susceptibility, only one of these controlled for social influences on smoking. This study¹¹⁶ found that, among 11- to 14-year-old Scottish youth, smokers were better than nonsmokers at recognizing the brand of cigarette shown in advertisements that had identifying characteristics removed, when controlling for friend, sibling, and parent smoking.

Attitudes toward Advertising

In 15 studies, investigators assessed relationships between various smoking measures and adolescents’ attitudes or opinions about cigarette advertising.^{92–94,108,109,111,112,116,124,127,133,142,144,145,147}

Twelve of these studies found that attitudes toward advertising were significantly more positive among those who smoked or were susceptible to smoking. One “positive” study found a significant association when variables were assessed bivariate, but the relationship was not significant when a multivariate analysis controlled for social influences.¹²⁷ This study of 1,003 Spanish schoolchildren 11 to 13 years of age analyzed cross-sectional baseline data with a fairly weak attitudinal measure: “Do you believe that it is [all right] that there is tobacco advertising?”

Of the remaining “positive” studies, another five controlled for social influences.^{108,111,116,142,147} Research by O’Connell and colleagues¹¹¹ provides an example of this type of study. These researchers obtained data from 6,000 Australian children, aged 10–12 years. They found that students’ ratings (low/unfavorable to high/favorable) of their attitudes toward cigarette advertising were significantly higher among smokers compared with nonsmokers.

Three additional studies found no significant relationship between attitudes

toward cigarette advertisements and smoking.^{112,133,144} No study reported a negative relationship. One study that did not find a relationship between attitudes toward cigarette advertising and smoking asked adolescents whether they believed that advertising influenced young people to smoke.¹¹² Results did not differ significantly by smoking status. This measure is conceptually distinct from measures of the degree to which adolescents like or find cigarette advertisements appealing. An adolescent who himself or herself does not find advertising appealing could still believe that it influences other adolescents to smoke.

Receptivity to Cigarette Marketing

Eighteen studies used indices of receptivity to cigarette marketing including owning or willingness to use cigarette promotional items.^{13,46,65,76,113,114,117,123,124,126,129,134,135,139,141,146,150,151} Each of these studies found that receptivity to cigarette marketing was significantly related to smoking status or susceptibility. Four of these studies did not control for social influences to smoke.^{114,117,124,129}

Evans and colleagues¹³ assessed receptivity in a sample of 3,536 adolescents who had never smoked but who varied in their susceptibility to smoking. Results show that adolescents' susceptibility to smoking was significantly greater the more receptive they were to marketing. This relationship held even when researchers controlled for exposure to social influences to smoke.

The study by Tercyak and colleagues⁷⁶ is of particular interest. These researchers obtained data from 1,123 high school freshmen in Northern Virginia. In addition to assessing receptivity, they evaluated

depression and found that exposure to other smokers, high receptivity to tobacco advertisements, and clinically significant depressive symptoms independently were associated with whether the students had ever smoked. These findings suggest that depressed adolescents may be especially vulnerable to cigarette advertising. Tercyak and colleagues found that adolescents experiencing high levels of depressive symptoms and who were high in receptivity to tobacco advertisements were more likely to smoke cigarettes than were those who were receptive but not depressed.

A study by Sargent and colleagues¹⁴⁶ of 1,265 students (grades 6 through 12) in New Hampshire and Vermont assessed only whether they owned a cigarette promotional item. One of every three students did. Investigators found a dose-response relationship between the number of promotional items owned and both being a smoker and being further along the continuum of the smoking initiation process.

Longitudinal Studies

Table 7.4 presents summary information about 16 longitudinal studies* of the relationship between various measures of exposure to cigarette marketing and adolescents' smoking or susceptibility to smoking. With relatively large samples of subjects in four countries (and three U.S. states), researchers found that receptivity to, exposure to, or awareness of tobacco advertising significantly predicted smoking at follow-up. After controlling for other variables including social influences, a significant link was present in all but two studies.^{127,152} In these two studies, the link just missed statistical significance at the $p < .05$ level. Because of the importance of

*Twelve of the studies published before 2003 were reviewed previously in Lovato, C., G. Linn, L. F. Stead, and A. Best. 2003. Impact of tobacco advertising and promotion on increasing adolescent smoking behaviours. *Cochrane Database of Systematic Reviews* (3):CD003439.

Table 7.4 Longitudinal Studies Predicting Later Smoking Behavior from Measures of Exposure to Tobacco Marketing at Baseline

Document	Setting/ sample size	Measure of advertisement exposure (IV)	Outcome measures (DV)	Findings
Aitken et al. 1991 ¹¹⁰	Glasgow, Scotland, in-home interviews of 640 children initially between 11 and 14 years old. They were reassessed about 1 year later. Few had smoking experience.	Recall of advertising for specific brands of cigarettes, recognition of brands in advertisements with brand information removed, appreciation of cigarette advertisements (ratings of liking for cigarette advertisements in general, recall of liked advertisements, and opinion about banning cigarette advertisements)	Intentions to smoke ("Do you think you will smoke cigarettes when you are older?") asked of all respondents, including those with smoking experience	The number of cigarette advertisements correctly identified significantly predicted the development of more positive intentions to smoke 1 year later, even when friends, parents, and sibling influences were controlled. Children with less appreciation of cigarette advertisements were significantly more likely to become more negative in their intention to smoke, even when friends, parents, and sibling influences were controlled.
Alexander et al. 1983 ¹⁵³	5,686 10- to 12-year-old Australian children assessed at 2 points, 12 months apart	Approval of cigarette advertising	4-level status: (1) adopters—did not smoke at first survey, but did at second, (2) nonsmokers at both surveys, (3) quitters—smoked at first but not second survey, and (4) smoked at both surveys	Approval of cigarette advertising predicted smoking status (adopters and smoker at both times) 1 year later, even when friends' and siblings' smoking was controlled.
Armstrong et al. 1990 ¹⁵⁴	Australia, 2,366 year 7 students (modal age 12 years); reassessed 1 and 2 years later	Perceived influence of cigarette advertising on the student	Initiation of smoking (ever smoked) 1 or 2 years later	Children who were initially nonsmokers were more likely to have smoked 2 years later if they initially perceived that cigarette advertising influenced them. This was true even when parental, sibling, and friends' smoking was controlled.

Note: IV = independent variable; DV = dependent variable.

Table 7.4 Longitudinal Studies Predicting Later Smoking Behavior from Measures of Exposure to Tobacco Marketing at Baseline (continued)

Document	Setting/ sample size	Measure of advertisement exposure (IV)	Outcome measures (DV)	Findings
Biener and Siegel 2000 ¹⁵⁵	Massachusetts Tobacco Survey (1993), 1997–98 follow-up on 529 adolescents, who were 12 to 15 years old and nonsmokers (never or experimenter) in 1993	Receptivity to tobacco marketing: (1) owned a promotional item and (2) could name a brand of cigarettes whose advertisements attracted them	Whether or not had become an established smoker (had smoked 100 or more cigarettes) at 4-year follow-up	Adolescents who owned a tobacco promotional item and named a brand whose advertisements attracted them were more than twice as likely to be established smokers 4 years later. This was true even when prior experimentation, rebelliousness, and smoking by adults and friends were controlled.
Charlton and Blair 1989 ¹⁵⁶	29 secondary schools in Northern England; 1,390 self-identified never smokers aged 12–13 years; assessed twice, 4 months apart	Cigarette brand awareness, favorite advertisements for cigarettes, viewing of cigarette brand–sponsored sports on television	3-level status: (1) never smoker, (2) sometime smoker, and (3) regular smoker	For girls, awareness of at least one cigarette brand significantly predicted the uptake of smoking (sometimes or regularly) even when smoking by parents and friends was controlled. There were no significant findings for boys.
Choi et al. 2002 ¹⁵⁷	Baseline data derived from the California Tobacco Survey, 1993; follow-up in 1996; 965 adolescents classified as experimenters (had smoked, but fewer than 100 cigarettes) at baseline	Receptivity to advertising (having a favorite tobacco advertisement, and being willing to use a promotional item)	Established smoking by 1996 (smoked 100 or more cigarettes in lifetime)	Receptivity to tobacco advertising and promotions was a significant predictor of established smoking. Those who were highly receptive to tobacco marketing were 70% more likely to become established smokers at follow-up compared with those who were minimally receptive. This was true even when relationships with family members and family and friends who smoked were controlled.

Document	Setting/ sample size	Measure of advertisement exposure (IV)	Outcome measures (DV)	Findings
Diaz et al. 1998 ¹²⁷	1,003 Spanish schoolchildren (aged 11 to 13 years)	Were asked: "Do you believe that it is [all right] that there is tobacco advertising?"	Never vs. any smoking at follow-up	Never smokers at baseline ($n = 906$) were followed up 1 year later, and agreement with the statement about tobacco advertising was marginally predictive of any smoking at follow-up.
Gilpin et al. 2007 ¹⁵⁸	2 cohorts of young adolescents (12–15 years) followed up 6 years later (1993–99, $n = 1,734$ and 1996–2002, $n = 1,983$); baseline cohorts identified from 1993 and 1996 California Tobacco Surveys	Receptivity to tobacco advertising and promotions: high—own or would be willing to use a tobacco promotional item and moderate—have a favorite cigarette advertisement	Being a current established smoker as a young adult 6 years later	Despite lower rates of current established smoking in the second cohort, the effects of high and moderate receptivity on the outcome variable were similar and significant in both cohorts after controlling for social influences to smoke.
Lopez et al. 2004 ¹⁵⁹	Spanish students (13 and 14 years) participating in 3-country study ($N = 2,356$) in Spain completing 18-month follow-up	Awareness at baseline of 3 advertisements (with brand identification removed) that were exhibited near participating schools	New and at least weekly smoker at follow-up	Awareness level (provided brand for none, 1, 2, or 3 advertisements) predicted new weekly smokers at follow-up, after controlling for social influences to smoke.
Pierce et al. 1998 ¹⁶⁰	Population-based, random-digit-dialed telephone survey in CA; 1,752 adolescent never smokers who were not susceptible to smoking in 1993 reinterviewed in 1996	Exposure to tobacco promotions and advertising	Progression to smoking: becoming susceptible to smoking (do not rule out trying a cigarette or accepting one if offered by a friend) or any experimenting by 1996	Having a favorite advertisement in 1993 predicted which nonsusceptible never smokers would progress by 1996, even when controlling for family and peer smoking. Possession of or willingness to use a tobacco promotional item was even more strongly associated with future progression, even when family and peer smoking was controlled.

Note. IV = independent variable; DV = dependent variable.

Table 7.4 Longitudinal Studies Predicting Later Smoking Behavior from Measures of Exposure to Tobacco Marketing at Baseline (continued)

Document	Setting/ sample size	Measure of advertisement exposure (IV)	Outcome measures (DV)	Findings
Pierce et al. 2002 ¹⁶¹	Population-based, random-digit-dialed telephone survey in CA; sample of 1,641 adolescent never smokers aged 12–14 years in 1996 who had never smoked and were assessed again in 1999. Analysis in this paper focused on 894 adolescents whose parents were classed as authoritative.	Receptivity to tobacco advertising and promotions	Any smoking by follow-up	Among adolescents whose parents were authoritative (an index of parents' positive responsiveness and monitoring), high receptivity predicted smoking onset even when family and peer smoking was controlled.
Pierce et al. 2005 ¹⁵²	2,119 12- to 15-year-old never smokers from 1996 California Tobacco Survey followed 3 years later	Advertising receptivity, curiosity about smoking, and susceptibility to smoking	Any smoking by follow-up in full sample, and susceptibility or any smoking among nonsusceptible never smokers	For the full sample, both curiosity about smoking and being susceptible to smoking predicted smoking by follow-up. High receptivity was of marginal significance. In the nonsusceptible never smokers, only curiosity predicted progression toward smoking. A further cross-sectional analysis showed receptivity and friends who smoked to be related to curiosity (dependent variable), suggesting that these factors may induce curiosity. All analyses controlled for social influences to smoke.
Pucci and Siegel 1999 ¹⁶²	627 12- to 15-year-old never smokers in MA	External measure of brand-specific exposure to cigarette advertising in magazines the youth read	Brand first smoked by new ever smokers at follow-up, brand smoked by current smokers at follow-up, and brand whose advertisements attracted attention the most.	Brand of exposure in magazines at baseline was significantly correlated with brand of initiation 4 years later, brand smoked by current smokers at follow-up, and naming of the brand that attracted attention the most at follow-up.

Document	Setting/ sample size	Measure of advertisement exposure (IV)	Outcome measures (DV)	Findings
Sargent et al. 2000 ¹⁶³	480 4th- to 11th-grade students in 3 rural VT kindergarten–12th-grade schools, surveyed at baseline, 12 months, and 24 months	Receptivity to cigarette promotions measured by ownership or willingness to use a cigarette promotional item	6-level uptake process: (1) never smoker/not susceptible, (2) never smoker/susceptible, (3) puffer, (4) noncurrent experimenter, (5) current experimenter, and (6) smoker/≥100 cigarettes in lifetime	Receptivity significantly predicted progression along the smoking initiation process 21 months later even when controlling for family and peer smoking. Increases in receptivity to cigarette promotions between the first and second or second and third assessments also significantly predicted progression to smoking (higher status level).
Weiss et al. 2006 ¹⁶⁴	2,822 of 4,427 California 6th graders who completed 3 waves (6th, 7th, 8th grade) of school survey; main analysis confined to 2,026 nonsusceptible never smokers at baseline	Self-reported exposure to smoking on TV or to point-of-sale tobacco advertising; self-reported exposure to anti-tobacco media advertising on television.	Reporting susceptibility to smoking and/or ever smoking (progression) at either follow-up (7th or 8th grade)	Report of exposure to either or both protobacco settings was significantly related to progression by follow-up. Report of exposure to antitobacco media was significantly protective of future progression. Analyses were adjusted for demographics and whether or not the school had an antitobacco program but not for social influence variables.
While et al. 1996 ¹⁶⁵	1,450 English 11- and 12-year-olds assessed twice, 1 year apart	Awareness of brands and having a favorite cigarette advertisement	Smoking status (precise measure not reported)	Girls who named Benson & Hedges as a brand they were aware of were significantly more likely to be smoking 1 year later. The same was true for girls who named Benson & Hedges and Silk Cut (the two most advertised cigarette brands). No effects were found for boys.

Note. IV = independent variable; DV = dependent variable.

this methodological approach, each of these studies is described in detail below.

Alexander and colleagues¹⁵³ assessed 5,686 Australian schoolchildren, aged 10–12 years, at two occasions over 12 months (the follow-up rates were not reported). In the first assessment, students rated their approval of cigarette advertising. A multiple regression analysis indicated that those who approved of cigarette advertising were significantly more likely to report smoking at the second assessment. The analysis took account of smoking by friends and siblings, which also were significant predictors of later smoking.

Aitken and colleagues¹¹⁰ obtained data from 640 11- to 14-year-olds in Glasgow, Scotland (75% of original sample). Their measures of exposure included recall of advertising for specific brands of cigarettes, recognition of brands in advertisements with brand information removed, and ratings of appreciation of cigarette advertisements (ratings of liking for cigarette advertisements in general, recall of liked advertisements, and opinion about banning cigarette advertisements). They found that the number of cigarette advertisements correctly identified significantly predicted the development of more-positive intentions to smoke one year later, even when controlling for friend, parent, and sibling influences. Children with less appreciation of cigarette advertisements were significantly more likely to become more negative in their intention to smoke, even when friend, parent, and sibling influences were controlled.

Armstrong and colleagues¹⁵⁴ measured the perceived responses to cigarette advertising in a large sample (2,366) of 7th-grade students in Australia participating in an experimental evaluation of a smoking prevention curriculum. At baseline, students provided information about their own, their families', and their friends' smoking status,

and their knowledge of and attitudes toward smoking. They also answered the question, "How much do cigarette advertisements make you think you would like to smoke a cigarette?" There were two follow-up assessments, one and two years after the end of the intervention, with a successful reassessment of 64% at two years. For girls, the researchers found consistent evidence of smoking initiation both one and two years later among students who said cigarette advertising had some influence. For boys, the relationship was significant only at the two-year follow-up. All of the analyses controlled for family and peer smoking.

Six studies used data from statewide tobacco surveys in Massachusetts (two) and California (four).^{152,155,157,158,160,162} All but one study¹⁵² found that adolescents in Massachusetts and California who responded positively to cigarette promotional items or tobacco advertisements were more likely to progress toward smoking three to four years after baseline. The California studies were the only longitudinal studies that weighted the data to be representative of the population and to account for attrition by follow-up.

In one Massachusetts study, Biener and Siegel¹⁵⁵ reinterviewed 529 adolescents (58%) four years after baseline regarding their smoking status. Adolescents who owned a cigarette promotional item and who could name a cigarette brand whose advertisements they liked were twice as likely as those who did neither to become smokers. The analysis controlled for prior experimentation, rebelliousness, and adult and friend smoking. Thus, the influence of exposure to advertisements and cigarette promotional items was over and above any influences of these factors.

In another Massachusetts study of the same data set, Pucci and Siegel¹⁶² examined adolescent exposure (external measure) to brand-specific advertising and its

relationship to smoking four years later. The first assessment obtained data on the magazines each youth read. The authors created an estimate of each student's exposure to advertising for each cigarette brand on the basis of the number of pages of cigarette advertising for those brands in the magazines the youth reported reading that year. The investigators also estimated the share of advertising reaching these youth that each brand achieved by totaling the number of pages of advertising for each brand in the magazines the students read and dividing that by the total number of pages for all brands. The top five brands on this measure of share of advertising were (in order) Marlboro, Camel, Kool, Newport, and Winston. They accounted for 81.8% of all cigarette advertising in these magazines. Brand-specific exposure to advertising

among these youths was highly related to each brand of initiation among new smokers four years later ($r = .93$). Moreover, this exposure measure predicted the brand smoked by current smokers in the follow-up assessment ($r = .86$), as well as the brand whose advertisements attracted the most attention at follow-up ($r = .87$).

Using California data, Pierce and colleagues¹⁶⁰ reported on the 1996 follow-up of 1,752 adolescents 12–17 years of age who were nonsusceptible never smokers in 1993 (62% of original sample). They found that having a favorite advertisement in 1993 predicted which adolescents would progress toward smoking by 1996. Possession of or willingness to use cigarette promotional items was even more strongly associated with future progression toward smoking

Other Models of the Influence of Tobacco Advertising

The psychological needs of adolescents and their related need to project a desired image have received the most attention from researchers regarding how tobacco marketing works to influence adolescents to smoke. However, at least three other mechanisms have been suggested and investigated on a more limited basis:

- One proposes that a positive stereotype depicted in cigarette advertising may lead adolescents to seek favorable evidence about smokers and come to believe that they have desirable traits.^a In turn, they become more inclined to smoke cigarettes themselves.
- Another suggests that adolescents perceive that tobacco advertising influences their peers to engage in an accepted or “in” behavior. To not be left out, they adopt smoking to be part of the crowd.^b
- Finally, another line of research based on advertising theory suggests that advertising helps to create curiosity about smoking. If adolescents perceive that trying a cigarette is low cost (offered free by a peer) and low risk (just one is okay), they may act to satisfy their curiosity.^c

It is likely that most of these mechanisms operate to a greater or lesser extent in a given individual.

^aPechmann, C., and S. J. Knight. 2002. An experimental investigation of the joint effects of advertising and peers on adolescents' beliefs and intentions about cigarette consumption. *Journal of Consumer Research* 29 (1): 5–19.

^bGunther, A. C., D. Bolt, D. L. G. Borzekowski, J. L. Liebhart, and J. P. Dillar. 2006. Presumed influence on peer norms: How mass media indirectly affect adolescent smoking. *Journal of Communication* 56 (1): 52–68.

^cPierce, J. P., J. M. Distefan, R. M. Kaplan, and E. A. Gilpin. 2005. The role of curiosity in smoking initiation. *Addictive Behaviors* 30 (4): 685–96.

cigarettes. All analyses controlled for demographics, school performance, and peer and family smoking.

In another analysis of the 1993–96 California data, Choi and colleagues¹⁵⁷ conducted separate analyses for another 965 adolescents who at baseline were classified as experimenters (had smoked, but fewer than 100 cigarettes). Among the 32% of experimenters who had become established smokers by 1996, the highest rate of progression (52%) occurred among those who, in 1993, were willing to use a cigarette promotional item and believed they could quit anytime. The authors found that experimenters who were highly receptive to marketing were 70% more likely to become established smokers by follow-up than were those minimally receptive to the marketing. This was true even when family and friend smoking was controlled.

Pierce and colleagues¹⁶¹ conducted another longitudinal study using data from a sample of adolescent never smokers aged 12–14 years identified from the 1996 California Tobacco Survey and recontacted in 1999. These researchers examined the level of authoritative behavior in parents and the students' receptivity to tobacco advertising and promotions. Authoritative parents were those whose children rated them as warmly responsive to the child and high in their level of parental monitoring. When 1,641 of the adolescents completed a follow-up survey in 1999 (68% of the original sample), the authors found significantly higher rates of smoking among adolescents who were receptive to advertising and who had more authoritative parents. Apparently, in families in which parents are authoritative but noninterfering with respect to their children's exposure to cigarette marketing, such marketing can influence smoking initiation.

Another analysis¹⁵² of the above 1996–99 data set investigated the role of curiosity

together with smoking susceptibility and advertising receptivity in never smokers aged 12–15 years ($n = 2,119$, or 67% successfully followed). The study also examined only the nonsusceptible never smokers ($n = 970$) and whether they became susceptible or smoked by follow-up. Advertising theory emphasizes the necessity for closing the knowledge gap about the benefits of a product to increase curiosity about the product.^{166,167} Further, those curious about a product may seek to satisfy their curiosity if they perceive that it is low cost (free from a peer) and low risk (just one is okay).^{168,169} In the analysis of all never smokers, both smoking susceptibility and curiosity were significantly related to any smoking by follow-up. However, high advertising receptivity just missed statistical significance, with an adjusted odds ratio (OR) of 1.88 (95% confidence interval [CI], 0.99–3.56). In the analysis of the nonsusceptible never smokers, curiosity predicted progression toward smoking but receptivity did not. A further cross-sectional analysis (1,451 nonsusceptible never smokers at baseline in 1996), with curiosity as the dependent variable, identified friends who smoke and advertising receptivity as significant correlates, again adjusting for other variables. The authors conclude that curiosity, perhaps stimulated by advertising, might be a critical precursor to smoking initiation.

In addition, a 2007 study by Gilpin and colleagues¹⁵⁸ further examined additional follow-ups in both of the cohorts reported on previously. The 1993–96 adolescent never smokers aged 12–15 years were again contacted in 1999 ($n = 1,734$, 47% of the original sample). In addition, similar adolescents from the 1996–99 cohort were contacted again in 2002 ($n = 1,983$, 48% of the original sample). High (own or would use a cigarette promotional item) and moderate (have a favorite cigarette advertisement) levels of advertising receptivity in the young adolescent never

smokers at baseline were significantly associated with being a current established smoker as a young adult to the same extent in both cohorts. This was true despite the lower percentage of current established smokers in the second cohort, reflecting California's decline in youth and adult smoking prevalence. Analyses were adjusted for demographics, school performance, smoking susceptibility, and family and peer smokers in the social environment.

Another study by Weiss and colleagues¹⁶⁴ of a California cohort of 6th graders successfully followed in both the 7th and 8th grades ($n = 2,822$ or 64% of the original sample) related reports among nonsusceptible never smokers at baseline ($n = 2,026$) of seeing smoking on television and/or seeing advertisements for tobacco in stores (point of sale) to reports of becoming susceptible to or actually smoking at either of the later follow-ups (7th or 8th grade). The study also examined reports of seeing antitobacco media advertising on TV. The protobacco media exposure was coded as exposure to neither, either, or both of the above protobacco messages. Exposure to one type predicted significantly greater progression toward smoking than exposure to neither, and exposure to both types predicted greater progression than exposure to just one type. The analyses were adjusted for demographics and whether the school had an antitobacco program, but not for social influence variables. Exposure to antitobacco media was protective of progression toward smoking.

A longitudinal study was conducted with the Spanish adolescents surveyed in the cross-sectional study by Diaz and colleagues¹²⁷ described above. Of never smokers at baseline, 906 were followed one year later (90% of the original sample). Agreement with the statement about the legitimacy of tobacco advertising was bivariately predictive of smoking at follow-up but only marginally significant in a multivariate

analysis that controlled for opinions about smoking and social influences to smoke (adjusted OR of 1.6; 95% CI, 0.9–2.7).

Another Spanish study¹⁵⁹ analyzed advertising awareness at baseline among 2,356 adolescents, in 69 schools, aged 13 and 14 years who were successfully followed 18 months later (64%). Three billboard advertisements (selected according to specified criteria) that had appeared near each school were shown to the students with the brand identification removed. Participants could correctly identify zero, one, two, or all three brands. Awareness level was positively and significantly associated with being a new regular smoker (at least weekly) by follow-up. The authors adjusted for demographics and social influences.

Sargent and colleagues¹⁶³ studied 480 rural Vermont students in grades 4 through 11. They assessed receptivity to cigarette promotions in terms of ownership of or willingness to use a cigarette promotional item. The students (66% of the original sample) were contacted again 12 and 21 months later. Receptivity predicted progression toward smoking 21 months later, even when controlling for parent and peer smoking. Moreover, changes in receptivity between the first and second assessments or between the second and third assessments predicted progression to smoking even when controlling for initial receptivity. Thus, over time, the likelihood of smoking increased when an adolescent received or was willing to use a cigarette promotional item.

University of Manchester researchers¹⁶⁵ examined smoking onset among 1,450 students in England surveyed twice, one year apart (the follow-up response rate was not reported). The two most heavily advertised cigarette brands in that year were Silk Cut and Benson & Hedges. Girls who indicated awareness of either brand

were significantly more likely to be smoking one year later. The study found no effects for boys.

Another study with divergent results between genders was conducted in 29 secondary schools in Northern England.¹⁵⁶ In this study, 1,390 students (aged 12 and 13 years) self-identified as never smokers answered questions pertaining to nine variables. The students completed questionnaires twice, four months apart (the follow-up response rate was not reported), concerning cigarette brand awareness, favorite cigarette advertisements, and viewing of cigarette-sponsored sporting events. Awareness of cigarette brands (determined by answering the question, “Can you name a brand of cigarette?”) was a significant predictor of smoking among girls, even when parent and friend smoking was controlled. However, there were no significant findings among boys.

There was a potential reduction in statistical power to identify a link between tobacco marketing activities and later smoking behavior because of sample attrition and the resulting potential bias toward a null finding. However, all of the longitudinal studies described above found at least a marginal link, even after adjusting for multiple other variables, including social influences to smoke cigarettes.

Effects of Tobacco Advertising on Tobacco Consumption

This section reviews another line of evidence from the empirical literature from econometric studies about the effects of tobacco advertising on tobacco consumption. Tobacco industry sources

have claimed that tobacco advertising only affects market share among various competing brands rather than increasing total demand for tobacco. This section develops a framework for studying the relationship between advertising and tobacco consumption and reexamines prior studies of tobacco advertising in the context of this framework.

Chapters 4 and 6 in this monograph provide information as background for this chapter. Besides traditional media-based advertising to create a favorable product image, the tobacco industry uses additional marketing options to increase sales, including price discounts and promotional activities (e.g., specialty item distribution) that reduce the full price paid by consumers or by retailers.* As a result of the 1998 Master Settlement Agreement (MSA)—which bans tobacco advertising on billboards, in transit media, and in most other outdoor venues—the only remaining traditional media available to tobacco advertising are newspapers and magazines. However, a great deal of advertising and promotion now takes place at the point of purchase,¹⁷⁰ and it has more than doubled since the MSA (chapter 4). The MSA restrictions have not reduced the total amount of money the industry spends on advertising and promotions (\$15.1 billion in 2003),¹⁷¹ only the allocation. Most of the studies reviewed later in this section consider the time before the shift from advertising to promotional activities became well advanced, and for this reason, the expenditure measures were mostly for advertising.

Total advertising expenditures typically are analyzed as a percentage of sales, which is known as the advertising-to-sales ratio.† Schonfeld and Associates¹⁷² reported that typical industry-level advertising-to-sales ratios average less than 3%. The advertising-to-sales ratio for cigarettes

*In this case, the full price can be defined as the monetary price minus the value of coupons or merchandise.

†The advertising-to-sales ratio does not include promotional expenditures.

Economics of Tobacco Advertising

Industries with a fairly limited number of producers (oligopolistic), such as the tobacco industry, often prefer competition through advertising rather than price to increase their share of the market.^a Schmalensee showed that oligopolistic firms are likely to advertise more than similar firms in monopoly situations. Each firm is reluctant to use price competition if it believes that rivals also will cut their prices. If all firms cut prices, they all move down along an inelastic demand function similar to the industry demand function. Market share will not increase and revenue will decline. Advertising research usually finds that the firm with the largest share of voice (the firm's advertising as a percentage of total industry advertising) has the largest share of the market. Each firm attempts to advertise more than its rivals, which results in a high level of industry advertising. However, popular price promotions (e.g., two packs for the price of one, promotional sales with the price differential absorbed by the parent company rather than the retailer) are prevalent tactics that tobacco companies use.^b

The high level of total advertising expenditures by the tobacco industry also is a function of the regulatory environment. Tobacco is an addictive substance with a high degree of brand loyalty. For such a product, in a period of increasing regulation, short-run sales maximization may be preferred to short-run profit maximization. Consumers lost now to a cheaper brand will not be likely to return. As a response to this, tobacco firms may take a multiperiod perspective on sales and profits. In a multiperiod framework, advertising and pricing decisions are guided by the goal of sales maximization, which is expected to maximize profit in the long run.

^aSchmalensee, R. L. 1972. *On the economics of advertising*. Amsterdam: North Holland.

^bFeighery, E. C., K. M. Ribisl, N. C. Schleicher, and P. I. Clark. 2004. Retailer participation in cigarette company incentive programs is related to increased levels of cigarette advertising and cheaper cigarette prices in stores. *Preventive Medicine* 38 (6): 876–84.

in 1980 was reported at 6.3%, although by 2000 this ratio was down to 2.9% (for later data, see chapter 4). However, the empirical studies of tobacco advertising reviewed below used historic data from the period when the ratio was relatively high.

Economic Issues in Tobacco Advertising

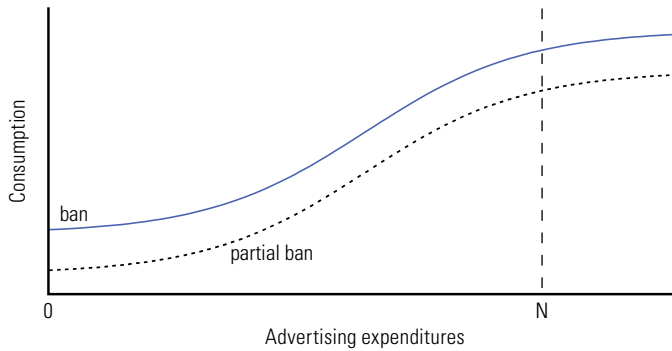
To interpret the findings of prior studies of tobacco advertising, it is important to understand how the extent of advertising is measured. In general, three methods of measuring advertising have been used:

1. National aggregate advertising expenditures from annual or quarterly time series

2. Local-level, cross-sectional advertising expenditure measures
3. Advertising bans

Examining the advertising response function can provide some insight into the consequences of these alternative methods of measuring advertising. An advertising response function describes the functional relationship between consumption and advertising. The advertising response function is nonlinear because of diminishing marginal effect. That is, while advertising increases consumption, increments of advertising yield ever smaller increments in consumption.* Ultimately, consumption is completely unresponsive to additional advertising, because all those who can be

*The literature on advertising response functions includes a variety of specifications. Some specifications also include a range of increasing marginal product.

Figure 7.1 Relationship between Levels of Advertising and Consumption Aggregated at the National Level

Note. N = point beyond which slope of function becomes near zero. A ban on certain media shifts the function downward.

Adapted from Saffer, H. 2000. Tobacco advertising and promotion. In *Tobacco control in developing countries*, ed. P. Jha and F. Chaloupka, 219. Oxford: Oxford Univ. Press. Reprinted with permission of Oxford University Press.

enticed to buy the product have already done so and they can consume only a certain amount.

Advertising response functions have been used for some time in brand-level research to illustrate the effect of advertising on consumption at various levels of advertising.^{173–175} However, the same theory that describes the brand-level advertising response function also might be applied to aggregations of brands.* An aggregation of all brands in an industry can be defined as the industry-level response function. For the tobacco industry, the industry-level response function would include all brands and variations of cigarettes, cigars, and other tobacco products. If advertising resulted only in brand switching, the industry-level response function would be horizontal.[†]

The assumption of a positively sloped industry-level response function provides a potential framework to analyze prior

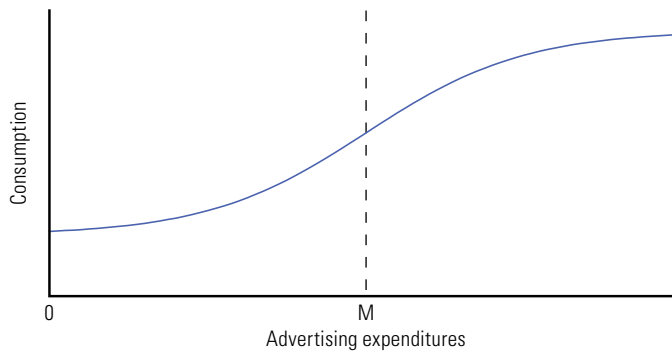
research. The prior research, in turn, either will validate or reject this assumption. The industry-level response functions are different from the brand-level response functions in that advertising-induced sales must come at the expense of sales of products from other industries or consumer savings.

An industry response function using national data and an industry response function using market-level data are defined. The reason for two response functions is that the likely outcome (the relationship between advertising and consumption) of measuring advertising at the national level could be different from measuring advertising at the market level (geographic area). Figure 7.1 illustrates the national-level response function. The vertical axis measures industry-level consumption at the national level, and the horizontal axis measures industry-level advertising expenditures at the national level. Figure 7.2 charts a market-level function. The vertical

*Specific media may be subject to diminishing marginal product, which would suggest that media diversification is necessary to maximize the effect of a given advertising budget.

[†]The theory of an industry response function also applies to counteradvertising, where the industry response function slopes downward and is subject to diminishing marginal product. Counteradvertising expenditures are relatively small, so a negative effect of these expenditures is likely to be observed in empirical studies.

Figure 7.2 Relationship between Levels of Advertising and Consumption Aggregated at the Market Level



Note. M = point around which changes in advertising expenditures produce observable changes in consumption.

Adapted from Saffer, H. 2000. Tobacco advertising and promotion. In *Tobacco control in developing countries*, ed. P. Jha and F. Chaloupka, 219. Oxford: Oxford Univ. Press. Reprinted with permission of Oxford University Press.

axis measures industry-level consumption at the market level, and the horizontal axis measures industry-level advertising expenditures at the market level.

Another important aspect of advertising is that its effects linger over time. That is, advertising in one period will have a lingering, although smaller effect, in the next period. Although the rate of decline over time remains an arguable issue, research such as that of Boyd and Seldon¹⁷⁶ indicates that cigarette advertising fully depreciates within a year. The lingering effect of advertising is the basis for a widely used advertising technique known as pulsing. A pulse is a burst of advertising, in a specific market, that lasts for a short time and then stops.* After a period with no (or minimal) advertising, the market will be exposed to another pulse. The length and intensity of a pulse will vary due to several factors, including the specific media, the specific advertisers, and the advertising costs in the specific market.

The response function represented in figure 7.1 helps to illustrate the likely

outcome of measuring advertising at the national level. National advertising expenditures are the total of all tobacco advertising expenditures, for all advertisers, in all media, for all geographic market areas. This high level of aggregation reduces variation in the data. Since the advertising-to-sales ratio for tobacco was relatively large in the past, advertising may have been in a range of a very low or zero marginal effect. In figure 7.1, this situation is represented as measuring advertising in a range around N. The slope of the response function in the range around N is near zero.† That is, increases in advertising around N will not produce incremental cigarette sales (consumption). Studies that use this type of data would be expected to show no, or very little, effect of advertising.

Studies that use cross-sectional data to measure tobacco advertising are less common. Cross-sectional data can differ but typically are at the level of a local market area and have greater variation than national-level data for several reasons. Local markets are exposed to different

*This practice also is known as flighting, and the advertising period is known as a flight.

†In a regression, the advertising coefficient is equal to the slope of the response function.

levels of advertising because of pulsing and because of differences in local relative media costs. A media plan may call for a different schedule of pulses in different cities or regions and a different mix of media. This creates variation in advertising across local areas, which increases the probability that some areas are exposed to a range of nonzero marginal effect of advertising. Figure 7.2 illustrates this situation, with the advertising data occurring in a range around M. Studies using local-level advertising data are more likely to find a positive relationship between advertising and consumption.

The third category of studies is based on tobacco advertising bans. The potential effect of a partial advertising ban is a downward shift of the response function, as figure 7.1 illustrates. A partial ban may not reduce the total level of advertising, but it will reduce the effectiveness of the remaining nonbanned media. The reason for this is that a ban on one or more media will result in a shift toward the remaining media. However, advertising in each medium is subject to a diminishing marginal effect. The increased use of nonbanned media will result in a lower average effect for these media. This shifts the overall media response function downward. When only a few media are banned (i.e., a weak ban or limited ban as defined by Saffer and Chaloupka 2000),¹⁷⁷ the change is minimal or modest and may be difficult to detect. However, when more media are banned (i.e., a comprehensive ban, defined by Saffer and Chaloupka as a ban on 5–7 media channels),¹⁷⁷ the magnitude of the change increases, the marginal impact of additional advertising in the remaining (nonbanned) media decreases, and the bans are more successful in suppressing consumption.

Firms may or may not respond to this decrease in effectiveness of their advertising

expenditures. Some may try to compensate with more advertising in nonbanned media, which would be illustrated by moving to a higher level of advertising on a lower advertising response function.* Firms also might respond by increasing the use of other marketing techniques such as promotional allowances to retailers.

Two authors^{178,179} make the interesting and almost universally ignored point that a study of cigarette advertising should, therefore, control for changes in the level of advertising in all industries. The level of advertising in all industries is defined as external advertising. The effect of external advertising can be explained with a simple example. Holding savings constant, if all industries, including cigarette manufacturers, doubled advertising, cigarette sales would not increase.[†] This is because the increase in advertising in each industry would be mutually canceling. Cigarette advertising should, therefore, be measured relative to external advertising.

Econometric Studies

Econometric studies of the effect of cigarette advertising on cigarette consumption are grouped into studies that use (1) time-series national expenditure data; (2) local-level, cross-sectional data; and (3) advertising bans. Table 7.5 provides a list of econometric studies and prior reviews. Each type of study and the results from previous reviews are described.

Time-Series National Expenditure Studies

Table 7.5 lists 15 econometric studies of cigarette advertising expenditure

*In a simple model, the decrease in marginal product would reduce the use of the input. However, in an oligopoly model, with response to rivals, one reaction to reduced sales is to increase advertising.

†This assumes that there is no change in the relative effectiveness of all advertising.

Table 7.5 Econometric Studies of Tobacco Advertising and Consumption

Study	Data	Major conclusions ^a
Time-series studies		
Hamilton 1972 ¹⁸⁰	U.S. 1925–70	no effect of advertising
Schmalensee 1972 ¹⁷⁹	U.S. 1955–67	no effect of advertising
McGuinness and Cowling 1975 ¹⁸¹	UK quarterly, 1957–68	small positive effect of advertising
Grabowski 1976 ¹⁸²	U.S. 1956–72	no effect of advertising
Schneider et al. 1981 ¹⁸³	US 1930–78	no effect of advertising
Bishop and Yoo 1985 ¹⁸⁴	U.S. 1954–80	small positive effect of advertising
Abernethy and Teel 1986 ¹⁸⁵	U.S. 1949–81	small positive effect of advertising
Baltagi and Levin 1986 ¹⁸⁶	U.S. 1963–80	no effect of advertising
Johnson 1986 ¹⁸⁷	Australian 1961–86	no effect of advertising
Porter 1986 ¹⁸⁸	U.S. 1947–82	no effect of advertising
Chetwynd et al. 1988 ¹⁸⁹	New Zealand, quarterly, 1973–85	small positive effect of advertising
Seldon and Doroodian 1989 ¹⁹⁰	U.S. 1952–84	small positive effect of advertising
Wilcox and Vacker 1992 ¹⁹¹	U.S. quarterly, 1961–90	no effect of advertising
Valdes 1993 ¹⁹²	Spanish 1964–88	small positive effect of advertising
Duffy 1995 ¹⁹³	UK, quarterly, 1963–88	no effect of advertising
Cross-sectional studies		
Lewit et al. 1981 ¹⁹⁴	7,000 youths 1966–70	positive effect of advertising
Roberts and Samuelson 1988 ¹⁹⁵	1971–82 for 5 firms	positive effect of advertising
Goel and Morey 1995 ¹⁹⁶	U.S. states 1959–82	positive effect of advertising
Advertising ban studies		
Hamilton 1975 ¹⁹⁷	11 OECD countries	no effect of a ban
Laugesen and Meads 1991 ¹⁹⁸	22 OECD countries 1960–86	negative effect of a ban
Stewart 1993 ¹⁹⁹	22 OECD countries 1964–90	no effect of a broadcast ban
Saffer and Chaloupka 2000 ¹⁷⁷	22 OECD countries 1970–92	negative effect of a ban
Saffer 2000 ²⁰⁰	102 countries 1970–95	negative effect of a ban
Prior reviews and other work		
Boddewyn 1986 ²⁰¹	descriptive data	no effect of bans
Andrews and Franke 1991 ²⁰²	meta-analysis	positive effect of advertising
Smee et al. 1992 ²⁰³	literature review and 2 countries analysis	positive effect of advertising
Lancaster and Lancaster 2003 ²⁰⁴	literature review	no effect of advertising
Keeler et al. 2004 ²⁰⁵	U.S. 1990–2000 effect of MSA	positive effect of advertising
Nelson 2006 ²⁰⁶	international, meta-analysis	no effect of advertising

Note. UK = United Kingdom; OECD = Organisation for Economic Co-operation and Development; MSA = Master Settlement Agreement.
^a“Positive effect” means an increase in consumption, and “negative effect” means a decrease in consumption.

studies, which use national annual or quarterly time-series data. All of these studies found either no effect or a small effect of advertising on cigarette demand.

As mentioned earlier, it would be difficult to find an effect since the level of cigarette advertising is relatively high and national-level data may not provide sufficient

variance.* These studies typically use annual or quarterly data from one country, with 20 to 90 observations. Advertising usually is measured by expenditures, with control variables such as price and income included.

Chetwynd and colleagues¹⁸⁹ found a small effect with quarterly data that was lost when aggregation was increased to the annual level. This supports the theory that annual data have insufficient variance. Duffy¹⁷⁸ reviewed these studies and a few more that also use national-level advertising data. Duffy also reported that these studies found either no effect or a small effect, and concluded on the basis of these findings that cigarette advertising has no effect on cigarette consumption. An alternative conclusion, however, is that studies that use a single time series of national-level data measure the effect of advertising on consumption at a level of advertising for which little or no effect can be found, as illustrated by the industry response function in the area at N or higher in figure 7.1.

Local-Level Cross-Sectional Studies

Only three studies use cross-sectional data (table 7.5). The reason for so few cross-sectional studies is that the data are expensive and difficult to assemble. Cross-sectional data measure advertising over a range around M, as illustrated in the industry-level advertising response function at the market level shown in figure 7.2. Since external advertising primarily is national, it will have little cross-sectional variation and can be safely ignored. The study by Roberts and Samuelson¹⁹⁵ is somewhat different but still may be classified as cross-sectional. In their study, the cross-sectional unit is the firm. These researchers found that advertising increases market size and that market share is related to the number of brands sold by a company. These studies show that when advertising

is measured over a wide range, such as with cross-sectional data, a significant positive effect of advertising is observed.

Advertising Bans

The third category of studies examine the effect of advertising bans on various aggregate-use measures. Partial advertising bans shift the function in figure 7.1 downward. Five studies of cigarette advertising bans using pooled international data sets have been published (table 7.5). Hamilton¹⁹⁷ used data on 11 countries over the period from 1948 to 1973 and presented a set of regressions using pooled data of countries with bans and countries without bans. The regressions show no effect from a ban. Laugesen and Meads¹⁹⁸ used data from 22 Organisation for Economic Co-operation and Development (OECD) countries for the period 1960 to 1986. Like Hamilton, Laugesen and Meads also found that before 1973, cigarette advertising bans had no effect on consumption. However, they found that after 1973, cigarette advertising bans have had a significant negative effect on consumption. Laugesen and Meads argued that, before 1973, manufacturers were able to increase alternative marketing efforts in response to broadcast advertising restrictions. This is unmeasured in the data set and offsets the effect of the broadcast bans. However, after 1973, more comprehensive antismoking legislation was enacted. These newer laws restricted advertising efforts to a greater degree and resulted in lower cigarette consumption. Stewart¹⁹⁹ conducted the third study of cigarette advertising bans. Stewart analyzed data from 22 OECD countries for the period 1964 to 1990 and found that a television advertising ban had no effect. This study did not control for other offsetting increases in advertising in other media and did not separately examine the more restrictive period after 1973.

*A flat portion of the function has a zero slope, which means a zero regression coefficient and no relationship between consumption and advertising.

One reason that the empirical results from these three studies are mixed is that the bans must be sufficiently inclusive to reduce the average effect of the nonbanned media so the industry does not compensate by increasing advertising or other marketing efforts. For example, a ban on television cigarette advertising alone may not be enough to affect total advertising, since other media and other marketing techniques can be used to compensate for the loss. Chapter 3, in the section titled “Ineffectiveness of partial advertising bans,” reviews studies and examples of how tobacco companies have circumvented partial advertising bans.

The International Advertising Association (IAA) published another ban study as a report edited by Boddewyn.²⁰¹ According to tobacco industry and litigation documents, a British American Tobacco official was the report’s ghostwriter.²⁰⁷ The IAA report presented data on consumption in 16 nations (8 centrally planned economies and 8 free-market economies), all but one of which had adopted tobacco advertising bans or had no advertising. The study included no other controls on tobacco demand such as tobacco price or income. Price changes and income changes can have a larger effect on tobacco demand than advertising bans. Thus, the failure to control these effects makes it impossible to determine the effect of bans from this study.

Saffer and Chaloupka¹⁷⁷ estimated the effect of tobacco advertising bans by using an international aggregate data set consisting of 22 countries for the years 1970 through 1992. The advertising bans considered included seven media: television, radio, print, outdoor, point of purchase, movie, and sponsorship. Three ban variables were constructed. The first, a weak ban, equaled one if zero, one, or two bans were in effect. The second, a limited ban, equaled one if three or four media were banned. The third, a comprehensive ban, equaled one if five, six, or seven media were banned. A set of regressions limited to the

period 1984 to 1992 showed that limited bans were not effective but that comprehensive bans were effective. The results suggest that moving from a limited ban to a comprehensive ban has a compounding effect that is consistent with the theory that limited bans allow substitution to other media. The results show that limited sets of bans are minimally effective in reducing the impact of advertising. However, comprehensive bans have a clear effect in reducing tobacco use.

Saffer²⁰⁰ provided empirical research using data from 102 countries on the effect of tobacco advertising. The primary conclusion of this research was that a comprehensive set of tobacco advertising bans can reduce tobacco consumption and that a limited set of advertising bans will have little or no effect. The policy options that have been proposed for the control of tobacco advertising include limitations on the content of advertisements, restrictions on the placement of advertising, restrictions on the time that cigarette advertising can be placed on broadcast media, total advertising bans in one or more media, counteradvertising, and taxation of advertising. Saffer concluded that restrictions on content and placement of advertising and bans in only one or two media are not effective. However, comprehensive control programs, including comprehensive advertising bans, reduce cigarette consumption. Counteradvertising also can reduce tobacco use (see chapter 12). The taxation of advertising reduces total advertising and raises revenue that can be used to fund counteradvertising.

Prior Reviews and Other Work

Andrews and Franke²⁰² presented the results from 24 time-series studies of advertising and cigarette demand, which include 147 estimates of the advertising elasticity. They used these estimates to compute a mean elasticity and a variance for this mean. Meta-analysis assumes that all the data being analyzed come from randomized

trials. In a regression context, this means that all unobserved heterogeneity in each study was random or controlled. This is an unlikely possibility, and how robust the method is to violations in this assumption is not known in this context. Nevertheless, Andrews and Franke found a small positive effect of tobacco advertising—a weighted mean advertising elasticity of 0.060, which is significantly different from zero ($p < 0.039$). This means that a 10% increase in cigarette advertising expenditures would result in a 0.6% increase in cigarette sales. The authors also showed that the magnitude of the effect of advertising on sales (i.e., advertising elasticity estimates) declined over time in the United States and the United Kingdom—“a result which is to be expected as a product moves through its life cycle.”²⁰²

Another meta-analysis by Nelson²⁰⁶ reanalyzed the studies from the Andrews and Franke meta-analysis and included several additional ones. One criticism Nelson made of the Andrews and Franke analysis was that it included more than one estimate from the studies considered; multiple estimates from the same study are not independent. Nelson selected one estimate from each study for his meta-analysis, but the selection criteria were not well explained. The aggregate estimate of advertising elasticity from this study was not statistically different from zero. A subsequent erratum to this study disclosed that Nelson consults for a law firm that represents the tobacco industry.^{208*}

A report prepared by the Economics and Operational Research Division of the UK Department of Health²⁰³ provided an informative discussion of the econometric issues involved in estimation of the effects of advertising. The report pointed out that advertising is subject to diminishing

marginal effectiveness and that studies using annual time-series data will measure the effects of advertising in a range in which marginal effects are likely to be small or zero. The report also indicated that studies of total or comprehensive bans examined across countries avoid many of the problems associated with time-series advertising studies because, in the case of ban studies, an advertising effect “will be on a larger scale and should show up more clearly.” The report reviewed a number of prior time-series studies and found that enough studies reported positive results to conclude that advertising has a positive effect on consumption. In addition, the report also concluded that in Norway, Finland, Canada, and New Zealand, the banning of advertising was followed by a fall in smoking on a scale that cannot reasonably be attributed to other factors. The report also provided empirical results for Norway and the United Kingdom. Unfortunately, the analysis included lagged values of consumption as an independent variable and estimated these equations with ordinary least squares, which is known to create biased results.

Keeler and colleagues²⁰⁵ estimated a demand function for cigarettes with the use of monthly data from 1990 to 2000. This was a period of significant advertising changes that resulted from the MSA. The MSA took effect in November 1998 and eliminated tobacco advertising on billboards, in transit media, and in most other outdoor venues. The researchers reported that tobacco companies had been reducing traditional media advertising in favor of other marketing techniques since 1980. They argued that the MSA resulted in a slowing of this trend, and as a result, a decrease in the reduction in cigarette sales. This was a time-series study, but since

*Erratum: “The author consults with a law firm that represents the tobacco industry. The paper was independently prepared by the author and was not reviewed by the law firm prior to submission for publication. I wish to thank two anonymous referees for helpful comments on an earlier draft. The usual caveats apply.”

the primary source of advertising variation was the exogenous shift in advertising due to the MSA, this study is not in the same category as the older time-series studies reviewed above, and is more credible than those older studies. Keeler and colleagues estimated an advertising elasticity of 0.27, which is large for this type of elasticity.

Lancaster and Lancaster²⁰⁴ reviewed 35 single-country studies of tobacco advertising and found that overall advertising had little or no effect on consumption. These results are consistent with the industry-level advertising response function about the point N (figure 7.1). These researchers also reviewed 21 studies of tobacco advertising bans. Here, the evidence was mixed, but the authors concluded that bans had no effect. Some of these ban studies examined only limited bans, which are not likely to have any effect.

Time-Series Studies of Smoking Initiation and Brand Choice

Besides examination of time-series expenditure data and cigarette consumption, other investigators have studied measures of smoking initiation. Pierce and Gilpin²⁰⁹ examined annual age-specific rates of smoking initiation from the late 1800s through the 1970s. They note changes in these rates following the launching of novel and aggressive cigarette advertising campaigns. The early campaigns were targeted at males, and this group, but not females, showed increased initiation. In the 1920s, when women became the target of advertising (e.g., “Reach for a Lucky Instead of a Sweet”), initiation incidence rates increased for both female adolescents and adults, but not for males. Advertisements for “women’s brands” (e.g., Virginia Slims) were heavily featured in the late 1960s. Girls, but not women or males of any age, showed increased rates of initiation.^{209,210} The increases in initiation observed

appeared to be specific to the group being targeted by the advertising campaigns.

Another analysis of adolescent and young adult initiation rates showed that after a decline in the early 1980s, there was an increase in adolescent but not young adult initiation rates. This increase coincided with R.J. Reynolds’s Joe Camel campaign, perhaps reinforced by both the “Camel Cash” and “Marlboro Mile” promotions programs.^{211,212} Another study²¹³ compared observed and expected rates of initiation of daily smoking among 9th graders (using Monitoring-the-Future data) with tobacco industry promotional expenditures. Using diffusion modeling, observed rates departed significantly from expected rates coincident with the increase in tobacco industry resources devoted to promotional activities.

A study published in 2006 examined the temporal relationship between health-theme magazine advertising for low-tar cigarette brands and sales of these brands.²¹⁴ The authors reviewed cigarette advertisements published in 13 widely read magazines from 1960 to 1990 and noted the type of low-tar brand and whether the theme of the advertisement implied a health advantage. Two types of low-tar brands were considered: (1) those (14 in all) that represented a brand extension of a regular-tar brand (e.g., Marlboro Lights) and (2) those brands (6 in all) that had always been exclusively low tar (e.g., Carlton). Advertising that carried a health theme then was computed as a proportion of all advertising for these brands and plotted together with the proportion of sales of these brands among sales for all brands.

For the brand extensions, the health theme began in 1965 and increased slowly until 1975 (around 5% of all advertising for these brands), then increased markedly until 1977 (nearly 35% of all advertising of these brands). Sales for the low-tar brand extensions were low (<5% of total) until

1976 but increased rapidly until 1982 (23%). By 1985, the health-theme advertising had returned to a low level (just over 5%), but sales remained high, reaching 25% in 1990. The pattern for exclusively low-tar brands was different. While sales also increased rapidly following a marked increase in health-theme advertising beginning in 1974, the health-theme advertising remained at nearly peak levels (30%–40%) through 1990. Sales peaked at about 15% in 1981 and declined slightly thereafter to 10% in 1990.

For both brand types, marked increases in health-theme advertising were followed by increases in sales. It appeared, however, that once the brand extensions were established, further such advertising was not necessary to retain brand share, but advertising was needed for the exclusively low-tar brands.

Further information on advertising for low-tar cigarettes appears in chapters 4 and 5.

Summary

The most definitive evidence of the influence of cigarette marketing on youth smoking would involve experimental manipulation of adolescents' long-term exposure to cigarette marketing and assessment of its impact on adolescents' initiation of smoking. However, such a study would be either unethical or unfeasible. Nevertheless, a body of experimental evidence exists about the effect of brief exposure to cigarette marketing on images of smokers, perceptions about the prevalence of smoking among adolescents, and intentions to smoke.^{95–99} Further, an abundance of evidence from multiple lines of research using other study designs collectively establishes a causal link between tobacco marketing and smoking behavior.

Adolescent Psychological Needs

One type of evidence involves adolescent psychological needs. Many adolescents

are motivated to smoke by the perception that doing so will help fulfill important psychological needs. Adolescents perceive that smoking will contribute to popularity and that advertising conveys this message. Those who believe the message are more likely to smoke. In addition, tobacco company documents show that marketing for cigarette brands popular with youth associates smoking those brands with popularity.

Many adolescents perceive that smoking will confer attributes associated with success with the opposite sex—toughness in the case of boys and slenderness in the case of girls. Girls are more likely to smoke if they think it will help them be thin and attractive. Cigarette marketing conveys that young women who smoke are high in sex appeal. Tobacco company documents show that several of the most youth-popular brands have been consistently and effectively associated with an image of rugged masculinity and sex appeal.

Many adolescents have a need to be rebellious and see smokers as having this characteristic. As a result, rebelliousness is a predictor of smoking initiation. At least one cigarette brand—Camel—is marketed for the rebellious.

Adolescents' needs for sensation, risk taking, and fun also are associated with smoking. Adolescents high in sensation seeking are more likely to smoke. Cigarette marketing frequently associates smoking with themes of fun and excitement. Many adolescents feel that cigarette advertising conveys that smokers will derive pleasure from smoking.

Cigarette marketing also exploits adolescents' needs to cope with depression and anxiety. Many adolescents perceive that smoking can help reduce distress. Adolescents high in stress or depression appear more likely to smoke. Those who are depressed and receptive to cigarette

advertising are particularly vulnerable to initiating smoking. Numerous tobacco company documents indicate that cigarette marketing often conveys that smoking youth-popular brands will help a person to relax or better cope with stress.

Cigarette Marketing and Image Enhancement

Because of the importance of popularity and peer acceptance in adolescence, most teenagers have a strong need for a positive self-image. Many adolescents perceive smokers to have a number of desirable traits. The perception that smoking will reinforce a desired self-image motivates those adolescents to smoke.

Both correlational and experimental studies show that exposure to cigarette marketing influences adolescents to have a more favorable image of smokers, to perceive that smoking among adolescents is more prevalent, and to have more positive intentions to smoke. The experimental studies provide particularly strong evidence of the influence of marketing. They control for other possible influences on smoking and rule out the possibility that there is a relationship between smoking and exposure to advertising simply because both are due to some third variable, such as innate curiosity about smoking.

Exposure to Cigarette Marketing and Smoking Susceptibility and Behavior

This chapter reviewed a large number of cross-sectional and longitudinal studies dealing with the relationship between various measures of exposure to cigarette marketing and several different measures of susceptibility to smoking and actual smoking. The longitudinal studies provide strong evidence of such an effect, since exposure to tobacco marketing occurs

before changes in smoking behavior occur. The findings are robust and consistent. In the overwhelming majority of studies, exposure to cigarette marketing was associated with smoking behavior. This was for diverse measures of exposure including self-reported exposure to advertisements, derived estimates of adolescents' exposure, recall of specific advertisements, recognition of brands in advertisements in which brand information had been removed, a variety of attitudes toward the advertisements, beliefs about the impact of advertising, and multicomponent indices of adolescents' receptivity to cigarette advertising. Measures of exposure predicted both increases in adolescents' stated intentions to smoke as well as the actual initiation of smoking.

Tobacco companies have repeatedly asserted that peer and family influences—not their marketing practices—influence adolescents to smoke. However, many of these cross-sectional and longitudinal studies of the influence of marketing exposure measured and analyzed social influences along with tobacco marketing exposure. They generally found that marketing practices influence adolescent smoking even after controlling for peer and parental influences. Indeed, a number of the studies that used advertising and influence of peers and parents to predict later smoking or intent to smoke found that advertising exposure is a stronger predictor than peer or parental smoking.^{150,154,155,160}

Yet, these studies probably underestimate the influence of marketing practices, since some marketing influence develops through peers and parents. For example, tobacco companies design marketing to influence the perception that popular people smoke specific brands. These practices influence not just one person, but entire peer groups. Because of exposure to these advertisements, some adolescent peer groups may view smoking as the “in” thing. These groups are then more likely to approve and

admire someone who smokes a brand that marketing tells them “in” people smoke.

Thus, evidence that an adolescent is more likely to smoke if his or her friends smoke, is, in part, due to the influence cigarette marketing has on the entire peer group. Advertising that associates a cigarette brand with popularity prepares an entire peer group to approve of those who smoke it. When adolescents correctly perceive Marlboro as a popular brand, they perceive that their peers will accept them if they smoke it.

Effects of Tobacco Advertising on Tobacco Consumption

The issues and studies relative to this line of evidence indicate, at a minimum, that empirical estimation of the effects of tobacco advertising on tobacco consumption is a complex challenge. The most potentially valid econometric strategies are either cross-sectional data with advertising measured by independent sources at a local level or international data on comprehensive advertising bans. Many econometric studies use small samples of highly aggregated national time-series data and find little or no effect of advertising. This is because the advertising data employed have little variance and are measured at a level of expenditure at which advertising has little or no marginal effect. However, a meta-analysis that pooled the results of 24 such studies did find a small, but statistically significant, positive effect of advertising on cigarette consumption. The evidence from cross-sectional studies using disaggregated local-level data does indicate an effect of advertising on consumption. These time-series and cross-sectional studies support the theory that the industry response function slopes upward and is subject to diminishing marginal effects.

The studies of advertising bans suggest that bans can reduce consumption under

certain circumstances. Banning advertising in a limited number of media has little or no effect. Limited advertising bans do not reduce the total level of advertising expenditure but simply result in substitution to the remaining nonbanned media or to other marketing activities. Banning advertising in most or all available media can reduce tobacco consumption, because, in these circumstances, the possibilities for substitution to other media are limited.

Conclusions

1. Much tobacco advertising targets the psychological needs of adolescents, such as popularity, peer acceptance, and positive self-image. Advertising creates the perception that smoking will satisfy these needs.
2. Adolescents who believe that smoking can satisfy their psychological needs or whose desired image of themselves is similar to their image of smokers are more likely to smoke cigarettes.
3. Experimental studies show that even brief exposure to tobacco advertising influences adolescents' attitudes and perceptions about smoking and smokers, and adolescents' intentions to smoke.
4. The vast majority of cross-sectional studies find an association between exposure to cigarette advertising, measured in numerous ways, and adolescent smoking behavior, measured in numerous ways, indicating a robust association.
5. Strong and consistent evidence from longitudinal studies indicates that exposure to cigarette advertising influences nonsmoking adolescents to initiate smoking and to move toward regular smoking.
6. Many econometric studies have used national time-series data to

examine the association between tobacco advertising expenditures and tobacco consumption. Some of these studies found a small positive effect of advertising on consumption. Other studies failed to find a positive effect, probably because the data used had little variance and were measured at a high level of advertising expenditure at which changes in the volume of advertising have little or no marginal effect.

7. The evidence from three cross-sectional econometric studies using disaggregated local-level data indicates a positive effect of advertising on tobacco consumption.
8. The studies of tobacco advertising bans in various countries show that comprehensive bans reduce tobacco

consumption. Noncomprehensive restrictions generally induce an increase in expenditures for advertising in “nonbanned” media and for other marketing activities, which offset the effect of the partial ban so that any net change in consumption is minimal or undetectable.

9. The total weight of evidence from multiple types of studies, conducted by investigators from different disciplines, using data from many countries, demonstrates a causal relationship between tobacco advertising and promotion and increased tobacco use, as manifested by increased smoking initiation and increased per capita tobacco consumption in the population.

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8

Legal and Constitutional Perspectives on Tobacco Marketing Restrictions

Policy interventions for tobacco control have moved increasingly toward strong limitations on tobacco marketing. Steps in this direction include legislative and regulatory efforts by governmental agencies in the United States and other countries and a comprehensive ban on tobacco advertising, promotion, and sponsorship incorporated into the World Health Organization's Framework Convention on Tobacco Control (WHO FCTC). This chapter explores the legal and constitutional issues presented by such restrictions, highlighted by discussions of controls imposed by the U.S. Federal Cigarette Labeling and Advertising Act, regulatory efforts by agencies including the U.S. Food and Drug Administration and Federal Trade Commission, and attempts at widespread promotional bans in Canada and the European Union.

Constitutional protection of commercial speech in the United States has been a major impediment to enacting a complete ban on tobacco advertising and promotion, and implementation of the WHO FCTC is subject to the constitutional frameworks of countries that are parties to the treaty. Nonetheless, the scope of such restrictions has continued to grow and evolve, with future limits remaining a matter of continuing legal and policy debate.

Introduction

This chapter examines the legal and constitutional issues affecting regulatory efforts aimed at tobacco marketing and promotion. Such efforts have expanded over time in response to public health concerns about the content and outcomes of tobacco product marketing and have become an important component of tobacco control policy interventions. As the scope of marketing restrictions broadens, important questions arise about balancing the public's interest with the right to free speech and about the allowable scope of regulatory and legislative efforts. This chapter explores these issues within the framework of existing protections for commercial speech, the efforts of regulatory agencies, and legal precedents in the United States and elsewhere.

Chapter 3 examines the arguments for increased regulation of tobacco marketing and promotion. These issues include the health consequences of tobacco use, deceptive or misleading promotional tactics, the failure of tobacco industry efforts to self-regulate its marketing practices, and the ineffectiveness of partial restrictions on tobacco advertising and promotion. Effective global policies that respond to these concerns must consider the legal and constitutional framework of each country involved.

In response to the global health impact of tobacco promotion, the World Health Organization (WHO) called on countries to undertake a comprehensive ban of all tobacco promotion, in accordance with each country's respective constitution, as part of the Framework Convention on Tobacco Control (FCTC). This chapter focuses on the United States but also illustrates and summarizes relevant regulatory actions and legal rulings in Canada, due to its proximity to the United States, and in the European Union (EU) because of the importance of regional developments taking place there.

Constitutional, Statutory, and Regulatory Perspectives

In the United States, constitutional and statutory provisions have impeded efforts to restrict tobacco advertising. First, there is a strong tradition of protecting free speech. The First Amendment to the U.S. Constitution prohibits the government from “abridging the freedom of speech.”¹ Since the mid-1970s, the U.S. Supreme Court has increasingly interpreted this provision to include “commercial” speech, meaning speech solely intended to sell products or services. Although the Supreme Court initially afforded commercial speech a low level of constitutional protection, in recent years it has imposed strict limits on governmental interference with advertising.

Other constitutional and statutory constraints have similarly impeded efforts to warn consumers about the health hazards of smoking and to limit advertising. The Federal Cigarette Labeling and Advertising Act (FCLAA),² which requires cigarette packs to contain specific health warnings, also contains language preempting state and local governments from imposing additional warnings on cigarette packs. The enactment by Congress of the FCLAA was also one basis for the Supreme Court's conclusion that the U.S. Food and Drug Administration (FDA) lacks jurisdiction to regulate tobacco products. Finally, even when the government has had some authority to regulate advertising, such as the Federal Trade Commission's (FTC's) mandate to prohibit false and misleading advertising, political and other pressures appear to have limited the exercise of that authority.³

This chapter describes legal constraints, both constitutional and statutory, on the

regulation of tobacco advertising and promotion in the United States, compares them to constraints on advertising restrictions in selected other countries, and discusses approaches that would more likely be consistent with current legal doctrine.

The First Amendment Framework

Evolution of Commercial Speech Protection

The First Amendment to the U.S. Constitution provides that “Congress shall make no law ... abridging the freedom of speech, or of the press.”^(n.1) 1 The First Amendment constrains the federal government from suppressing speech by private citizens, even if the subject matter is factually wrong or offensive.⁴ (The same constraints are placed on states through the Fourteenth Amendment.) While government may, consistent with the First Amendment, exert some control as to the physical and temporal attributes of speech—so-called time, place, and manner restrictions^(n.2) 5—it generally may not prohibit communications on the basis of their content.⁶ The general prohibition on content-based restrictions of speech applies equally to speech concerning matters of public health. In other words, the potentially detrimental effect of a particular communication on the health of an individual or population in and of itself is not considered a legitimate basis for government suppression.⁷

Several rationales are offered for such broad protection of free speech. Freedom of expression is thought to advance the values of (1) individual self-fulfillment, (2) attainment of the truth, (3) societal participation in social and political decision making, and (4) maintaining a balance between stability and change within society.⁸ The second value, that of truth, has been encapsulated in the metaphor

of a “marketplace of ideas.”^{5,9,10} In his 1919 dissent in *Abrams v. United States*, Justice Oliver Wendell Holmes, citing John Stuart Mill, states that

when men have realized that time has upset many fighting faiths, they may come to believe ... that the ultimate good desired is better reached by free trade in ideas—that the best test of truth is the power of the thought to get itself accepted in the competition of the market.^{10(p.630)}

Under the marketplace rationale, permitting unfettered expression exposes false ideas to debate and rejection while permitting truth to be discovered. As Mill states,

the peculiar evil of silencing the expression of an opinion is, that it is robbing the human race; posterity as well as the existing generation; those who dissent from the opinion, still more than those who hold it. If the opinion is right, they are deprived of the opportunity of exchanging error for truth: if wrong, they lose, what is almost as great a benefit, the clearer perception and livelier impression of truth, produced by its collision with error.¹¹

Certain classes of speech have, however, been categorically excluded from First Amendment protection. The exclusions have come, not from the text of the First Amendment itself, but from Supreme Court interpretations thereof. In *Chaplinsky v. New Hampshire*,¹² the Court opines, “There are certain well-defined and narrowly limited classes of speech, the prevention and punishment of which have never been thought to raise any Constitutional problem.”^{12(pp.571–72)} The Court lists these categories as “the lewd and obscene, the profane, the libelous, and the insulting or ‘fighting’ words.”^{12(p.572)} From this and other cases, the following categories of speech have been historically excluded from First Amendment protection: (1) obscenity, (2) fighting words, (3) incitement, and (4) defamation.¹³ In contrast to political,

social, or artistic expressions, these excluded categories of speech are considered to constitute “no essential part of any exposition of ideas, and are of such slight social value as a step to truth that any benefit that may be derived from them is clearly outweighed by the social interest in order and morality.”^{12(p.572)} In *Texas v. Johnson*,¹⁴ however, the Court struck down a law prohibiting flag desecration, holding that such conduct could not be construed as fighting words.

Until relatively recently, the Supreme Court found that speech relating to commercial transactions and activities—what has become known as “commercial speech”—was also categorically excluded from First Amendment protection.^(n.3) In the 1942 case *Valentine v. Chrestensen*,¹⁵ which was decided shortly after *Chaplinsky*, the Court upheld an ordinance prohibiting the use of city streets for “commercial and business advertising matter.”^{15(p.53)}

The Supreme Court did not revisit the issue again for more than 30 years. In the 1975 case *Bigelow v. Virginia*,⁹ however, the Court struck down an ordinance that would have prohibited a newspaper from carrying an advertisement informing the public that abortions were legal in New York and offering assistance in obtaining abortion services. The Court held that “speech is not stripped of First Amendment protection merely because it appears”^{9(p.818)} in the form of a paid commercial advertisement. The Court limited the effect of *Chrestensen*, stating that the case did not provide “authority for the proposition that all statutes regulating commercial advertising are immune from constitutional challenge”^{9(p.820)} and “does not support any sweeping proposition that advertising is unprotected *per se*.”^{9(p.820)}

The *Bigelow* decision involved advertising solely for abortion services, which the Supreme Court viewed as speech that

“conveyed information of potential interest and value to a diverse audience—not only to readers possibly in need of the services offered.”^{9(p.822)} In the following year, however, the Court confronted head on the issue of “pure” commercial advertising. In *Virginia Pharmacy Board v. Virginia Citizens Consumer Council*,¹⁶ the Court struck down a Virginia law prohibiting pharmacists from advertising the prices of prescription drugs. The state argued that the restriction was necessary to protect consumers, since permitting price advertising would undermine the professionalism of pharmacists and jeopardize the customer-pharmacist relationship. By allowing pharmacists to compete as to price in advertising, the state feared that the quality of pharmacists’ service to customers would decline, to the customers’ detriment. The Court, after acknowledging that its holding in *Chrestensen* had “all but passed from the scene,”^{16(p.759)} formally recognized that commercial speech (i.e., speech that does “no more than propose a commercial transaction”)^{16(p.762)} is protected by the First Amendment. The Court noted the important interests furthered by commercial speech. “As to the particular consumer’s interest in the free flow of commercial information, that interest may be as keen, if not keener by far, than his interest in the day’s most urgent political debate.”^{16(p.763)} With respect to pharmaceutical price advertising specifically, the Court noted that

those whom the suppression of prescription drug price information hits the hardest are the poor, the sick, and particularly the aged. A disproportionate amount of their income tends to be spent on prescription drugs; yet they are the least able to learn, by shopping from pharmacist to pharmacist, where their scarce dollars are best spent.^{16(p.763)}

Responding to the state’s concerns that consumers would choose low-cost, low-quality pharmacy services, the Court states

There is, of course, an alternative to this highly paternalistic approach. That alternative is to assume that this information is not in itself harmful, that people will perceive their own best interests if only they are well enough informed, and that the best means to that end is to open the channels of communication rather than to close them.^{16(p.770)}

The Court concluded that the state could not suppress truthful information about a lawful activity solely because of its concerns about the effect of the information on the disseminators and the recipients of that information.

Notwithstanding its recognition of the value of commercial speech that warranted First Amendment protection, the Court nevertheless notes factors that distinguish commercial speech from other types of protected speech. First, whether commercial speech is truthful “may be more easily verifiable by its disseminator”^{16(p.772)} than other types of speech, since the advertiser is in a position to know about the product. Second, commercial speech is less likely to be stifled by government regulation because the speaker is motivated to speak by the opportunity for commercial profit. Thus, “the greater objectivity and hardness of commercial speech ... may make it less necessary to tolerate inaccurate statements for fear of silencing the speaker.”^{16(p.772)}

Central Hudson Gas & Electric Corporation

Following the *Virginia Pharmacy Board* case, the Supreme Court considered commercial speech in a variety of contexts,^{17,18} including lawyer and other professional advertising.^{19–22} Through these cases, the Court formalized its commercial speech doctrine, which was articulated in the 1980 case *Central Hudson Gas &*

Electric Corporation v. Public Service Commission.²³

In *Central Hudson*, the Court laid out a four-part balancing test for determining whether a particular government restriction of commercial speech comported with the First Amendment. Under this test, a court must first determine whether the speech being restricted is misleading or concerns an unlawful activity.²³ Only speech that is truthful and relates to a lawful activity merits First Amendment protection.

Assuming this first criterion is satisfied, the second prong of the test imposes a burden on the government to demonstrate that it has a substantial interest in restricting the speech at issue.²³ Third, the restriction must directly advance the state interest involved. Restrictions that provide only “ineffective or remote support for the government’s purpose”^{23(p.564)} will not be upheld. Finally, the restriction must not be more restrictive than necessary to achieve the governmental interest.²³ This step examines the “fit” between the interest and the means chosen to achieve it.²³ The government must show, not merely that its regulation directly advances an important objective, but also that the means used are not more extensive than necessary to achieve that goal.^{(n.4) 23}

Although some Supreme Court justices have advocated eliminating any variation in the level of protection afforded truthful commercial speech and fully protected or “core speech,”^{(n.5) 7,24} the Court has reaffirmed the *Central Hudson* test. What has changed, however, is the rigor with which some justices have applied the test, particularly the test’s third and fourth prongs.^{(n.6) 25,26} In earlier cases the Court had accepted a variety of restrictions to directly advance the state’s interest in a manner that was not unduly restrictive.^{(n.7) 27} In recent years the Court, although often divided, has imposed a much higher burden of proof on

the government to link the ends sought with the means used.^{(n.8) 24,28}

In *Lorillard v. Reilly*,⁷ for example, the Supreme Court struck down a Massachusetts regulation that prohibited the advertising of cigarettes, cigars, and smokeless tobacco products within 1,000 feet of any school or playground. Six members of the Court were satisfied that the state's interest was directly advanced by the restrictions on outdoor cigar and smokeless tobacco advertising,^{(n.9) 7} thus meeting the third standard in *Central Hudson*. However, five members of the Court held that the 1,000-foot rule was more extensive than necessary to serve the state's interests, thus failing to satisfy the fourth step of *Central Hudson*. Specifically, they found that the attorney general did not "carefully calculate the costs and benefits associated with the burden on speech imposed by the regulations"^{7(p.561)} (internal punctuation omitted). For example, they stated that the attorney general did not consider the impact of the restriction in metropolitan areas, which would be greater than in rural areas: "The uniformly broad sweep of the geographical limitation demonstrates a lack of tailoring."^{7(p.563)} Although, in the Court's opinion, "[a] careful calculation of the costs of a speech regulation does not mean that a State must demonstrate that there is no incursion on legitimate speech interests," the state "cannot unduly impinge on the speaker's ability to propose a commercial transaction and the adult listener's opportunity to obtain information about products."^{7(p.565)} The state's interest in protecting children was insufficient, in the Court's opinion, to completely override the legitimate interests of tobacco retailers to convey to adults truthful information about their products and the choice of adults to receive such information.

In *Thompson v. Western States Medical Center*,²⁹ a six-member majority of the Court struck down a provision of the Food

and Drug Administration Modernization Act (FDAMA) of 1997²⁹ that would have prohibited pharmacists from advertising compounded drugs.^{(n.10) 29,30} The FDA argued that the restriction on advertising was necessary to balance the interest in providing compounded drugs to those patients who require them with the need to preserve the integrity of the new drug approval process by ensuring that compounding remains on a small scale. Although the Court agreed that the government's objective was substantial and that the means chosen might directly achieve the objective, it concluded that the FDA had not shown its methods were no more extensive than necessary. The Court noted that several alternatives to restricting speech could have been used to draw a line between compounding and large-scale manufacturing, such as by limiting the number of compounded drugs sold by a particular pharmacist or pharmacy or by prohibiting the use of commercial-scale equipment to compound drugs. According to the Court,

The Government simply has not provided sufficient justification here. If the First Amendment means anything, it means that regulating speech must be a last—not first—resort. Yet here it seems to have been the first strategy the Government thought to try.^{29(p.373)}

Compelled Commercial Speech

Just as the First Amendment protects the right to speak, it protects the right to refrain from speaking. The Supreme Court has articulated two complementary rationales for affording First Amendment protection against compelled speech. First, to compel a person to enunciate a view in which he or she does not believe violates freedom of conscience or belief.³¹ This reasoning was used to invalidate state laws making flag salute and the pledge of allegiance compulsory³²

or requiring automobile owners to display license plates carrying the state motto “Live Free or Die.”³³ Second, government-compelled speech may deter the speaker from expressing his or her own views.³¹ The Court struck down state laws prohibiting anonymous handbills³⁴ and campaign literature³⁵ because these laws discouraged a person’s underlying right to publish and disseminate his or her work.

The Supreme Court’s compelled-speech jurisprudence is concerned principally with political and social discourse as opposed to product health and safety.^(n.11)³⁶ However, in *United States v. United Foods, Inc.*,³⁷ the Court makes clear that its compelled speech doctrine applies to commercial speech.^(n.12) In that case, the Court held that a federal statute requiring mushroom producers and importers to pay for generic advertising promoting the mushroom industry is coerced speech: “First Amendment values are at serious risk if the government can compel ... [citizens to subsidize speech] on the side that it favors.”^(n.13)^{37(p.411)}

Lower courts have also grappled with the circumstances under which the government may compel disclosures in the commercial context. In *International Dairy Foods Association v. Amestoy*,³⁸ dairy manufacturers challenged a Vermont law that required labeling of products from cows treated with recombinant bovine somatotropin (rBST, a synthetic growth hormone that increases milk production). The federal court of appeals analyzed the regulation under *Central Hudson*, concluding that the asserted government interest (“consumer curiosity”) was insufficiently strong to justify the regulation.

In other circumstances, lower courts have viewed compelled disclosure as preferable to an outright ban on speech. In *Pearson v. Shalala*, the D.C. Circuit Court struck down an FDA regulation requiring

prior approval of “health claims” for dietary supplements (i.e., claims on labels linking the use of the supplement to prevention of a particular disease or condition).^(n.14)³⁹ The FDA required that such claims be supported by “significant scientific agreement,” a standard defined and enforced by the agency.^(n.15)³⁹ The court held that the significant scientific agreement standard was unconstitutional because it precluded manufacturers from making claims having less scientific support in conjunction with a disclaimer, stating,

It is clear ... that when government chooses a policy of suppression over disclosure—at least where there is no showing that disclosure would not suffice to cure misleadingness—government disregards a “far less restrictive” means.^{39(p.658)}

Misleading Speech

The first prong of the *Central Hudson* test makes clear that First Amendment protection will be afforded only to truthful commercial speech about a lawful activity. Commercial speech that is misleading, deceptive, or untruthful or that concerns illegal activity is outside the protection of the First Amendment. As the Supreme Court explained in *Rubin v. Coors Brewing Co.*,

Not only does regulation of inaccurate commercial speech exclude little truthful speech from the market, but false or misleading speech in the commercial realm also lacks the value that sometimes inheres in false or misleading political speech. Transaction-driven speech usually does not touch on a subject of public debate, and thus misleading statements in that context are unlikely to engender the beneficial public discourse that flows from political controversy. Moreover, the consequences of false commercial speech can be particularly severe: Investors may lose their savings, and consumers

may purchase products that are more dangerous than they believe or that do not work as advertised. Finally, because commercial speech often occurs in the place of sale, consumers may respond to the falsehood before there is time for more speech and considered reflection to minimize the risks of being misled.^{28(p.496)}

However, the Supreme Court has provided little guidance to aid in a determination of what is misleading commercial speech. For the most part, cases decided by the Court have involved challenges to government restrictions of speech acknowledged by both sides to be truthful. In a few instances, mostly involving professional advertising, the Court has addressed contentions by the government that certain types of advertising will mislead consumers.^{(n.16) 40–42} These opinions have not, however, dealt in depth with what factors should be used to assess whether a particular communication is deceptive or misleading.³¹ The Court has indicated that even when speech is potentially misleading, the remedy is additional disclosure, such as mandated warning labels, and not a categorical ban.^(n.17)

Impact of the Supreme Court on Tobacco Advertising Restrictions

The Supreme Court's jurisprudence has created a difficult dilemma for public health authorities. Narrowly tailored restrictions on tobacco advertising, while more defensible under the fourth ("reasonable fit") prong of *Central Hudson*, are at the same time less likely to generate the type of concrete evidence of effectiveness necessary for the third prong's "direct advancement" requirement. More sweeping restrictions, on the other hand, while more likely to advance the government's objective of deterring tobacco use (see chapter 7), are less likely to satisfy the narrowly tailored requirement. Thus, the Court's rulings create a conundrum

for public health authorities seeking to craft tobacco advertising restrictions that are both demonstrably effective and likely to be deemed constitutional by the current Supreme Court.⁴³

Although some advocates believe that focused and tailored advertising bans clearly aimed at preventing youth tobacco use could still be implemented consistent with Supreme Court jurisprudence,⁴⁴ achieving this would be an uphill battle, at the very least. The only area in which bans have been held constitutional has been in electronic media; this historical anomaly is viewed by some observers as both constitutionally suspect and unlikely to be repeated.^(n.18)

One avenue that remains largely unexplored could theoretically enable public health advocates to effect consumer protection consistent with First Amendment constraints. The Court has consistently stated that speech must be truthful and nonmisleading to receive First Amendment protection, but, as stated above, the Court has not examined manufacturers' obligations under this requirement. As might be inferred from the "Misleading Speech" section above, many cigarette advertisements could be considered deceptive or misleading because of implied health claims. In addition, it is arguable that tobacco advertisements, to the extent that they fail to disclose the serious health hazards associated with use of the products, are deceptive and misleading and therefore not entitled to First Amendment protection.⁴³

In the *Lorillard* case discussed earlier, the Supreme Court had, but failed to use, an opportunity to further consider what constitutes deceptive speech. In a partial dissent, Justice David Souter noted that the attorney general for Massachusetts "remains free to proffer evidence that the advertising is in fact misleading."^{77(p.590)} Thus, the door was left open for a future case to argue that images associating tobacco

products with a vibrant, athletic lifestyle, while failing to disclose the full scope of their health effects and addictiveness, are deceptive and misleading.³¹ On the basis of such an argument, courts could impose on manufacturers the obligation to add language sufficiently balanced and informative such that the advertisements are not misleading.

As already noted, the courts have consistently shown a preference for more speech rather than less and have viewed compelled disclosure as preferable to speech restrictions. Thus, for example, a court would be more likely to deem constitutional the government-mandated requirements for health warnings on tobacco packages and advertisements (including photos or other images illustrating the health effects of tobacco use), the inclusion of package inserts detailing the dangers of tobacco use and available treatments and resources for quitting, and industry funding of “corrective” advertising compared with laws that ban or significantly restrict tobacco product advertising.⁴³

Morrison⁴⁵ argues that one of the premises behind the Supreme Court’s protection of commercial speech is that it conveys useful information, and therefore the Court might be persuaded by evidence of tobacco advertising’s lack of utility. Morrison suggests that criteria could be established to assess the content of cigarette advertising, including the percentage of an advertisement devoted to “useful” information (e.g., information on price or tar and nicotine content). However, this author acknowledges that such a study might not necessarily change votes in the Court. In light of the challenging prospects for favorable judicial review of statutory restrictions on tobacco advertisements, some have advocated for increased funds for counteradvertising and for changing the preemption provisions of the FCLAA, as discussed in the next section.

Preemption of Warnings under the FCLAA

The 1964 Surgeon General’s report on smoking and health⁴⁶ spurred government interest in regulating tobacco advertising. The FTC sought to require disclosure on cigarette packages and in advertising that smoking is dangerous to health.⁴⁷ Many states and cities also began to consider new tobacco regulations. Public health advocates sought the broadest possible regulation at all levels of government. The tobacco industry, however, became increasingly interested in federal preemptive regulation as a means of avoiding more far-reaching restrictions by states and municipalities.⁴³

The FCLAA,⁴⁸ originally enacted in 1965, requires the inclusion of health warnings specified by the government on cigarette packaging for cigarettes sold or distributed in the United States and in print advertising.^(n.19) As amended in 1969,⁴⁹ the FCLAA also contains a provision stating,

No requirement or prohibition based on smoking and health shall be imposed under State law with respect to the advertising or promotion of any cigarettes the packages of which are labeled in conformity with the provisions of this chapter.⁵⁰

State is defined in the FCLAA as including “any . . . political subdivision of any State.” This type of language, which prevents states and localities from acting, is known as *preemption*. The federal government’s power to preempt, and thereby nullify, state and local laws is grounded in the Supremacy Clause of Article VI of the U.S. Constitution, which proclaims that the laws of the United States “shall be the supreme law of the land . . . anything in the Constitution or Laws of any State to the contrary notwithstanding.”⁵¹ Thus, in general, state law that conflicts with federal law is considered to be without legal effect.^(n.20)

The legislative history of the FCLAA indicates that Congress used preemption to protect “commerce and the national economy” from being “impeded by diverse, nonuniform, and confusing cigarette labeling and advertising regulations.”^{52,53} The FCLAA, though widely viewed as a public health regulatory initiative, also served certain tobacco industry goals: forestalling FTC regulation, preempting state and local requirements, and softening the warnings that had been proposed by public health advocates.^{43,47}

The consequences of federal preemption for efforts to restrict cigarette advertising and promotion can be seen in the *Lorillard* decision. In addition to its ruling based on First Amendment jurisprudence, the Supreme Court ruled five to four that the FCLAA preempted Massachusetts from regulating outdoor and retail point-of-sale cigarette advertising.⁷ Justice Sandra Day O’Connor, writing for the Court, rejected the Massachusetts attorney general’s argument that the advertising restrictions were not “based on smoking and health” because they did not address the content of the advertising but instead sought to reduce youth exposure to such advertising. According to Justice O’Connor, this was an unduly narrow reading of the statute:

The context in which Congress crafted the current pre-emption provision leads us to conclude that Congress prohibited state cigarette advertising regulations motivated by concerns about smoking and health. At bottom, the concern about youth exposure to cigarette advertising is intertwined with the concern about cigarette smoking and health.^{7(p.548)}

Similarly, Justice O’Connor rejected the argument that the restrictions addressed only the location of the advertising and not its content, stating that the FCLAA preempted all requirements and prohibitions based on smoking and health.⁷ She added, however, that the Court’s ruling would not

prohibit general billboard zoning regulations or laws that prohibited certain conduct, such as underage possession of cigarettes or unlawful sales of cigarettes to minors.⁷

However, the Supreme Court has also held that the preemptive effect of the FCLAA is limited in that it does not completely preclude lawsuits by those who claim they were injured by tobacco products. In *Cipollone v. Liggett Group, Inc.*,⁵⁴ the executor of the estate of a lifetime smoker who died of lung cancer sued several tobacco companies, alleging that they did not provide adequate warnings about the health risks of smoking, expressly warranted that their products were not dangerous to the health of consumers, tried to neutralize the effects of statutory warnings, ignored medical evidence about the dangers of smoking, and conspired to prevent such medical evidence from reaching the general public.^{54,55} The trial court awarded the decedent’s husband \$400,000, but the appellate court reversed this on the basis that the plaintiff’s claims were preempted under the FCLAA. The Supreme Court, however, found that although the FCLAA expressly preempted tort claims based on inadequate health warnings in tobacco advertising or promotion after 1969, it did not preempt claims against cigarette manufacturers for breach of express warranty, misrepresentation, or conspiracy.^(n.21) Thus, the Court distinguished between tort claims that implicitly challenged the uniform labeling scheme of the FCLAA and those that did not directly relate to that scheme.

The Comprehensive Smokeless Tobacco Health Education Act⁵⁶ requires placement of government-specified health warnings on smokeless tobacco packages and in advertisements and banned smokeless tobacco advertising on television and radio. Like the FCLAA, the Smokeless Tobacco Act preempts state and local requirements for health warnings on packaging and in advertising (except for outdoor billboard

advertisements). However, it does not preempt state and local restrictions on smokeless tobacco advertising and promotion analogous to the FCLAA's preemption of restrictions on cigarette advertising and promotion that are "based on smoking and health." Furthermore, no federal legislation preempts state or local restrictions on the advertising and promotion of other tobacco products, namely, cigars, pipe tobacco, and roll-your-own cigarette tobacco.⁵⁷

The FDA's Unsuccessful Efforts to Regulate Tobacco Products

The Federal Food, Drug, and Cosmetic Act authorizes the Secretary of Health and Human Services to regulate drugs and medical devices. The statute defines a drug as an "article" that is "intended for use in the diagnosis, cure, mitigation, treatment, or prevention of disease"⁵⁸ or that is "intended to affect the structure or any function of the body."⁵⁹ A medical device is similarly defined, except that it "does not achieve its primary intended purposes through chemical action within or on the body of man [and] ... is not dependent upon being metabolized for the achievement of its primary intended purposes."⁶⁰ Before marketing a drug or device, a manufacturer must submit sufficient data for the agency to ascertain that there is reasonable assurance that the product is safe and effective.⁶¹

For most of its history, the FDA did not assert its jurisdiction over tobacco products. In the late 1970s, the agency declined petitions to consider cigarettes containing nicotine as a drug or medical device,⁶² relying on its "consistent position that cigarettes will not be deemed a drug unless health claims are made by the vendors."^{62(p.237)} An appellate court subsequently upheld the FDA's position as a reasonable interpretation of the agency's statutory authority—indeed, one that was fully consistent with "administrative and judicial emphasis upon manufacturer and

vendor intent as the cornerstone" of the Federal Food, Drug, and Cosmetic Act.^{62(p.243)}

During the tenure of Commissioner David Kessler (1990–97), the FDA reconceived its jurisdiction over tobacco. According to Kessler, this change was prompted by the agency's discovery of new information in internal documents from tobacco manufacturers evidencing their awareness of the addictive properties of nicotine and that tobacco products were essentially a vehicle for its delivery. Moreover, the agency learned of methods used by manufacturers to increase the nicotine content of tobacco products and to enhance the drug's impact.^{63–65}

In 1995, the FDA proposed a rule outlining a regulatory approach that would include restrictions on the sale, distribution, and advertisement of tobacco products.⁶⁶ Consistent with Kessler's view that tobacco use was principally a pediatric disease in that most smokers begin smoking before they are 18 years old, the proposed rule restricted its scope to reducing youth and adolescent access to tobacco products and exposure to tobacco advertising and promotion. Restricting the focus to youth also appears to have been an attempt to enhance the political attractiveness of the FDA's approach.⁶⁵ However, Kessler, in testimony before Congress, acknowledged "the possibility that regulation of the nicotine in cigarettes as drugs would result in the removal of nicotine-containing cigarettes from the market, limiting the amount of nicotine in cigarettes to levels that are not addictive, or otherwise restricting access to them, unless the industry could show that nicotine-containing products are safe and effective."^{63(p.157)}

The FDA received more than 700,000 comments on the proposed rule, more than "at any other time in its history on any other subject."^{67(p.44418)} In 1996, the FDA issued a final rule, "Regulations Restricting

the Sale and Distribution of Cigarettes and Smokeless Tobacco to Protect Children and Adolescents,”⁶⁸ which classified nicotine as a drug and cigarettes and smokeless tobacco as “drug delivery devices.” The agency found that tobacco products “affect the structure or any function of the body” within the meaning of the statute because nicotine has “significant pharmacologic effects,” including “psychoactive, or mood-altering, effects on the brain,” that cause addiction.^{68(p.44631)} Further, the agency concluded that these effects were “intended,” as required by the statute, because (1) they “are so widely known and foreseeable that these effects may be deemed to have been intended by the manufacturers,”^{68(p.44687)} (2) the products are designed by manufacturers to achieve these effects,^{68(p.44849)} and (3) the products are used by consumers primarily to achieve these effects.^{68(p.44807)} The agency coupled its jurisdictional assertion with evidence of the profound public health detriment caused by these products—namely, more than 400,000 deaths per year as a result of illnesses caused by smoking.^{68(p.44398)}

The FDA construed tobacco products as “combination products” in that they combine a drug (nicotine) with a device (the cigarette or smokeless tobacco) to deliver it. Relying on its discretion to regulate combination products as drugs or devices, the FDA chose to regulate tobacco under the “restricted devices” provisions of the Federal Food, Drug, and Cosmetic Act.⁶⁹ These provisions give the agency significant latitude to restrict the sale, distribution, and use of a device based on the “potentiality for harmful effect or the collateral measures necessary to its use.”⁶⁹

On the basis of this classification, the FDA promulgated rules regarding the promotion, labeling, sale, and distribution of tobacco products. These rules prevented the sale of cigarettes and smokeless tobacco to persons younger than 18 years of age, required retailers to verify through photographic

identification the age of all purchasers younger than 27 years of age, prohibited the sale of cigarettes in quantities of less than 20, prohibited the distribution of free samples, and prohibited sales through self-service displays and vending machines except in adult-only locations.^{68(pp.44616–17)} The promotion regulations required that any print advertising appear in a black-and-white, text-only format, unless the publication in which it appears was read almost exclusively by adults; prohibited outdoor advertising within 1,000 feet of any public playground or school; prohibited the distribution of any promotional items, such as T-shirts or hats, bearing a tobacco-product brand name; and prohibited sponsorship of any athletic, musical, artistic, or other social or cultural event using a tobacco-product brand name (allowing only corporate-name sponsorship provided that the corporate name was not similar or identical to the name of a tobacco product).^{68(pp.44617–18)} The labeling regulation required that the statement “A Nicotine-Delivery Device for Persons 18 or Older” appear on all tobacco product packages.^{68(p.44617)}

Tobacco manufacturers, retailers, and advertisers challenged the final rule in federal district court, arguing that (1) the FDA lacked jurisdiction to regulate tobacco products and (2) the advertising restrictions violated the First Amendment. The district court upheld the FDA’s jurisdiction to regulate tobacco products and found its access and labeling regulations lawful but held that its advertising and promotion restrictions exceeded its authority.⁷⁰ On appeal, the Fourth Circuit Court reversed, holding that the FDA lacked jurisdiction to regulate tobacco products and that the court did not address the advertising and promotion restrictions or the First Amendment challenge.⁷¹ The FDA appealed the ruling on its jurisdiction to the U.S. Supreme Court.

In a five to four vote, the Supreme Court ruled that the FDA’s governing statute did

not confer jurisdiction to regulate tobacco because such an interpretation would be inconsistent with congressional intent.⁷¹ The Court reasoned that if the FDA were to correctly apply its statutory authority to regulate medical devices to tobacco products, the FDA would be obligated to find them unsafe and remove them from the market. However, such action would be inconsistent with several statutes (including the FCLAA) that show Congress's intent to maintain, and even promote, tobacco products in the marketplace while at the same time informing consumers of the associated adverse health consequences.^{71(p.143)} The majority opinion written by Justice O'Connor stated, "Congress has created a distinct regulatory scheme to address the problem of tobacco and health, and that scheme, as presently constructed, precludes any role for the FDA."^{71(p.144)} The Court was not persuaded by the FDA's justification that its regulatory framework, under which tobacco products were restricted but not banned, was preferable to a ban, which would create a "black market."^{71(p.140)} The Court held that in considering product safety, the agency could not take account of factors external to the product's intended use such as the potential for a black market.^{71(p.141)}

The Court's decision left no room for FDA regulation of tobacco products as currently marketed absent Congress's amending the Food, Drug, and Cosmetic Act to explicitly confer such authority. The Court's decision may also discourage other agencies from asserting jurisdiction over tobacco or interpreting existing jurisdiction expansively. The Court construed Congress as having made a policy decision to maintain and even promote a market for tobacco products and to narrowly circumscribe agency authority to warn of the dangers of tobacco use.

However, legislation to give the FDA authority to regulate tobacco products

was passed by the U.S. Senate on July 15, 2004 (by a vote of 78–15), but companion legislation in the U.S. House of Representatives was not adopted.^{72,73} Similar legislation (S. 625 and H.R. 1108) was approved by the Senate Committee on Health, Education, Labor, and Pensions on August 1, 2007 (by a vote of 13–8) and the House Committee on Energy and Commerce on April 2, 2008 (by a vote of 38–12).

The Court's ruling does not preclude FDA action against tobacco products making explicit claims about health benefits. For example, the FDA might assert jurisdiction to regulate tobacco products that manufacturers claim to be less harmful to health than are other brands. The agency could argue that such products are drugs because manufacturers' claims show their intent to mitigate disease.

The Court's ruling also does not preclude state action to restrict minors' access to tobacco products along the lines proposed by the FDA. For example, all 50 states and the District of Columbia (D.C.) prohibit the sale of tobacco products to minors, which in most cases is defined as 18 years of age. Further, 45 states and D.C. restrict the distribution of free samples of tobacco products, and 10 states restrict direct consumer access to tobacco products by, for example, prohibiting self-service displays or requiring direct contact between retailers and customers.⁷⁴

The FTC's Limited Efforts to Regulate Tobacco Advertising

The FTC is an independent federal agency established by Congress in 1914.⁷⁵ The Federal Trade Commission Act (FTC Act) declares unlawful "unfair or deceptive acts or practices in or affecting commerce"⁷⁶ and directs the FTC to prevent such activities. ^(n.22) False or misleading advertising is considered an unfair trade

practice and therefore unlawful. Thus, the agency has clear authority to take action against false advertising that misleads the public, including advertising for tobacco products.

However, having statutory authority does not necessarily imply that it is broadly exercised. As summarized below, the FTC's role has been largely limited to enforcing legislated tobacco labeling requirements and reporting to Congress concerning the effectiveness, or lack thereof, of these laws.

The FTC can take action against false or misleading advertising through its adjudicatory (quasi-judicial) authority, in which case judgments apply only to the parties to the case. Alternatively, the agency can use general rule-making procedures to promulgate industrywide guidelines as trade regulation rules.⁴⁷(pp.510-11) Between 1938 and 1968, the FTC invoked its adjudicatory authority 25 times in regard to health claims made in cigarette advertising.⁷⁷ However, because adjudicatory judgments applied only to the parties to the case, "the Commission found itself putting out brush fires of deception while the inferno raged on."⁷⁷(p.70)

Following the issuance of the 1964 Surgeon General's report on smoking and health,⁴⁶ the FTC determined that cigarette advertising that failed to disclose the health risks of smoking was "unfair and deceptive."⁷⁸ It proposed a trade regulation rule that would have made it a violation of the FTC Act "to fail to disclose, clearly, and prominently, in all advertising and on every pack, box, carton or other container [of cigarettes] ... that cigarette smoking is dangerous to health and may cause death from cancer and other diseases."⁷⁸(p.8325) This regulatory effort was, however, rendered moot before it was implemented by the passage of the FCLAA in 1965.

The FCLAA articulated two policy goals: (1) informing the public about the

dangers of smoking and (2) protecting commerce and the national economy by preventing "diverse, nonuniform, and confusing cigarette labeling and advertising regulations with respect to any relationship between smoking and health."^{48,79} In contrast to the FTC trade regulation rule, the FCLAA required the warning "Caution: Cigarette Smoking May Be Hazardous to Your Health" to be placed on cigarette packages but not in advertising. The language of the warning was much milder than the FTC would have required and its dissemination more limited. Some did not view the FCLAA as a public health victory but saw it instead as an "unashamed act to protect private industry from government regulation"^{(n.23) 43}(p.2991)

The FCLAA in 1965 and the Comprehensive Smokeless Tobacco Health Education Act in 1986 directed the FTC to report to Congress concerning sales and advertising for cigarettes and smokeless tobacco, respectively. The FTC issued its first report to Congress in 1967, in which it recommended that the warning label be changed to "Warning: Cigarette Smoking Is Dangerous to Health and May Cause Death from Cancer and Other Diseases."⁸⁰(p.30) In 1969, Congress enacted the Public Health Cigarette Smoking Act,⁴⁹ which amended the FCLAA. This act prohibited cigarette advertising on television and radio and required that each cigarette package contain the label "Warning: The Surgeon General Has Determined That Smoking Is Dangerous to Your Health." In 1981, the FTC issued a staff report that concluded that the current health-warning labels had little effect on public knowledge and attitudes about smoking.⁸¹ In response, Congress enacted the Comprehensive Smoking Education Act of 1984,⁸² which required four specific health warnings on all cigarette packages and advertising: "Surgeon General's Warning: Smoking Causes Lung Cancer, Heart Disease, Emphysema And May Complicate Pregnancy"; "Surgeon

General's Warning: Quitting Smoking Now Greatly Reduces Serious Risks to Your Health"; "Surgeon General's Warning: Smoking By Pregnant Women May Result in Fetal Injury, Premature Birth, And Low Birth Weight"; and "Surgeon General's Warning: Cigarette Smoke Contains Carbon Monoxide." (The warnings mandated for cigarette advertisements on outdoor billboards are slightly shorter versions of the same messages.)⁸³

Responding to evidence that smokeless tobacco use causes oral cancer, nicotine addiction, and other health problems, in 1986 Congress passed the Comprehensive Smokeless Tobacco Health Education Act.⁵⁶ This law required rotating warning labels on smokeless tobacco packaging and advertisements, in a circle-and-arrow format:⁴⁷ "Warning: This product may cause mouth cancer"; "Warning: This product may cause gum disease and tooth loss"; and "Warning: This product is not a safe alternative to cigarettes."^{84,85} As with the labeling of other tobacco products, the FTC was charged with enforcing this requirement.

In 1999, the FTC issued a report to Congress in which it recommended warning labels for cigar packaging and advertising.⁸⁶ The Commission noted that cigar sales had increased 43% in one year, from \$613 million in 1996 to \$876 million in 1997, and stated, "The dramatic increase in cigar use in America has occurred in tandem with the increase in promotional activities surrounding cigar smoking."⁸⁶ The FTC recommended that three warnings for cigars be required on a rotating basis: "Warning: Regular cigar smoking can cause cancers of the mouth and throat, even if you do not inhale"; "Warning: Inhaling cigar smoke can cause lung cancer. The more deeply you inhale, the greater your risk"; and "Warning: Cigars are not a safe alternative to cigarettes."⁸⁶ The report also recommended that Congress enact legislation prohibiting

the advertisement of cigars on television, radio, and any other electronic media regulated by the Federal Communications Commission. Although Congress did not enact legislation as recommended by the FTC, some of these recommendations were achieved through consent agreements entered into with cigar manufacturers.

The FCLAA explicitly exempted from preemption the FTC's ability to take action against unfair or deceptive acts or practices in the advertising of cigarettes.⁸⁷ The agency has used this authority to initiate proceedings in response to promotional efforts it considered unfair or deceptive. Some of the FTC's earlier actions (between 1938 and 1968) were mentioned above and reviewed by Fritschler.⁷⁷ More recently (in May 1997), the FTC took on a long-time cigarette icon—Joe Camel. The agency filed a complaint against R.J. Reynolds Tobacco Company charging that the company's use of the cartoon character was an unfair trade practice in that it was a deliberate attempt to target smokers younger than 18 years of age and calling on the company to "cease and desist from advertising to children through the Joe Camel character or others like it."⁸⁸⁻⁹⁰ In filing this complaint, which was decided in a three to two vote by the FTC commissioners, the agency reversed a 1994 decision not to take action against the advertising campaign.^{91,92} R.J. Reynolds subsequently filed a challenge to the FTC complaint but then decided to remove Joe Camel from its domestic advertising. The FTC initially continued to pursue the complaint and to seek a court order barring the company from using Joe Camel or his fellow cartoon camels again in advertisements and requiring the company to pay for an antismoking campaign targeted to teenagers.⁹³ The FTC dropped the complaint in 1999, relying instead on the Master Settlement Agreement (see chapter 3), a multibillion-dollar settlement between the tobacco industry and 46 states that achieved the goals the FTC was seeking.⁹⁴

In 2000, the FTC entered into a consent agreement with seven cigar manufacturers representing 95% of the cigars sold in the United States. The agreement settled a complaint filed by the FTC against the manufacturers in which it charged that failure to disclose health risks of cigars is a deceptive and unfair business practice. Under the consent agreement, the manufacturers agreed to place one of five warnings on cigar packages and in advertising. These warnings are as follows: “Surgeon General Warning: Cigar Smoking Can Cause Cancers Of The Mouth And Throat, Even If You Do Not Inhale”; “Surgeon General Warning: Cigar Smoking Can Cause Lung Cancer And Heart Disease”; “Surgeon General Warning: Tobacco Use Increases The Risk Of Infertility, Stillbirth And Low Birth Weight”; “Surgeon General Warning: Cigars Are Not A Safe Alternative to Cigarettes”; and “Surgeon General Warning: Tobacco Smoke Increases The Risk Of Lung Cancer And Heart Disease, Even In Nonsmokers.”

This FTC consent agreement superseded a 1988 settlement under California’s Proposition 65, which had required that cigars sold in the state of California include on their packaging (but not in advertisements) a warning label stating the following: “WARNING: This product contains chemicals known to the State of California to cause cancer, birth defects, and other reproductive harm.” Cigar manufacturers had printed the California warning on the packages of manufactured cigars sold nationally.^{47,95} The FTC consent agreement preempted a California law that was set to take effect on September 1, 2000, which would have required new rotating warnings on cigar packages sold in the state.⁹⁶

The FTC’s methodology for measuring the tar and nicotine levels of cigarettes has come under scrutiny in recent years. Beginning in the 1960s, various branches of the government sought to encourage tobacco companies to produce low-tar cigarettes and

to encourage smokers to reduce their risk by switching to low-tar brands.⁹⁷ In 1967, pursuant to its authority to prohibit unfair or deceptive advertising claims, the FTC authorized establishment of a laboratory to analyze mainstream cigarette smoke (i.e., the smoke that is drawn through the cigarette rod during puffing).⁹⁸ The purpose of the program was to provide smokers seeking to switch to lower-tar cigarettes with a single, standardized measurement with which to choose among existing brands. The FTC protocol used a machine to simulate smoking in a standardized way and measure tar and nicotine yields in mainstream smoke for each cigarette brand. In 1970, the FTC began to develop a trade regulation rule that would have required disclosure of tar and nicotine ratings in all cigarette advertising. In response, five major cigarette manufacturers and three small companies agreed voluntarily to disclose the FTC ratings in certain types of advertising. The FTC added carbon monoxide to the protocol in 1980, but its disclosure in advertising is not required. Industry disclosure of tar and nicotine yields on some cigarette packages occurs voluntarily, but rarely for brands with 8 mg or more of tar.^{47(p.489)} In 1987 the FTC closed its laboratory and began to collect data on tar, nicotine, and carbon monoxide yields, through a compulsory process, from cigarette companies, which conduct the testing through the Tobacco Industry Testing Laboratory, using the FTC method.⁹⁹

On the basis of the FTC protocol, manufacturers have for decades advertised certain brands as “light” or “low tar.” In the 1990s, scientists began to question the FTC methodology, alleging that the protocol did not effectively predict the amount of tar and nicotine a smoker would receive during actual smoking.¹⁰⁰ One report concluded that

measurements of tar and nicotine yields using the FTC method do not offer smokers meaningful information

on the amount of tar and nicotine they will receive from a cigarette. The measurements also do not offer meaningful information on the relative amounts of tar and nicotine exposure likely to be received from smoking different brands of cigarettes.¹⁰¹

The Centers for Disease Control and Prevention believes that existing evidence (1) does not support recommending that smokers switch to low-yield cigarette brands and (2) does not support the conclusion that changes in cigarette design have appreciably reduced the incidence of diseases caused by smoking.¹⁰²

In 1997, the FTC issued a notice in the *Federal Register* seeking comments on proposed changes to the FTC methodology. No final rule implementing these changes has been issued. In 2000, the FTC issued an alert in which it warned consumers that cigarette tar and nicotine ratings cannot predict the amount of tar and nicotine a smoker will receive from a particular cigarette. The alert states, "Smoking 'low tar' or 'light' cigarettes does not eliminate the health risks of smoking."¹⁰³

In 1994, the FTC announced a settlement with the American Tobacco Company, prohibiting the company from disseminating ads for Carlton or any other cigarettes that make certain misrepresentations about the relative amount of tar and nicotine consumers will receive by smoking certain cigarette brands.¹⁰⁴ However, the agency has not undertaken any industrywide enforcement efforts against cigarette manufacturers advertising "low-tar," "light," or other low-yield cigarettes for making false or misleading claims. Legislation mentioned above (S. 625 and H.R. 1108 in the 110th Congress) that would give the FDA authority to regulate tobacco products would ban the use of terms such as "light," "mild," or "low" in advertising and on package labels.

Class action lawsuits have been filed in several states alleging that cigarette companies engaged in fraudulent claims by marketing "low-tar" and "light" cigarettes despite knowledge that such cigarettes were no less dangerous, and perhaps were more dangerous, than other cigarettes.^{105,106} One class action failed because of a longstanding FTC agreement with tobacco companies that they would voluntarily measure tar and nicotine levels. In a four to two decision reached in 2005, the Illinois Supreme Court overturned a lower court ruling in favor of a class of consumers who argued they were defrauded by Philip Morris's marketing of "light" and "lowered tar and nicotine" cigarettes.¹⁰⁷ The Supreme Court relied on section 10(b)(1) of the Illinois Consumer Fraud and Deceptive Practices Act, which exempts conduct "specifically authorized by laws administered by any regulatory body or officer acting under statutory authority of this State or the United States." In determining that the claims at issue were "specifically authorized" by the FTC, the Illinois court relied heavily on a 1970 agreement between the FTC and U.S. cigarette companies, directing them to voluntarily measure their brands' tar and nicotine yields. In 2006, the U.S. Supreme Court denied a petition for a *writ of certiorari*, allowing the state high court's decision to stand.¹⁰⁷

Preemption arguments did not, however, prevail in a challenge by R.J. Reynolds to a California law prohibiting the distribution of free cigarettes. The justices said that California, one of 16 states regulating free tobacco promotions, had the right to ban free cigarette sampling because tobacco is a health hazard and because Congress has not spoken against state laws regulating the time, place, and manner in which cigarettes are sold or distributed. Nevertheless, California's highest court overturned the \$14.8 million fine the state imposed on R.J. Reynolds Tobacco Co. for illegally doling out free cigarettes at a beer fest, a biker rally,

and other public events, and sent the case back to a lower court to consider whether the fine was excessive and whether the tobacco maker had acted in bad faith.¹⁰⁸

With low-yield claims under attack, some manufacturers have begun to market cigarettes with explicit claims of lowered risk. In 1996, for example, R.J. Reynolds began to test-market Eclipse, which used a design that was purported to present less risk of cancer and produce less inflammation in the respiratory system. Slade and colleagues concluded that there was not satisfactory evidence that this cigarette is less harmful than are conventional cigarettes.^{109,110} As noted above, another new R.J. Reynolds brand, Advance, is marketed with the slogan “Great Taste. Less Toxins.”¹¹¹ The FTC has yet to consider whether such claims are false or misleading.

The FTC has a long history of oversight of tobacco advertising and its statutory authority would appear quite broad in its direction to prohibit any “false or misleading” advertising claims. Nevertheless, some view the agency’s activities in this area as fairly limited,¹¹² particularly when compared with its more aggressive stance with respect to advertising for other products (e.g., those promising weight loss).^{113,114} For example, one might argue that advertisements depicting healthy, vibrant smokers are inherently false and misleading because they imply that smoking is a healthful activity. However, the FTC has largely refrained from undertaking enforcement action against tobacco advertisements on these or similar grounds.

Comparison of the United States with Other Countries’ Experience

In 2000, the U.S. Surgeon General issued a report on reducing tobacco use in the United States. The report concludes that tobacco products are far less regulated

in the United States than in many other developed countries.¹¹⁵ In particular, the report finds that warning labels on cigarette packages in the United States are weaker and less conspicuous than those of some other countries.¹¹⁵ In addition, the report states that current regulation of advertising and promotion of tobacco products in the United States is considerably less restrictive than in several other countries.¹¹⁵

The sections below review the oversight of tobacco advertising and promotions in Canada and the European Union as examples of marketing controls outside the United States and describe the WHO FCTC. Further, the American Cancer Society has published a comprehensive review of information on tobacco production, trade, consumption, disease burden, and legislation (including marketing controls) for 196 countries and territories.¹¹⁶

Canada

Although the United States and Canada share a continent, they are miles apart in the extent to which they have pursued many tobacco control policy interventions. For more than a decade, for example, the Canadian legislature has sought to protect public health and prevent youth smoking through a variety of substantial restrictions on tobacco advertising and promotion.

Like the First Amendment to the U.S. Constitution, however, section 2(b) of Canada’s Charter of Rights and Freedoms¹¹⁷ protects freedom of expression,^(n,24) and the Canadian Supreme Court, like its U.S. counterpart, has held that such protection includes commercial speech.^{118,119} The Canadian Supreme Court has based this view on the need to protect the receiver and the belief that a free-market economy relies on having fully informed consumers.^(n,25) Unlike the First Amendment, however, section 2(b) may be overridden

by section 1 of the charter, which permits the legislature to place limits on the freedoms protected in the charter if they are “demonstrably justified in a free and democratic society.”^(n.26)

In recent years, the Canadian legislature and courts have struggled with the inherent conflict between the constitutional guarantee of free speech and laws intended to protect the public and foster public health.¹²⁰ This struggle has been particularly apparent in the case of tobacco advertising and promotion. The 1988 Tobacco Products Control Act (TPCA)¹²¹ largely banned tobacco advertising. The TPCA also prohibited retailers from displaying signs with tobacco brand names or trademarks, prohibited manufacturers from applying tobacco trademarks to other products or using tobacco-product brand names in sponsorship (weakened by an ambiguity in the law discussed in the section on “Ineffectiveness of Partial Advertising Bans,” chapter 3), and required the placement of “health indicators” on cigarette packages as imposed by regulation.

After the TPCA was passed, tobacco manufacturers sued the Canadian government, arguing that the statute exceeded the federal government’s legislative authority and violated the constitutional protection of freedom of expression.¹²² The trial court rejected both arguments,¹²³ but the Quebec Court of Appeal¹²⁴ overturned the lower court’s decision. In *RJR MacDonald Inc. v. Canada* (Attorney General),¹²⁵ the Canadian Supreme Court, in a 5–4 ruling, struck down certain provisions of the advertising restrictions and labeling requirements, holding that they violated section 2(b) of the Charter and were not justified under section 1.^{125(pp.10–12)}

First, the court held that the government had not adequately justified a complete advertising ban. In particular, the

government did not distinguish between “lifestyle” advertising (i.e., evocative or emotionally appealing advertising), which, the court found, “is designed to increase consumption,” and “informational” or “brand preference” advertising, which “has not been shown to have this effect.”^{125(p.15)} With respect to the prohibition on the use of logos on articles other than tobacco products, the court held that the government had not adequately demonstrated a link between the objective of decreasing tobacco consumption and the ban on logos.¹²⁵ In regard to the health warning requirement, the government’s failure to permit manufacturers to attribute the health warnings violated section 2(b) of the charter because “freedom of expression necessarily entails the right to say nothing or the right not to say certain things.”^{125(p.9)} While the majority found the warning labels themselves to be a justifiable impairment on expression, the government failed to demonstrate the need for the warnings to be unattributed.¹²⁰

The Canadian Supreme Court left open the possibility that “less intrusive alternative measures would be a reasonable impairment of the right to free expression, given the important objective and the legislative context.”¹²⁵ In 1997, the Canadian legislature enacted the Tobacco Act.¹²⁶ A response to the court’s objections, the Tobacco Act is more nuanced in its approach to advertising restrictions. The act prohibits lifestyle advertising,¹²⁷ defined as “advertising that associates a product with, or evokes a positive or negative emotion about or image of, a way of life such as one that includes glamour, excitement, vitality, risk or daring,”¹²⁸ and restricts advertising to media primarily targeted at adults.^{127,128} However, the act permits manufacturers to use informational and brand-preference advertising to promote their products to adult smokers.^{127,128} Also in response to the court’s ruling, the act permits attribution of mandated health warnings.^{126(p.13)}

In 2000, the Canadian government mandated new health warnings to appear on cigarette packages. Under these regulations, manufacturers must dedicate at least 50% of the “principal display surfaces” of each cigarette pack to 1 of 16 warnings that combine a textual warning with a visual image, such as a diseased mouth, a lung tumor, a brain after a stroke, a damaged heart, or a limp cigarette (coupled with a warning that smoking can cause impotence). Warnings inside each package offer tips on quitting.¹²⁹ These warnings began to appear on cigarette packages in 2001.

Several manufacturers challenged the requirements imposed by the Tobacco Act as unconstitutional, but the trial court (the Quebec Superior Court) dismissed the claim.¹³⁰ On August 22, 2005, the Quebec Court of Appeal upheld most of the stipulations of the act. However, because the court allowed event sponsorship using corporate names (as long as they are not also tobacco product brand names), the Canadian government appealed the decision to the Canadian Supreme Court.¹³¹ The tobacco manufacturers cross-appealed in an attempt to defeat some of the provisions held to be constitutional. On June 28, 2007, the Supreme Court issued a unanimous (nine to zero) ruling in favor of the government’s appeal and against the cross-appeal, thereby upholding the order of the trial court and the provisions of the original statute.¹³²

Perhaps because of Canada’s proximity to the United States and because the two countries share many cultural values,¹³³ tobacco control advocates in the United States often look to Canada as a model for the United States to follow. In reality, there appears to be little diffusion of tobacco control policies from Canada to the United States.¹³³ The reasons for this are many and varied and are largely beyond the scope of this chapter. With respect to prohibitions on

advertising, however, it is worth noting that the Canadian Supreme Court and the U.S. Supreme Court, while having on paper similar constitutional parameters to work from, have come to different conclusions about where to place the fulcrum in balancing freedom of expression and public health protection. Although the Canadian Supreme Court struck down certain provisions of the TPCA, it left much room for more nuanced restrictions (and upheld the Tobacco Act), room that likely would not be available if the U.S. Supreme Court were to evaluate similar legislation. This may in part be due to the relative newness of the charter itself, which permits greater flexibility to address emergent health threats. In addition, unlike the U.S. Supreme Court, the Canadian Supreme Court is operating against a backdrop of broad political and social consensus at the provincial and national levels on the public health need to reduce tobacco use. This consensus may have led the Canadian Supreme Court to grant more latitude to the legislature in restricting tobacco advertising and promotion.

European Union

The European Union banned tobacco advertising on television and radio and tobacco company sponsorship of television programs in 1989.¹³⁴ In 1998, the EU enacted a directive banning tobacco advertising and sponsorship in all EU Member States.^{135,136} The directive would have phased out all advertising and sponsorship by 2006. The directive was based on several provisions of the Treaty Establishing the European Community.¹³⁶ In particular, Article 100a(1) permits the adoption of laws that have as their objective the establishment and functioning of the internal market, meaning the “abolition, as between Member States, of obstacles to the free movement of goods, persons, services, and capital”¹³⁶ The council argued that the directive

was necessary to facilitate trade among member states,¹³⁶ since conflicting national advertising laws could impede the free movement of media, such as newspapers and magazines,¹³⁷ and create distortions in competition.¹³⁶

The Federal Republic of Germany, which opposed the directive, and several British tobacco companies thereafter challenged its legality, arguing that the council and the parliament had exceeded their authority. In 2000, the Court of Justice of the European Community overturned the directive.^{138,139} The court held that the ban was too broad to be justified as an internal market measure. In particular, the court said it could not see how a ban on advertising tobacco on posters, parasols, ashtrays, or in theaters could help facilitate trade in those products between EU Member States.¹⁴⁰ However, the court stated that a more limited ban that focused on eliminating foreseeable obstacles to the free movement of goods and services, and for which distortion of competition was appreciable, would be valid under the treaty.¹³⁶

In 2002, the EU voted to outlaw tobacco advertising in newspapers and magazines, on the Internet, and at international sports events.¹⁴¹ The directive, issued in 2003, also includes a prohibition on tobacco company sponsorship of major international sporting events, such as Formula One racing.¹⁴² However, the ban does not include posters, billboards, cinema advertising, and indirect advertising (see chapter 4) such as cigarette logos on clothing. It also does not affect magazines published outside the EU but distributed within it. Most of the provisions were scheduled to take effect in 2005; the Formula One racing sponsorship ban took effect in 2006.¹⁴¹

All Member States should have transposed the directive into national law by July 2005. However, some countries—notably

Germany, the Czech Republic, Hungary, and Spain—failed to do so, leading to legal action by the European Commission.¹⁴³ In December 2006, the EU's highest court upheld the directive and rejected Germany's challenge that it was illegal.¹⁴⁴ Germany, Europe's biggest tobacco market, had argued that tobacco advertising in local newspapers should not be subject to blocwide legislation because it does not affect trade among nations in the 25-member EU. However, the European Court of Justice in Luxembourg held that prohibitions met the conditions to be adopted for the purpose of the establishment and functioning of the internal market.¹⁴⁵

World Health Organization

On May 21, 2003, the World Health Assembly, the governing body of WHO, unanimously adopted resolution WHA 56.1, which included adoption of the FCTC.¹⁴⁶ This represents the first-ever global health treaty negotiated by WHO.¹⁴⁷ The FCTC entered into force on February 27, 2005, 90 days after ratification of the treaty by 40 countries.¹⁴⁸ By April 2008, 154 countries—not including the United States—had become parties to the treaty.¹⁴⁹

Included in the FCTC are provisions aimed at reducing both the supply of and demand for tobacco.¹⁵⁰ Among the provisions intended to reduce demand is a comprehensive ban on tobacco advertising, promotion, and sponsorship (Article 13). However, the treaty also recognizes that compliance with such bans may not be feasible by some signatories because of constitutional constraints that exist within those countries. Thus, ratification does not necessarily require that a country impose a comprehensive ban. Rather, Article 13 of the treaty provides that “each Party shall, in accordance with its constitution or constitutional principles, undertake a comprehensive ban of all

tobacco advertising, promotion and sponsorship.”^{151(p.10)} It states that a country that is not in a “position to undertake a comprehensive ban due to its constitution or constitutional principles” should apply “restrictions” to these activities consistent with its legal environment.^{151(p.10)}

The treaty provides minimum standards that parties must adopt, but again, in accordance with their constitutional principles. These minimum standards include (1) prohibition of advertising, promotion, or sponsorship for a tobacco product that is “false, misleading, or deceptive or likely to create an erroneous impression about its characteristics, health effects, hazards or emissions”,^{151(p.9)} (2) the inclusion of health warnings in all advertising and “as appropriate” in

promotion and sponsorship; (3) restriction of tobacco advertising, promotion, and sponsorship on radio, television, print media, and “as appropriate” other media, such as the Internet, within a period of five years; and (4) restriction of tobacco sponsorship of international events, activities, and/or participants. Further, in Article 11, the FCTC requires that each party to the treaty “adopt and implement, in accordance with its national law, effective measures to ensure that: (a) tobacco product packaging and labelling do not promote a tobacco product by any means that are false, misleading, deceptive, or likely to create an erroneous impression about its characteristics, health effects, hazards or emissions, including any term, descriptor, trademark, figurative or any other sign that directly or indirectly creates the false impression that a particular

Framework Convention on Tobacco Control Article 13: Tobacco advertising, promotion and sponsorship^a

1. Parties recognize that a comprehensive ban on advertising, promotion and sponsorship would reduce the consumption of tobacco products.
2. Each Party shall, in accordance with its constitution or constitutional principles, undertake a comprehensive ban of all tobacco advertising, promotion and sponsorship. This shall include, subject to the legal environment and technical means available to that Party, a comprehensive ban on cross-border advertising, promotion and sponsorship originating from its territory. In this respect, within the period of five years after entry into force of this Convention for that Party, each Party shall undertake appropriate legislative, executive, administrative and/or other measures and report accordingly in conformity with Article 21.
3. A Party that is not in a position to undertake a comprehensive ban due to its constitution or constitutional principles shall apply restrictions on all tobacco advertising, promotion and sponsorship. This shall include, subject to the legal environment and technical means available to that Party, restrictions or a comprehensive ban on advertising, promotion and sponsorship originating from its territory with cross-border effects. In this respect, each Party shall undertake appropriate legislative, executive, administrative and/or other measures and report accordingly in conformity with Article 21.
4. As a minimum, and in accordance with its constitution or constitutional principles, each Party shall:
 - (a) prohibit all forms of tobacco advertising, promotion and sponsorship that promote a tobacco product by any means that are false, misleading or deceptive or likely to create an erroneous impression about its characteristics, health effects, hazards or emissions;
 - (b) require that health or other appropriate warnings or messages accompany all tobacco advertising and, as appropriate, promotion and sponsorship;

tobacco product is less harmful than any other tobacco products.”^{151(p.9)}

Article 13 includes several references to the need to eliminate cross-border advertising, specifically expressed to apply to “radio, television, print media and, as appropriate, other media, such as the internet.”^{151(p.11)}

Article 13.7 states that, “Parties which have a ban on certain forms of tobacco advertising, promotion and sponsorship have the sovereign right to ban those forms of cross-border tobacco advertising, promotion and sponsorship entering their territory and to impose equal penalties as those applicable to domestic advertising, promotion and sponsorship originating from their territory in accordance with their national law.”^{151(p.11)} These articles are directly intended to address tobacco advertising

and promotion that may cross national borders through international print media (especially magazines), direct broadcast satellite linked to domestic receiving dishes, paid product placement in movies, and the World Wide Web and other Internet-based communication channels. To control cross-border advertising under the FCTC, Kenyon and Liberman have recommended a multilayered approach including formal law and regulation, monitoring and enforcement practices, education, and international cooperation.¹⁵²

The United States signed the treaty in May 2004 but has not ratified it.¹⁴⁹ Article II, section 2, of the U.S. Constitution states that the president “shall have power, by and with the advice and consent of the Senate, to make treaties, provided two-thirds of the

(c) restrict the use of direct or indirect incentives that encourage the purchase of tobacco products by the public;

(d) require, if it does not have a comprehensive ban, the disclosure to relevant governmental authorities of expenditures by the tobacco industry on advertising, promotion and sponsorship not yet prohibited. Those authorities may decide to make those figures available, subject to national law, to the public and to the Conference of the Parties, pursuant to Article 21;

(e) undertake a comprehensive ban or, in the case of a Party that is not in a position to undertake a comprehensive ban due to its constitution or constitutional principles, restrict tobacco advertising, promotion and sponsorship on radio, television, print media and, as appropriate, other media, such as the internet, within a period of five years; and

(f) prohibit, or in the case of a Party that is not in a position to prohibit due to its constitution or constitutional principles restrict, tobacco sponsorship of international events, activities and/or participants therein.

5. Parties are encouraged to implement measures beyond the obligations set out in paragraph 4.
6. Parties shall cooperate in the development of technologies and other means necessary to facilitate the elimination of cross-border advertising.
7. Parties which have a ban on certain forms of tobacco advertising, promotion and sponsorship have the sovereign right to ban those forms of cross-border tobacco advertising, promotion and sponsorship entering their territory and to impose equal penalties as those applicable to domestic advertising, promotion and sponsorship originating from their territory in accordance with their national law. This paragraph does not endorse or approve of any particular penalty.
8. Parties shall consider the elaboration of a protocol setting out appropriate measures that require international collaboration for a comprehensive ban on cross-border advertising, promotion and sponsorship.

^aWorld Health Organization. 2003. World Health Assembly Resolution 56.1. Geneva: World Health Organization. http://www.who.int/tobacco/framework/final_text/en.

Senators present concur.”¹⁵³ By April 2008, the president had not yet submitted the FCTC to the Senate for ratification. It is unclear to what extent ratification would require the United States to impose new restrictions on tobacco advertising, promotion, and sponsorship beyond those already in effect.¹⁵⁴

Summary

The history of efforts to restrict tobacco advertising and promotion in the United States has been closely intertwined with legal and constitutional factors such as constraints established by prior legislation, the proper roles of regulatory agencies, and constitutional protections derived from free speech rights encompassed in the First Amendment. Such issues have taken on increasing prominence, at both domestic and global levels, with the increasing use of policy interventions toward such promotion as a strategy to reduce the disease burden related to tobacco use.

Numerous legislative and regulatory efforts have been launched to date to curb tobacco promotion, including a comprehensive ban on such promotion within the WHO FCTC. Implementation of such broad restrictions, however, has generally been limited by constitutional protections for commercial speech (for example, in the United States and Canada) or legal challenges (such as the EU’s eventual modification of its sweeping 1998 ban of tobacco advertising and sponsorship). At the same time, policies on tobacco advertising and promotional activities have generally evolved to become progressively more restrictive over time. Moves toward broader prohibitions in this area are likely to continue and will probably stimulate further legal and policy debate and analysis.

Conclusions

1. The First Amendment to the U.S. Constitution, as the Supreme Court has interpreted it in recent years, grants broad protection for commercial speech, including speech about tobacco products. The Court has precluded regulation of tobacco products by the U.S. Food and Drug Administration (FDA) on the basis of the Court’s analysis of existing authorities under the FDA’s governing statute and the complex balance that Congress has struck between protecting and promoting trade in tobacco products and informing consumers of their dangers.
2. The Federal Trade Commission has authority to prevent “unfair or deceptive acts or practices in or affecting commerce.” However, the agency’s efforts to prevent tobacco advertisements that are false or misleading have been limited.
3. Canada and the European Union have imposed limitations on tobacco advertising and promotion, but these policies were weakened as a result of legal challenges. Nevertheless, Canadian and European restrictions on tobacco marketing are stronger than those currently in place in the United States.
4. The Framework Convention on Tobacco Control (FCTC), the first treaty ever negotiated by the World Health Organization, calls on each party to the treaty to “undertake a comprehensive ban of all tobacco advertising, promotion and sponsorship ... in accordance with its constitution or constitutional principles.” As of April 2008, 154 countries were parties to the FCTC. The United States signed the treaty in May 2004 but has yet to ratify it.

Notes

- n.1 “Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press; or the right of the people peaceably to assemble, and to petition the Government for a redress of grievances.”¹
- n.2 See, for example, *Members of City Council v. Taxpayers for Vincent*.⁵ The Supreme Court has stated that time, place, and manner restrictions do not violate the First Amendment “provided that they are justified without reference to the content of the regulated speech, that they are narrowly tailored to serve a significant governmental interest, and that they leave open ample alternative channels for communication of the information.”¹⁵⁵
- n.3 But see Troy.¹⁵⁶ Troy argues that the Framers of the Constitution believed that the right to advertise was encompassed within the First Amendment’s protection of freedom of the press and that they did not intend to distinguish between commercial and noncommercial speech, but rather between truthful and false speech.
- n.4 In *Bd. of Trustees v. Fox*¹⁵⁷ the Court ruled that the Court of Appeals had erred in requiring the application of a least restrictive means test to a university regulation; the Court instead interpreted the fourth prong of the *Central Hudson* test as a reasonable fit standard. “What our [commercial speech regulation] decisions require is a ‘fit’ between the legislature’s ends and the means chosen to accomplish those ends” (quoting *Posadas v. Tourism Co. of Puerto Rico* [478 U.S. 328, 341 (1986)]²⁷—“a fit that is not necessarily perfect, but reasonable ... that employs not necessarily the least restrictive means but ... a means narrowly tailored to achieve the desired objective.”¹⁵⁷
- n.5 See, for example, *44 Liquormart, Inc. v. Rhode Island*²⁴ in which Justice Clarence Thomas argues that where “legal users of a product or service [are kept] ignorant in order to manipulate their choices in the marketplace, the balancing test adopted in *Central Hudson* ... should not be applied”). See also *Lorillard Tobacco Co. v. Reilly*⁷ (533 U.S. at 572) in which Justice Thomas states that “I continue to believe that when the government seeks to restrict truthful speech in order to suppress the ideas it conveys, strict scrutiny is appropriate, whether or not the speech in question may be characterized as ‘commercial.’”
- n.6 See Gilhooley,²⁵ which notes that “while the Justices use the same [*Central Hudson*] test, they differ on its meaning in practice.” See also Vladeck,²⁶ which traces the history of the commercial speech doctrine.
- n.7 See, for example, *Posadas v. Tourism Co. of Puerto Rico*,²⁷ which upholds Puerto Rico law prohibiting casino advertising, finding that the government’s interest in reducing the demand for casino gambling by residents of Puerto Rico was substantial and that the regulations directly advanced the government’s interest, and the restrictions were no more extensive than necessary to serve the government’s interest.
- n.8 See, for example, *Rubin v. Coors Brewing Co.*,²⁸ which finds that federal government prohibition on display of alcohol content on beer labels did not sufficiently advance the government’s interest in protecting the health, safety, and welfare of its citizens). See also *44 Liquormart, Inc. v. Rhode Island*,²⁴ which unanimously overturned a state ban on liquor price advertising, while disagreeing on whether the state’s failure related to the direct advancement or reasonable fit prong of *Central Hudson*.
- n.9 Because the Court concluded that the restrictions on cigarette advertising were preempted by the Federal Cigarette Labeling and Advertising Act, it did not render an opinion regarding whether the cigarette advertising restrictions violated the First Amendment.⁷
- n.10 The appellate court ruled that the prohibition on advertising was not severable from the rest of the compounding provision.³⁰ Because petitioners did not challenge the severability determination, the Court’s ruling had the effect of invalidating the entire pharmacy compounding section of FDAMA.²⁹
- n.11 For example, in *Riley v. Nat’l Fed’n of Blind*,³⁶ the Court declined to use a commercial speech test in striking down a statute mandating professional fundraisers to disclose the percentage of charitable contributions actually turned over to the charity. “Even assuming ... that [the mandated] speech in the abstract is indeed merely ‘commercial,’ we do not believe that the speech retains its commercial

- character when it is inextricably intertwined with otherwise fully protected speech [involved in charitable solicitations].”
- n.12 The Court decided the case on the basis of its compelled speech jurisprudence and did not apply the *Central Hudson* test. Nevertheless, some legal commentators view the *United Foods* case as a victory for constitutional protections of commercial speech. See Hudson.¹⁵⁸
- n.13 Four years earlier, in *Glickman v. Wileman Bros. & Elliott*,¹⁵⁹ the Court had upheld similar federal marketing orders requiring California fruit producers to fund a generic advertising program, characterizing the orders as economic regulation that did not impinge on First Amendment rights.¹⁶⁰ The Court in *United States v. United Foods* distinguished its prior ruling by reasoning that the exaction in *Glickman* was ancillary to a comprehensive regulatory program that included several competition-displacing features. In contrast, the federal statute in *United Foods* had no regulatory objective other than the generic advertising.
- n.14 In *Pearson v. Shalala*,³⁹ the claims at issue in the case were that consumption of antioxidant vitamins may reduce the risk of certain kinds of cancer, that consumption of fiber may reduce the risk of colorectal cancer, that consumption of omega-3 fatty acids may reduce the risk of coronary heart disease, and that 0.8 mg of folic acid in a dietary supplement is more effective in reducing the risk of neural tube defects than is a lower amount in foods in common form.
- n.15 In *Pearson v. Shalala*,³⁹ the regulation at issue stated that the FDA would authorize a health claim only “when it determines, based on the totality of publicly available scientific evidence (including evidence from well-designed studies conducted in a manner which is consistent with generally recognized scientific procedures and principles), that there is significant scientific agreement, among experts qualified by scientific training and experience to evaluate such claims, that the claim is supported by such evidence.”¹⁶¹
- n.16 See, for example, *Zauderer v. Office of Disciplinary Counsel of Supreme Court*.⁴⁰ This case upholds disciplinary counsel finding that advertising contingent fee arrangement without disclosing the need to pay legal costs was deceptive and misleading, but rejecting prohibition of advertisements offering to represent previous users of a defective birth control device, where advertisements did not promise successful outcome on cases or suggest that the attorney had special expertise in such lawsuits and illustrations were accurate representation of device). See also *Ibanez v. Florida Dep’t of Bus. & Prof’l Regulation*,⁴¹ which finds that attorney’s use of Certified Public Accountant (CPA) and Certified Financial Planner (CFP) designations were not misleading provided that she held an active CPA license and CFP certification. See also *Peel v. Atty. Registration & Disciplinary Comm’n*,⁴² which holds that attorney’s letterhead stating that he was a “Certified Civil Trial Specialist By the National Board of Trial Advocacy” was not actually or inherently misleading where the information was true and verifiable, and the potential for the information to mislead was insufficient to warrant a categorical ban.
- n.17 For example, in *Thompson v. Western States Med. Ctr.*²⁹ the Court states that “[e]ven if the Government did argue that it had an interest in preventing misleading advertisements, this interest could be satisfied by the far-less-restrictive alternative of requiring each compounded drug to be labeled with a warning that the drug had not undergone FDA testing and that its risks were unknown.”
- n.18 Although the FCLAA also banned cigarette advertising in electronic media subject to the jurisdiction of the Federal Communications Commission, at least one commentator has opined that this provision would likely be considered unconstitutional were it enacted today but that a court would be reluctant to overturn a ban that has become so entrenched. See Hoefges⁵³ (quoting from Redish¹⁶²).
- n.19 Cigarette packages, outdoor billboards, and other forms of advertisements must bear one of the following labels: Surgeon General’s Warning: Smoking Causes Lung Cancer, Heart Disease, Emphysema, And May Complicate Pregnancy; Surgeon General’s Warning: Quitting Smoking Now Greatly Reduces Serious Risks to Your Health; Surgeon General’s Warning: Smoking By Pregnant Women May Result in Fetal Injury, Premature Birth, And Low Birth Weight; Surgeon General’s Warning: Cigarette Smoke Contains Carbon Monoxide.¹⁶³
- n.20 Preemption doctrine has its origins in the nineteenth-century Supreme Court case *McCulloch v. Maryland*.¹⁶⁴ In that case, the

- Court held unconstitutional the levying of a tax by the state of Maryland on a federal bank. The Court ruled that “the States have no power, by taxation or otherwise, to retard, impede, burden, or in any manner control the operations of the constitutional laws enacted by Congress.” Since then, “it has been settled that state law that conflicts with federal law is ‘without effect’.” See *Cipollone v. Liggett Group*,⁵⁴ which quotes *Maryland v. Louisiana* (451 U.S. 725, 746 [1981]). See also Garner and Whitney.¹⁶⁵
- n.21 In *Cipollone*, the Court concluded that section 5 of the 1965 act preempted only “state and federal rule making bodies from mandating particular cautionary statements and did not preempt state-law damages actions.”⁵⁴ See also Ausness,⁵⁵ which concluded, however, that the 1969 amendment to the act did have a limited preemptive effect.
- n.22 The 1914 statute prohibits only unfair methods of competition. The Wheeler Lea Amendment of 1938 expanded the agency’s jurisdiction to include unfair and deceptive trade practices and to prohibit false ads of drugs, devices, food, and cosmetics. See Wheeler-Lea Amendment of 1938¹⁶⁶ and *FTC v. Sperry & Hutchinson Co.*¹⁶⁷
- n.23 Bayer and colleagues⁴³ (quoting from Brenner¹⁶⁸).
- n.24 Section 2(b) of the charter states, “Everyone has the following fundamental freedoms: Freedom of thought, belief, opinion and expression, including freedom of the press and other media of communication.”¹¹⁷
- n.25 In *Ford v. Quebec*, the Canadian Supreme Court states, “Over and above its intrinsic value as expression, commercial expression which, as has been pointed out, protects listeners as well as speakers plays a significant role in enabling individuals to make informed economic choices, an important aspect of individual self-fulfillment and personal autonomy. The court accordingly rejects the view that commercial expression serves no individual or societal value in a free and democratic society and for this reason is undeserving of any constitutional protection.”^{118,120}
- n.26 Section 1 of the charter provides the following: “The *Canadian Charter of Rights and Freedoms* guarantees the rights and freedoms set out in it subject only to such reasonable limits prescribed by law as can be demonstrably justified in a free and democratic society.”¹¹⁷

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Tobacco in News and Entertainment Media

The average American is exposed to news and entertainment programming every day, yet the influence of these media on tobacco use remains an area open to future study. This part reviews the current evidence concerning tobacco use and exposure to mass media, together with the methodologies used to research these areas.

The first chapter looks at the influence of the news media on tobacco use and the broad range of metrics used to assess news coverage related to tobacco and whether it correlates with tobacco consumption, policy outcomes, and activities from both pro- and antitobacco stakeholders to influence news coverage. The following chapter then closes this part by examining the role of entertainment media in affecting attitudes and behavior toward smoking, particularly among children and adolescents. The research base in this area, much of which revolves around the relationship between movies and smoking, informs policy development and further research as newer entertainment media channels compete for the attention of today's youth.

9

How the News Media Influence Tobacco Use

News media coverage is an important source of health information and can frame discussions of tobacco-related issues among both policymakers and the general public. As a result, media coverage has the potential to affect individual attitudes, behaviors, and outcomes regarding tobacco use. This chapter examines the impact of news coverage on tobacco control and presents the following information:

- *Summaries of descriptive studies examining tobacco-related news coverage, including the volume and nature of news stories, content analysis of specific tobacco-related topics, and contextual issues*
- *Issues and early research into relationships between news coverage of tobacco issues and individual and policy outcomes*
- *Tobacco industry efforts to influence news coverage of tobacco issues*

This research indicates that media advocacy is an important but underutilized area of tobacco control. The impact of such media coverage on tobacco use remains a critical area for further study.

Introduction

This chapter examines the influence of the popular news media on issues surrounding tobacco use. It first looks at key concepts in the study of tobacco-related news coverage and corresponding audience reception. Next, it summarizes conclusions from literature examining the news media's coverage of tobacco, smoking, and tobacco control, including studies that sought to assess the impact of such news coverage on behavioral, policy, and legislative outcomes. This chapter also reviews published accounts of tobacco control media advocacy efforts to increase and improve the quality of news media reporting on tobacco. Finally, evidence is reviewed from tobacco industry documents to illustrate the industry's attempt to shape news coverage.

The news media are recognized as among the world's most influential and powerful institutions. George D. Lundberg, M.D., editor of the *Journal of the American Medical Association* for 17 years, remarked, "In our society ... public media are irreplaceable as a mechanism for moving a problem to a solution."^{1(p.113)} Alan Otten, a long-time reporter for the *Wall Street Journal*, noted, "Well-done investigative reporting produces public outrage (or policymaker outrage) that forces new regulations and laws or tougher

enforcement of existing ones." Otten quotes a health consultant saying, "Ten-thousand-watt klieg lights turned on a situation focuses the minds of policymakers very fast."^{1(p.112)} Page and Shapiro's seminal analysis of 50 years of trends in Americans' policy preferences concluded, "Short-term movements in public opinion can largely be accounted for (and predicted) by quantitative analyses of what news, from what sources, appears in the mass media."^{2(p.386)} Authoritarian governments invariably control the news media, but in democracies with historically independent news media, those in government, politics, industry, popular culture, and special interest groups work to obtain positive and extensive news coverage.

In the wider field of public health, research has established that the news media serve as an important source of health information for members of the general public³⁻⁸ who rely on it particularly for information about issues lying outside of their immediate realm of experience.⁵ A 2001 survey by the Kaiser Family Foundation and the Harvard School of Public Health found that more than one-half of Americans name national, local, or cable news as their most important source of health information, rather than a health care provider or public health source.⁹ In addition, 42% of those polled reported that they closely follow health news stories.¹⁰

A Changing Media Mix

Today's news media extend beyond newspapers, radio, and television bulletins. New technologies such as the Internet, handheld computers, and mobile telephones have revolutionized the ways people obtain their news, and news increasingly resembles entertainment. Industry groups, nongovernmental organizations, and community groups target audiences via direct mail and e-mail, selecting, synthesizing, and thereby selectively emphasizing a limited range of news that may be editorialized. These developments have attracted relatively little research attention of direct relevance to tobacco use or the use of these media tools by either tobacco control or tobacco industry interests, suggesting an important gap in knowledge. Regardless, in whatever form they take, news sources are an important and often unparalleled source of information for both the general public and influential decision makers.

Tobacco issues have become increasingly newsworthy as organized public health efforts to reduce tobacco use have grown and tobacco issues have become more politicized. Reporting on links between smoking and adverse health outcomes increased after the release of the 1964 Surgeon General's report on smoking and health.¹¹ Moreover, many other facets of tobacco control also have fallen under the news media spotlight. Over the last 40 years, the news media have paid significant attention to the tobacco-caused deaths of famous people; attempts to increase cigarette taxes, introduce and uphold smoke-free laws, and mount antismoking campaigns; criticism of tobacco industry advertising, promotions, and conduct in opposing effective tobacco controls; and private and state efforts to recover smoking-related health care costs from the tobacco industry. Much of the increase in news coverage results from a rise in the number of newsworthy tobacco-related events in the United States and internationally. However, this increase also reflects explicit efforts to create newsworthy events and stories and to shape news coverage by those working to promote or to undermine tobacco control progress.

The newsworthiness of tobacco control should not, however, be measured solely by the volume of news coverage. Efforts to incorporate measures of audience engagement also are important. To this end, research conducted using the Kaiser Family Foundation/Harvard School of Public Health's *Health News Index*¹⁰ listed tobacco use as one of the top three health issues to draw public attention between 1992 and 2002, after bioterrorism and abortion clinic violence. In this study, health stories were broadly defined as being those relating to national health policy, health issues or specific diseases and treatments, or social policy issues indirectly related to health, including elections, economic policy, gun control, poverty, welfare, and Social Security.

Overall, 55% of respondents reported that they closely follow news on tobacco.

The presence and prominence of tobacco control material in the news are indisputable. However, the tobacco control research community has largely neglected studying news coverage and the response to and influence of this coverage on smokers, on the broader community, and on policymakers. For instance, very few papers focused on news media at World Conferences on Tobacco OR Health held from 1983 to 2003 (table 9.1).

This low level of research effort, compared with the relatively high level of media coverage of tobacco issues and its potential impact, points to the need for a greater focus on media issues in tobacco control. This chapter examines concepts in news media coverage of tobacco, summarizes research on such coverage and its influence on tobacco use, and outlines a future research agenda based on trends found in existing data. By understanding the nature and potential impact of the news media, tobacco control stakeholders can gain a promising new area of knowledge in the fight to reduce the public disease burden due to smoking.

Perspectives on News Story Selection and Content

General news coverage can be viewed at a superficial level as a reflection of observable events happening in the world at a given time that are deemed newsworthy. Using this narrow definition, a change in the volume of coverage of an issue such as tobacco use could be considered to reflect a change in the occurrence of relevant, newsworthy events. In this vein, one research tradition focuses on the accuracy and comprehensiveness of news coverage¹² and how they might be improved. One study specifically attempted

Table 9.1 News Media Papers Presented at World Conferences on Tobacco OR Health, 1983–2003

Conference	Abstracts or proceedings	Total papers or abstracts published	Total papers or abstracts focusing on media campaign descriptions, planning, and evaluations		Total papers or abstracts focusing on tobacco coverage by news media	
			Total	%	Total	%
Winnipeg 1983	Proceedings	178	4	2.2	1	0.6
Tokyo 1987	Proceedings	189	12	6.3	8	4.2
Perth 1990	Proceedings	280	23	8.2	3	1.1
Buenos Aires 1992	Abstracts	412	6	1.5	2	0.5
Paris 1994	Proceedings	233	5	2.1	4	1.7
Beijing 1997	Proceedings	428	15	3.5	10	2.3
Chicago 2000	Program	574	16	2.8	11	1.9
Helsinki 2003	Abstracts	1,911	75	3.9	18	0.9

Note. These numbers are approximations because of incompatibilities in conference publications' inclusion of papers, seminars, workshops, and posters and because only one coder assessed each paper and abstract. The reliability of categorizations has not been determined.

to compare news coverage of an issue or event with some a priori criteria, such as quality of the study designs or involvement of commercial sponsors.¹³

By contrast, the social problems perspective^{14–17} treats the news media as an institution of power, rejecting both the “just the facts” notion of journalism and the idea that media content can ever accurately represent the “real world out there.” Instead, proponents of a social constructionist or social problems perspective consider public attention a scarce resource for which advocates of various issues are in constant competition. The news media cannot simply reflect the external world because of its sheer vastness and complexity and because the media are a critical part of the mechanism through which that world is both assembled and understood.

Agenda Setting

From a social problems viewpoint, the news media constitute a vital institutional arena within which competition for public attention to a given problem can occur. However, only a limited number of problems

or issues can be presented by the news media at any given time.¹⁵ All potential issues of interest must compete with hundreds if not thousands of events and issues that come before the news media each day. According to agenda-setting theory, the degree of emphasis the mass media place on an issue influences the priority the public affords to that issue.¹⁸ This theory essentially suggests that the influence of the news media is due to this capacity to set the public agenda—to determine, for example, which issues people discuss.

The relative scarcity of space for news highlights the importance of determining a topic's newsworthiness. This designation suggests to the public that a topic is important or interesting enough to receive media attention, thereby implicitly contributing to public notions of the relative importance of issues and events.^{19,20} From this perspective, news does not merely mirror society or passively reflect preexisting concerns at a particular time, but helps shape both individual and community concerns about what is worthy of public attention. Further, the news media can choose, create, sustain, and

shape an issue for public consumption by influencing how issues are presented or framed for consideration by the public and decision makers.^{21–23}

Embedded in this power to introduce and reinforce issues to the public is the notion that news media treatments influence perceived solutions to a given problem.²⁴ Iyengar²⁵ also argues that news discourses can implicitly question who or what is responsible for problems and their solutions. The result is that audiences can be presented with an account of a problem as well as perspectives for thinking about it and potential avenues for its resolution. Indeed, Menashe and Siegel²⁶ concluded that tobacco-related news coverage guides people's thoughts about tobacco and plays an important role in determining how people address the issue of tobacco use as a social problem.

Some research has found that stakeholders who seek to shape media coverage in an effort to guide or oppose social change can instigate news coverage of an issue.²⁷ Furthermore, allegations have been made that some journalists may tend to collaborate with rather than criticize the most influential societal elites. For example, one study found that medical science reporting is based on regular journalistic review of a very limited number of top science journals.⁴ This practice reinforces the established hierarchy of knowledge. Analyzing mainstream news coverage as a reflection of powerful societal institutions as well as an instigator of change may, therefore, be most appropriate.

Similarly, the identification of stakeholders in news media coverage of tobacco use issues is worthy of critical analysis. For example, Wakefield and colleagues²⁸ analyzed Australian news coverage of a liability trial involving a nonsmoking worker with laryngeal cancer and her employer at a bar. They found debate shaped around worker

inequity, smoking bans, and employer liability that made it difficult for the tobacco industry to publicly assert that the issue is one of personal responsibility or accommodation of smokers.

Framing

As part of the power of news resides in gaining attention for particular issues, understanding *which* issues are considered and *how* they are shaped for public consumption is important to analyzing news coverage. Researchers have long used the core concept of framing. At its most basic level, Goffman's²⁹ notion of framing emphasizes people's reliance on a structure within which to understand their experiences. Goffman argues that this structure always is necessary to facilitate social interaction.³⁰ To frame news discourse is to "*select some aspects of a perceived reality and make them more salient ... in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation...*"^{31(p.52)}

News coverage necessarily frames an issue for consumers as the language used, the sources consulted, and the opinions cited (as well as those omitted) provide the context for a news story.³² This context tells the reader whether the issue is of local or national importance, for example, or may link the topic to salient ideological debates on larger issues such as human rights, industry responsibility, or the government's role as protector or standard setter. A story may also define how the issue was instigated or interests that need to be considered in solving a problem.

One useful application of the framing concept is to distinguish between episodic and thematic contexts for news coverage.^{25,33} An episodic story isolates an event as newsworthy, such as an outbreak of a particular disease or the outcome of a court case or policy decision. Thematic

stories address a general issue or emerging pattern that may require broader public and political attention. Public health advocates often seek more thematic news coverage or provide thematic contexts for coverage of newsworthy events. Researchers need to distinguish between episodic and thematic news coverage in studying how consumers may develop different perceptions and understanding of health issues, the responsible parties, and potential solutions.

The notion of framing providing the interpretive schema for a particular news story is useful. However, framing can be considered an active process that seeks to move an issue in a particular direction. Social movements literature has developed an idea of framing as an action whereby advocates for issues seek to use widely accessible cultural ideologies to draw people's attention to particular issues and to gain public support for specific courses of action.^{34,35} Pan and Kosicki³⁰ argue that framing an issue in the news media essentially provides the parameters within which the public will debate the nature of a problem and what should be done about it. A frame implies the structure within which something is viewed, somewhat like a photograph or window frames. The importance of framing suggests that public health issues, which can lead to social developments such as the breast cancer movement Kolker³⁵ studied, may benefit from reframing to encourage change in the dominant public perception of an issue. The success of the breast cancer movement is seen at least partly as the result of a change away from framing breast cancer as an individual, stigmatized condition toward prominent and powerful notions of survivorship and camaraderie. Such potent concepts, in turn, suggest the need for public and financial support for prevention and treatment.

The crucial role of reporters and editors in constructing news frames and the brevity

of news reporting require those seeking media coverage to present their issues so they resonate for journalists. In highly competitive news environments, journalists come to learn which news frames are more likely to be deemed newsworthy and strive for optimal positioning for their news offerings within these frames. Those working in tobacco control also need to be acutely aware of how groups opposed to tobacco control can successfully frame their arguments to capture news attention.

Press articles and television bulletins are constructed to guide interpretation of the messages and make sense of events and how they relate to the social world. By referring to certain news discourses and narratives, news producers attempt to provide signposts to guide audiences in understanding a text. As Morley explains, "While the message is not an object with one real meaning, there are within it signifying mechanisms which promote certain meanings, even one privileged meaning, and suppress others: these are the directive closures encoded in the message."^{36(p.21)} Media analysts refer to this construction as the preferred or dominant meaning of a media text.

Descriptive analyses of the inclusion of tobacco issues within the news and the framing of tobacco within such coverage can improve the understanding of both the successes and limitations of public health efforts and campaigns in relation to tobacco use.²⁶ An appreciation of which tobacco issues receive news media attention helps to provide context for understanding changes in public attitudes and behavior as well as the success or failure of policy initiatives. Furthermore, analyses of any temporal and geographic variations in the volume and focus of news media coverage of tobacco issues enhance the understanding of the evolution of tobacco control and its popular and political reception. Analyses of the news both inform and are informed by an understanding of societal values and

concerns at a given time.^{16,37} Decisions about what is newsworthy entail a contemporary understanding of the significance of specific events as well as commonly held perspectives on institutional behavior and motives.²⁴ Research in this area has focused on what the volume of tobacco coverage can reveal and what might be learned from the analogies, metaphors, and historical comparisons used in framing news stories.³⁸

The total volume of unpaid news media coverage routinely outweighs even the most intensive antismoking advertising campaigns.³⁹ Because of its mass-reach nature, news can have a sizable impact on both individual- and policy-level outcomes. News coverage related to tobacco control gains importance when government funding for mass media campaigns decreases and as the public's exposure to explicitly formulated tobacco control messages declines.⁴⁰

Media Advocacy for Tobacco Control

As discussed, numerous studies have established news coverage as a primary source of health information for the general public.^{41,42} Given the potential of the media as a channel of influence, media advocacy is an aspect of policy change that prioritizes strategic efforts to attract media attention toward a particular subject or specific aspects of a given topic. The intent is to shape consideration of the given issue in ways that are conducive to the interests of those advocating the policy in question. Advocacy has become an essential tool that stakeholders use to influence how the public and policymakers attend to and rank the importance of various issues.^{43–46}

Media advocates work to reframe and shape public discussion of a policy objective through strategic use of the news media.^{47,48} They bring attention to problems that might otherwise be considered private

(for instance, viewing lung cancer as the result of an individual's smoking), and they focus on important social and public policy dimensions (such as the societal costs of smoking and the influence of tobacco industry practices in promoting smoking). Redefined as a social problem, an issue warrants societal response through policy rather than remaining the concern of an individual or friends and family.¹⁵

Effective tobacco control programs encompass individual, interpersonal, and societal factors and approaches to addressing the problem of tobacco use. Media advocacy has become an important component of these efforts.^{43,49,50} By working directly with news producers, advocates can influence the level of attention given to specific concerns and shape the consideration of potential solutions. Media advocacy includes publicizing data and study findings, planning events likely to attract coverage, and submitting letters to the editor and opinion articles (op-ed columns—named as such because they are generally opposite the editorial page) in support of tobacco control perspectives.⁵¹ There is a growing need for an active research and evaluation agenda to ensure that advocacy efforts have the desired effect to improve future campaigns and maximize impact. Chapman^{46(p.361)} outlined 10 key questions that should be considered in planning advocacy strategies to “build support for public policies and ultimately influence those who have the power to change or preserve laws, enact policies, and fund interventions that can influence whole populations.” These questions include the need for clear objectives for advocacy efforts, matching media advocacy objectives to meet these goals, and issue framing to promote outlined objectives.

News coverage that supports tobacco control sets the agenda for further change at the community, state, and national levels.⁵² However, policy analysts and researchers seeking to understand how policies, laws,

and community attitudes against smoking evolve often neglect to consider news reportage and commentary. At best, news coverage tends to be acknowledged as a mere background factor compared with more proximate, specific factors such as lobbying, petitions to government or paid media campaigns that are seen to influence policy, and behavioral change. For example, as suggested by table 9.1, researchers routinely evaluate the impact of limited-duration, health-promotion, antismoking campaigns sponsored by governments and nongovernmental organizations. However, they relatively seldom examine the influence and impact of ongoing antismoking news reportage that may dwarf the duration and number of exposures provided to audiences and readerships of health promotion campaigns. Accordingly, news coverage needs to be brought more into the foreground of explanations about how community and political attitudes influence support for tobacco control legislation and programs.^{21,22}

The news media are a primary source for information dissemination.^{53,54} However, many working in tobacco control underuse this source. Individuals involved in public health research and practice should recognize that if decision makers are not made aware via mass media reportage of advances in knowledge and/or understanding, the potential impact of this new knowledge is greatly limited.^{53,55} People can react only to information to which they have access. Yet, much research relevant to tobacco control is never brought to public attention via the news media. It remains relatively unnoticed, uncited, and unreported except in research journals that often have very low circulations compared to news audiences and readerships.⁴⁴

The next two sections review existing literature on the nature and volume of news coverage of tobacco and their relationship with behavioral and policy outcomes.

Most of the studies reviewed focused on newspapers because of the ease and relative lack of expense involved in accessing archival material. Longitudinal studies of electronic media in tobacco control are rare because the 24-hour monitoring required is resource intensive and the costs of purchasing the necessary data are very high. Newspapers also serve as a major source of information for electronic media⁵⁶ and are considered by most researchers to be the official record for news events.

Descriptive Studies of News Coverage of Tobacco Use

The literature on news coverage and tobacco consists primarily of descriptive studies. Researchers have focused either on analyzing variation in the volume and/or nature of news coverage of tobacco during specified periods, or examining coverage of one specific topic or type of coverage in isolation. As the literature has grown, an increasing number of studies have sought to go beyond simply examining the overall volume of coverage to consider more in-depth framing of tobacco issues in various news media. These descriptive studies can enhance the understanding of news coverage and are an important first step in informing efforts to improve future coverage.⁵⁷ Furthermore, analyses of news coverage of a particular topic can provide insights into the public mood regarding that issue, making the news media a proxy source for public opinion. Indeed, research has established that public officials often use news data for exactly this purpose.³⁰ However, few studies (see below) have linked an analysis of coverage of tobacco to individual, policy, or legislative outcomes.

Chapman's⁵⁸ study of 30 Australian newspapers over 12 months was one of the earliest descriptive studies of tobacco-related

news coverage. This study considered the volume, content, and orientation of coverage. Chapman identified 1,601 articles on tobacco-and-health issues. Of those articles, 62% were positive, 17% were negative, and 21% were neutral in their orientations toward tobacco control objectives. Articles on secondhand smoke were found to be the most frequent of all subcategories.

Menashe and Siegel²⁶ studied the frames used in front-page coverage of tobacco issues in the *New York Times* and the *Washington Post* from 1985 to 1996. In this more qualitative study of 179 front-page articles, the authors identified 11 protobacco frames and 10 tobacco control frames regularly used in press coverage. In contrast with the Australian study, Menashe and Siegel argued that the tobacco industry has been more successful than public health advocates in promoting a consistent, powerful, and clear message through the press. Over the 11-year period, tobacco control frames in these U.S. newspapers evolved from closely reflecting Surgeon General C. Everett Koop's message that tobacco kills and we must work to achieve a smoke-free society to focusing predominantly on combating youth smoking and restricting the tobacco industry's ability to target youth as potential smokers. By contrast, tobacco interest groups consistently emphasized the intrusion of tobacco control advocates into individual liberties and freedom of choice. The investigators argued that by having a tobacco control advocacy position that focused more on youth smoking—a frame that tobacco interest groups readily adopted—tobacco control advocates undermined the broader position that tobacco use is harmful to all.

Clegg Smith and Wakefield⁵⁹ analyzed newspaper editorial coverage on tobacco-related issues from 30 U.S. daily newspapers during 2001 as part of a comparative study of

coverage in the United States and Australia. Their descriptive analysis of 1,317 articles indicated a considerable fluctuation in the volume of news coverage of tobacco throughout the year. More favorable than unfavorable news stories were reported from a tobacco control perspective. Opinion coverage, less than 20% of overall coverage, tended to support tobacco control. The most prominent tobacco issue in the news during 2001 was secondhand smoke and smoking bans (17.6% of the coverage), followed by economic issues (such as cigarette taxation and price) and advertising and promotion issues. This analysis illustrated that U.S. print news coverage of tobacco issues was prominent in overall volume but fairly diffuse in its substantive focus. The analysis of the focus and tone of editorials, columns, and letters to the editor also allowed the authors to identify issues that elicited opinionated coverage.

Clegg Smith and colleagues⁶⁰ used the same methods in a subsequent study⁵⁹ to describe newspaper coverage of tobacco issues in the United States from 2001 to 2003. In a sample of 9,859 articles (approximately one-third of all articles published on tobacco) from the 100 leading daily newspapers, the majority of coverage reported on events that represented progress for tobacco control (55%), 23% reported on setbacks, and other coverage was mixed or neutral. Two-thirds of all articles were concerned with secondhand smoke and smoking bans (33%); economic issues (10%); education, prevention, and cessation efforts (10%); and the tobacco industry (9%). In opinion pieces such as editorials, columns, and letters to the editor, 56% expressed clear support for tobacco control objectives, while 26% expressed overt opposition.

Long and colleagues⁶¹ studied news coverage of tobacco by daily newspapers, local and national television newscasts, and three national news magazines in the United States during 2002 and 2003.

The nationally representative sample was drawn from 56 days of news coverage and was stratified by day of week and season of the year. Of 335 newspaper articles, stories about government policy, law, and regulation applying to tobacco dominated coverage (between 44% and 58% of articles each year), and the negative health consequences of tobacco were the next most common (between 13% and 27% of articles each year). However, government action and negative health effects usually were not covered in the same article. Tobacco news coverage was placed fairly prominently in newspapers, with nearly 62% in the front section of the newspaper. Among newspaper articles mentioning government tobacco control, news and feature stories evenly reported opinions that expressed support (16%) or opposition (17%), while opinion articles were more likely to favor control efforts (55%) than to oppose them (29%). Finally, Long and colleagues found that newspaper coverage in the southeast, the main U.S. tobacco-growing region, did not differ from that in the rest of the country. The sample of television coverage of tobacco issues found only 21 stories from 550 television news programs, averaging 0.38 stories per sampling day or one tobacco story every 25 news programs. The sampling period also identified 17 news magazine stories or about one story every four magazine issues. The allocation of television news coverage to tobacco-related topics was similar to that found in newspaper coverage. Magazines, however, tended to publish a relatively greater proportion of articles about health effects and were more likely to report about both government action and health effects in the same article.

In 2007 Nelson and colleagues⁶² published the findings of a news surveillance system for tracking tobacco news stories in the United States from January 2004 to June 2005. Tobacco news stories were coded from 10 newspapers selected according to circulation estimates and geographic

diversity, 4 national news wire services, and 7 national broadcast or cable television networks. The number of newspaper and wire stories fluctuated over time, averaging 71 per month, meaning that a tobacco story was present virtually every day in these newspapers and newswires. Television news stories were less common, with an average of 29 tobacco stories per month. Three main tobacco themes accounted for more than 70% of newspaper coverage: policy or regulation (31%), legal news or lawsuits (24%), and health effects or statistics (16%). By contrast, 49% of television news stories concerned health effects or statistics, with policy or regulation stories (19%) a distant second. This study suggests that television coverage is more common than observed by Long and colleagues.⁶¹ The difference is likely to be explained by the fact that Nelson and colleagues⁶² continuously sampled CNN television, which contained one-half of all televised news stories on tobacco, whereas Long and colleagues⁶¹ sampled only one hour of CNN per day.

These studies sought to describe news coverage of tobacco in general, rather than focusing on any particular issue of interest to tobacco control. Other descriptive research has focused more specifically on the coverage of particular topics of interest, such as tobacco farming, secondhand smoke, or cigars. Altman and colleagues,⁶³ for example, conducted a content analysis of news coverage of tobacco farming issues from 1995 to 1997. They concluded that diversification away from tobacco farming was underrepresented in news coverage of farming topics. These data indicate that there is a discrepancy in tobacco topics being covered by the media and suggest that public health practitioners need to track coverage of specific tobacco issues to ensure that media advocacy goals are achieved.

The resurgence in cigar smoking and cigar bars in the middle to late 1990s prompted Wenger and colleagues⁶⁴ to analyze news

coverage of cigars. The authors sought to characterize the role of the news media in the increasing consumption of cigars that accompanied a decline in the use of other forms of tobacco. Cigar-focused articles increased substantially over the study period, paralleling increased cigar consumption. Articles focused on cigar business (39%) and events (19%). Only 4% of articles focused on health effects. Sixty-two percent portrayed cigars favorably. The tobacco industry was mentioned in 54% of articles and portrayed positively in 78%. Forty-two percent of the individuals quoted or described in articles were affiliated with the tobacco industry, whereas only 5% were government/public health figures. The study concluded that the news coverage failed to communicate health risk messages and contributed to positive images of cigars.

In focusing on news coverage of tobacco policy, Lima and Siegel's³⁸ analysis of coverage of the 1997–98 national policy debates found that 55% of articles relating to tobacco policy portrayed the problem of tobacco use as smoking by youth and identified a “kids” frame as the dominant position relating to tobacco policy. This frame publicly established tobacco use as a problem on the basis that minors should not smoke. Thus, the news coverage did not frame the problem in terms of issues such as the long-term health harms to adult smokers, the economic costs of smoking to either the individual or society, or tobacco industry strategies to promote cigarette use. The authors recommended that the public health community should work to frame tobacco use as also relevant to the general population rather than continuing to frame it as primarily a youth issue.

Clegg Smith and Wakefield's⁶⁵ textual analysis of press coverage revisited the subject of discourses about youth in news coverage about smoking. The researchers applied an agenda-setting approach to their analysis of more than

600 youth-focused tobacco news stories from daily U.S. newspapers over a one-year period (2001). The presentation of smoking as a youth issue was a dominant component of tobacco control media advocacy efforts. News articles more often presented education as a solution to youth smoking, rather than calling on policy approaches to reduce the demand for tobacco among youth.

Three descriptive studies examined how secondhand smoke has been covered in the press. In a content analysis, Kennedy and Bero⁶⁶ found that newspaper and magazine coverage of secondhand smoke issues generally increased from 1981 to 1994. However, most of the articles (62%) suggested that research on secondhand smoke remained controversial, with the implication that decisive policy to restrict public smoking would move ahead of the supportive research evidence. As with the studies discussed above, tobacco industry spokespersons frequently were given voice in the articles and the industry perspective was often prominent, as evidenced by the tendency of stories to challenge the science of studies of secondhand smoke and to suggest continued controversy among experts over the issue. Magazines accepting tobacco advertising were significantly more likely than those refusing such advertising to publish stories suggesting that the harmful effects of secondhand smoke continued to be controversial.

Malone and colleagues²³ examined journalistic accounts and rhetorical devices used in representations of secondhand smoke as a news issue. Their analysis revealed a tendency to present the secondhand smoke issue as a moral argument between the tobacco industry and tobacco control advocates. Furthermore, they concluded that news coverage tended to treat science indicating harm from secondhand smoke as an area of controversy. Magzamen and colleagues⁶⁷ conducted a quantitative content analysis of press

coverage relating to California's proposed smoke-free policy for bars. Their study focused on the topics and nature of the coverage. The extent to which space on the editorial and letters pages of newspapers was allocated to this topic led the researchers to believe that secondhand smoke remained controversial in the public's mind. Nearly half of the press coverage of secondhand smoke was commentary. Tobacco industry representatives and public health advocates promoted their own perspectives by focusing on different aspects of the proposed policy. Moreover, tobacco industry representatives were more successful in gaining consistent coverage of their viewpoints.

Champion and Chapman⁶⁸ analyzed media reportage of the final years of public debate before Australian state governments announced smoke-free bars. Those seeking to retain smoking in bars were quoted in the press more often than others. However, more articles cast ongoing smoking in bars as a

problem that needed solving. Health advocates promoted the themes of occupational health inequity. Tobacco industry frames emphasized smoking in bars as an important cultural tradition and commercially important to bar owners.

The relationship between news coverage on tobacco and coverage of other public health issues is an important subject that largely has been ignored, particularly as it pertains to the potential impact on behavioral and policy change. The competition for space within the "news hole" is likely to be most fierce across topics that public health advocates would ideally treat as complementary (such as coverage of obesity and tobacco). Clegg Smith and colleagues⁶⁹ analyzed how the daily press described the allocations of Master Settlement Agreement (MSA) funds to areas other than tobacco control. This is an example of a study examining news coverage of one public health issue (or perspective) in competition

Tobacco Control Efforts and News Coverage: ASSIST Evaluation

Engaging in effective media advocacy is an established objective for many tobacco control programs. Therefore, monitoring the volume and nature of news coverage is an important part of evaluation efforts. The American Stop Smoking Intervention Study (ASSIST) was implemented to reduce tobacco use primarily by using policy-based approaches to change the socio-political environment. Seventeen ASSIST states formed coalitions to increase tobacco control media coverage, strengthen tobacco control policies and laws, and increase demand for smoking cessation services.^a Stillman and colleagues^b analyzed the volume and slant of news coverage of tobacco policy issues as an outcome variable in studying the impact of ASSIST in relation to the first objective. The authors conducted a content analysis of newspaper coverage of tobacco policy issues from 1994 to 1998 and compared the volume and content of coverage between ASSIST and non-ASSIST states. While the overall rate of increase in the volume of articles did not differ between ASSIST and non-ASSIST states, the rate of local stories in ASSIST states was greater than in non-ASSIST states. In addition, a state's ASSIST status did not predict the nature of editorial coverage. However, letters to the editor in ASSIST states, compared to non-ASSIST states, were more supportive of tobacco control.

^aNational Cancer Institute. 2005. ASSIST: *Shaping the future of tobacco prevention and control* (Tobacco control monograph no. 16, NIH publication no. 05-5645). Bethesda, MD: National Cancer Institute. <http://cancercontrol.cancer.gov/tcrb/monographs/16/index.html>.

^bStillman, F. A., K. A. Cronin, W. D. Evans, and A. Ulasevich. 2001. Can media advocacy influence newspaper coverage of tobacco: Measuring the effectiveness of the American Stop Smoking Intervention Study's (ASSIST) media advocacy strategies. *Tobacco Control* 10 (2): 137-44.

with others. The issue of “tobacco money” (a term that many news articles used to refer to MSA funds) is considered newsworthy without necessitating any discussion of tobacco control. Proponents of various causes (public health and others) use the news media effectively to illustrate the extent to which they deserve the MSA funds. However, others often conceptualized MSA funds as state property, requiring little or no justification for allocation outside of tobacco control.

Similarly, Caburnay and colleagues⁵⁷ situated tobacco use as one element in an analysis of news coverage of health behavior in local newspapers. Their study compared the nature of newspaper coverage of diet, exercise, and tobacco over one year. Health behavior stories occurred infrequently, and few were prominent or had a local focus. The authors concluded that more concentrated efforts need to be made in translating health behavior research into media content for local journalists.

The studies summarized so far have described the nature of coverage given to specific events or considered variations in the volume of coverage during particular periods. There is, however, also a need for analyses to consider the relative value and/or role of certain types of press coverage around tobacco. Clegg Smith and Wakefield’s⁵⁹ study of editorial coverage of tobacco topics in detail is one example of these types of investigations. This qualitative study treated editorials as evidence of engagement on the part of key media gatekeepers. It attempted to relate the salience of various tobacco-related frames to these opinion leaders. The authors examined 162 newspaper editors’ perspectives on tobacco issues as a way of assessing the relative success of those involved in seeking to promote or curb tobacco interests in the news media. They concluded that editors largely promoted tobacco control efforts, particularly structural innovations.

They also cautioned that there is little coverage of key issues such as health effects and addiction related to tobacco use and emphasized the need to reestablish these topics as newsworthy.

Relating News Coverage of Tobacco to Individual Attitudes, Behaviors, and Policy Outcomes

As outlined in the previous section, much can be learned from descriptive analyses of news coverage of tobacco use issues. However, if media advocacy is the powerful public health tool that it increasingly is assumed to be, research is needed to establish the relationship between coverage and key policy and behavioral outcomes. A large body of research literature spanning many different fields of public health indicates that news coverage informs the public about particular issues,¹⁰ and this information can influence behavior. Research has linked news coverage to behaviors such as using contraceptives,³³ having mammograms,⁷⁰ and using hormone replacement therapy in New Zealand⁷¹ and the United States.⁷²

News coverage of the health effects of binge drinking has been associated with greater self-reported disapproval rates for these behaviors among adolescents.⁷³ Likewise, Stryker⁷⁴ drew on evidence relating to breast cancer, mammography, and colorectal cancer screening to argue that a compelling societal event (such as a celebrity diagnosis) can produce enough news coverage to bring about at least a temporary change in health-related behaviors. People are highly sensitive to the contextual cues they gain from sources such as television news when they make decisions and formulate judgments.²⁵ In this light, news coverage of tobacco

issues could cue particular behavioral and attitudinal responses (such as attempts to quit smoking cigarettes and support for policy initiatives). Comprehending the interactions between the nature of news coverage and the progression of key individual decisions and policy outcomes may be instructive for tobacco control.

One challenge to studying the influence of news coverage on behavior is establishing causal relationships. It is difficult to separate the impact of the news coverage of a policy or intervention (on smoking behaviors) from the effects of the policy or intervention itself that has been subject to reportage.⁷⁵ For example, in considering the effects of the passage of a municipal clean indoor air policy on smoking behavior, one might anticipate that the restrictions themselves will reduce smoking. To the extent that the policy receives widespread news coverage, however, the coverage would communicate additional normative information and would support future policy efforts, thus having its own impact. The difficulty for the researcher is how to tease apart these effects. At the most basic level, the news media may have a direct influence on individual behavior via increased individual-level knowledge. News coverage may also have indirect effects on health behavior. For example, the news offers opportunities to change the nature of interpersonal influence relating to behavior. Finally, the news can influence the attitudes and behaviors of people in positions of power, which in turn may affect policy decisions and lead to behavior change.

Understandably, this latter effect is rarely studied. This is because the relationship among media coverage, individual attitudes, and policy outcomes is difficult to distinguish from the effects of other environmental and contextual factors.^{76,77} Moreover, politicians and key decision makers in government are reluctant to act as research informants and to admit that news events influence their decisions.

However, one innovative study examined the contribution of four factors in explaining the rate of adoption of smoke-free bylaws (ordinances) in Canadian municipalities between 1970 and 1995.⁷⁸ These four factors were (1) the number of journal articles about secondhand smoke in major scientific journals, (2) the number of pages of parliamentary debate about secondhand smoke, (3) the release of the U.S. Surgeon General's report on secondhand smoke, and (4) the number of newspaper articles about secondhand smoke. By using event history analysis, Asbridge⁷⁸ determined that the amount of news coverage and the U.S. Surgeon General's report both significantly increased the rate of smoke-free bylaw adoption. In fact, the size of the effect for news media was such that each additional news article increased the rate of bylaw adoption by 5%. Strong evidence from other areas of public health indicates that news coverage can spur policy change. However, few published studies have explicitly linked news coverage—either positive or negative—to key tobacco use behaviors.

Nonetheless, the tobacco control community is beginning to make some advances in understanding the influence of the news media on key tobacco use behaviors. Warner's¹¹ analysis of the impact of publicity flowing from the release of the Surgeon General's 1964 report on smoking and health is one study that explicitly links news coverage and behavior. The report's release and subsequent news coverage caused immediate (though transitory) decreases (4%–5%) in annual per capita tobacco consumption. Unpaid media coverage of the health effects of tobacco use also has been credited for much of the 30% decline in smoking among British men in the 20 years after release of the first Royal College of Physicians' report on smoking and health in 1962.⁷⁹

Laugesen and Meads⁸⁰ conducted a study in New Zealand that linked news coverage

News Coverage, Policy Change, and Adolescent Smoking

Niederdeppe and colleagues^a used data from the evaluation of the Florida Tobacco Control Program (FTCP) to relate news coverage of the FTCP to policy change (in the form of implementation of tobacco control policies at the county level) and then to investigate whether that policy change was related to adolescent smoking behavior within Florida. The authors conducted a content analysis of newspaper coverage between April 1998 and December 2001 and related the variation in tobacco news coverage to the enactment of tobacco product placement ordinances (specifically, policies to move cigarettes behind store counters) in 67 Florida counties by using event history analysis.

Greater news coverage of Students Working Against Tobacco events was associated with an increase in the likelihood of tobacco product placement ordinances being passed. However, passage of tobacco product placement ordinances did not lead to reduced smoking, as measured by 30-day self-reports by students up to one year after adoption of the ordinances. The authors conclude that the findings support the use of media advocacy as a tool to change tobacco policies but suggest caution in choosing policy goals that may not themselves influence tobacco use.

^aNiederdeppe, J. D., M. C. Farrelly, and D. Wenter 2007. Media advocacy, tobacco control policy change and teen smoking in Florida. *Tobacco Control* 16 (1):47–52.

of tobacco with cigarette sales data as an objective measure of tobacco consumption. This study examined the relationship between the volume of news stories on tobacco issues in daily newspapers and aggregate weekly cigarette sales data, within a broader study of the impact of cigarette price, individual income, and level of cigarette advertising on weekly cigarette sales. Aggregate cigarette sales were inversely related to the number of press clippings on tobacco or smoking issues. By calculating the elasticity for news volume and cigarette sales, the authors estimated that a 10% increase in the weekly volume of news stories could decrease purchase levels in the same week in which the stories were published by 0.4%. Doubling news coverage of tobacco use issues could be comparable to a 10% price increase. Similarly, a U.S. study by Cummings and colleagues⁸¹ found that a week-long newspaper series on smoking cessation had approximately the same effect on quit attempts (13% of smokers reported being prompted to attempt to quit, and 4% reported quitting for at least one week) as would participation in 380 dedicated smoking cessation clinics.

Pierce and Gilpin⁸² explored the relationship between news coverage and key tobacco use behaviors by analyzing coverage of tobacco issues in the most popular U.S. magazines from 1950 to 1990. They related patterns of news coverage to tobacco use cessation and initiation data from the National Health Interview Surveys (1965–92). This study sought to uncover potential relationships between news media coverage on tobacco and rates of smoking initiation and cessation over the 40-year period. From observed trends over time, the authors concluded that, for approximately 30 years, “The annual incidence of cessation in the USA mirrored the pattern of news media coverage of smoking and health.”^{82(p.145)} suggesting that news coverage was related to cessation but not to smoking initiation. They further suggested that efforts to create newsworthy tobacco issues could be most effective in settings in which cessation rates have begun to lag.

Only two studies have statistically examined the relationship between news coverage and youth smoking behavior. Niederdeppe and colleagues⁸³ assessed the relationship between exposure to tobacco-related

newspaper coverage in Florida counties and youth smoking, as measured by Florida Youth Tobacco Surveys administered between 1998 and 2002. Cumulative exposure to newspaper coverage on the Florida Tobacco Control Program (FTCP) with a one-year time lag (based on the assumption that news effects take time to diffuse) was associated with a lower likelihood of youth smoking (smoked in the past 30 days) among high school students. These results were found after adjusting for other FTCP policy and program efforts as well as individual variables associated with smoking participation. News coverage of youth advocacy efforts in particular contributed to lower rates of youth smoking in both middle and high school students. These findings provide persuasive evidence for the indirect effects of news coverage on smoking initiation.

Smith and colleagues⁸⁴ assessed the extent to which the volume and content of newspaper articles on tobacco were related to perceived smoking harm and smoking behavior among almost 100,000 American youth from 2001 to 2003, after adjusting for other individual factors and tobacco policy variables. The study found that each 10-article increase in newspaper coverage per community over the five-month period preceding survey administration was associated with increased odds of perceiving great harm from smoking (odds ratio [OR] = 1.04, $p < .01$) and decreased odds of smoking in the past 30 days (OR = 0.93, $p < .001$). However, no consistent association was found between the content or tone of coverage and youth smoking outcomes. The study suggests that gaining news coverage about tobacco issues may be an important tool by which to tackle youth smoking at the community level. Getting and keeping tobacco on the agenda is important, with volume of coverage, rather than detailed content, appearing to be the driving factor.

Another pathway through which news media affect attitudes and behavior is the

idea that general news coverage of tobacco control supports health communication campaigns that prioritize other forms of communication, such as paid mass media messaging. In this pathway, the news media are a secondary source of influence to the extent that the campaigns can be established as newsworthy and generate subsequent free coverage. For example, if a community were to invest heavily in tobacco control programs that generated newsworthy education or policy promotion events, news coverage of these events might generate additional awareness of and support for the goals of the overall program on the part of the general public and policymakers.

As noted above, some studies have suggested that news coverage on tobacco can lead to behavioral and policy change, but no sufficiently detailed, large-scale systematic study of such relationships has been conducted to determine how such an influence is achieved.²² Little is known about the potential pathways between media advocacy efforts and changes in attitudes toward tobacco control policy. In addition, little is known about the role of news coverage in influencing key decision makers to support or oppose tobacco control policy and legislation. As illustrated in the previous sections, existing research offers valuable descriptive insights. However, further investigation is needed into the relationship between news coverage on tobacco and tobacco use behaviors and policy change. The challenge now is to apply the increased understanding of the nature of news coverage on tobacco to determining the mechanisms by which it influences individual-level attitudes and behavior and policy implementation. Qualitative methodologies will be important in this effort, as well as complex statistical methods such as multilevel analysis, time series, and event history analysis linking news coverage to change in tobacco policies and smoking attitudes and behavior.

Tobacco Industry Influence on News Reporting

A key marketing tool, advertising requires a mutually beneficial commercial relationship between the advertiser and the media that carry the advertising. These relationships might afford the tobacco industry the ability to leverage editorial influence by favoring advertising in publications that downplay antismoking content or publish prosmoking articles. This effect is acknowledged in the Surgeon General's 1989 report^{85(pp.502,508-10)} as one of the indirect mechanisms by which advertising and promotion might increase tobacco consumption. Evidence for this line of reasoning from industry documents is provided later in this section.

Tobacco advertising might influence a publication's coverage of tobacco and health in several ways. An agent of the tobacco manufacturer might advise the publisher or editor (verbally if not in writing) to avoid certain types of news coverage, or a manufacturer might cancel its advertising contract with a publication or pull advertisements from one or more issues following publication of an article unfavorable to the company or industry. Some publications might self-censor their coverage of tobacco and health to avoid offending an advertiser and losing its business. A study of internal tobacco industry documents demonstrated previous instances when tobacco companies punished corporations that acted against its interests.⁸⁶ The Surgeon General's 1989 report^{85(pp.509,510)} provides several references for stating, "Writers, editors, and publishers have described numerous instances of purported censorship attributed directly to publications' fears of alienating cigarette advertisers."

While instances and impressions of the influence of advertising on editorial content

exist, a number of caveats need to be borne in mind. First, the degree of influence may vary by type of medium (television, radio, magazines, newspapers, etc.). Second, the relationship may be influenced by the geographical scope (national versus local) of the medium. Third, as discussed in chapter 2, news media companies are typically organized so as to separate and insulate business operations from editorial activities. Advertisers are serviced by marketing departments of media companies; thus, reporters rarely come into direct contact with advertisers in their media, although this may be more likely to occur in local news media. Finally, the degree of influence is likely to vary by the degree of the medium's reliance on advertising revenue. Controlled-circulation newspapers such as shoppers' guides or neighborhood newspapers that rely exclusively on advertising may be more susceptible compared to larger newspapers that rely heavily on subscription fees. In the case of larger newspapers and other media, it is possible that news coverage is more likely to influence advertising, rather than the other way around. In other words, an editorial environment that is not hospitable to a product is unlikely to attract advertising for the product, thus limiting the revenue stream for the news medium. With these general principles in mind, the remainder of this section discusses the relationship between revenue from tobacco advertising and publication of tobacco-related content.

As reviewed in chapter 10, early studies of news coverage of tobacco posed questions about the possible correlations between a publication's receipt of tobacco advertising revenue and tobacco-related content. For example, Whelan and colleagues⁸⁷ surveyed coverage of smoking in women's magazines with the objective of identifying magazines that published smoking-related articles, exploring a possible relationship between tobacco advertising and tobacco-related news content. They found few

smoking-related stories compared with other health topics. The authors concluded that the paucity of antismoking articles was related to the importance of tobacco advertising as a source of revenue for the magazines. They also concluded that magazine news coverage would adequately address tobacco issues only by restricting tobacco advertising.

A study of 99 U.S. magazines published over 25 years (1959–69 and 1973–86) essentially confirmed the summation by Whelan and colleagues that cigarette advertising in magazines was associated with diminished coverage of the hazards of smoking, particularly in magazines directed toward women. In women's magazines, the probability of publishing an article on the risks of smoking in a given year was 11.7% for magazines that did not carry cigarette advertisements compared with 5.0% for those that did publish these types of advertisements (adjusted OR = 0.13; 95% confidence interval [CI], 0.02–0.69).⁸⁸ For all magazines, when the proportion of revenues derived from cigarette advertising was the independent variable, the probability of publishing an article on the risks of smoking in a given year was reduced by 38% (95% CI, 18%–55%). This relationship was particularly strong in the case of women's magazines. Studies examining British,⁸⁹ Irish,⁹⁰ and European⁹¹ women's magazines reached similar conclusions. Furthermore, DeJong's⁹² analysis of the nature of tobacco coverage in student newspapers before and after acquisition by a tobacco company revealed a possible relationship between ownership and content. Similar studies have not yet been conducted to determine whether the presence of tobacco advertising influences editorial coverage in daily newspapers, radio, or television. However, anecdotal evidence about the influence of advertising over editorial coverage exists for newspapers and the broadcast media before the removal of cigarette commercials,^{85(p.520)} and occasional examples of industry claims of

influencing news coverage or plans to do so have surfaced within formerly private internal tobacco industry documents.

The internal tobacco industry documents made public through the MSA and other settlements and investigations provide insights into tobacco industry efforts to influence media coverage of tobacco matters. These insights often are fragmentary because documents made public represent an undefined sample of all documents ever produced within the industry. They also frequently raise questions that cannot be addressed because related documents are missing. However, many documents demonstrate the tobacco industry's awareness of the importance of news coverage favorable to industry interests. For example, Philip Morris used the InfoFlow measure to “understand what the public is reading, hearing and seeing in the news related to tobacco and ... to determine the impact this has on the general public's overall view of the tobacco industry.”⁹³ A negative InfoFlow score indicates that members of the public listen to news that influences their opinion about the tobacco industry “in a negative direction.” To that end, by its own accounts, the industry fares less well than it would like in attempts to control the nature of coverage. In 2000, Philip Morris reported to its staff, “Despite some minor movement, InfoFlow has remained decidedly negative.”⁹³

Thomas Lauria from the now-defunct U.S. Tobacco Institute lamented the nature of news coverage of the industry: “We are forever dogged with being at the bottom of the story in a chip shot quote that's taken out of context. I've counted as many as 13 anti-smoking activists in one *Los Angeles Times* article, with one recycled comment of mine at the bottom.”⁹⁴ The importance the industry places on news coverage also was illustrated when the New South Wales (Australia) government declined to support the

national introduction of health warnings on cigarettes packages in the early 1970s. One local Philip Morris operative in Australia reported to his U.S. head office, “Our first task is now to protect the New South Wales Government from too much adverse publicity — by exerting pressure on media chieftains. This is being done presently, so far with some success.”⁹⁵(Bates no. 2015047984)

Similarly, an anonymous speaker at a 1985 meeting of Philip Morris’s “top management” suggests that the news media could be “exploited” to “write articles or editorials positive to the industry position on the various aspects of the smoking controversy.”⁹⁶ It is not known whether Philip Morris or other tobacco companies adopted this strategy. However, the following comments illustrate that industry representatives were aware of the potential influence of messages delivered within the media arena.

The sixth point I want to make is that we are not *using our very considerable clout with the media*. [emphasis in original] A number of media proprietors that I have spoken to are sympathetic to our position - Rupert Murdoch and Malcolm Forbes are two good examples. The media like the money they make from our advertisements and they are an ally that we can and should exploit.

In most societies in the world today public opinion is formed, to a significant extent, by the news media and I believe we should make a concerted effort in our principal markets to influence the media to write articles or editorials positive to the industry position on the various aspects of the smoking controversy. I can’t speak for the U.S. but I can tell you all that we are not doing enough in this area in International.⁹⁶(Bates no. 2023268336)

A 1985 unsigned document commenting on a memorandum written by Philip Morris senior official Hamish Maxwell stated:

Another area we intend to exploit more fully is the ad agencies and media proprietors. We have already been helped a great deal by the agencies in Hong Kong for example, in our efforts to resist advertising restrictions. As regards the media, we plan to build similar relationships to those we now have with Murdoch’s News Limited with other newspaper proprietors. Murdoch’s papers rarely publish anti-smoking articles these days.⁹⁷(Bates no. 2023268390)

However, a 1989 Australian study somewhat contradicts this claim. The study found that newspapers owned by Rupert Murdoch published 55.7% of articles on tobacco control that were judged positive and 23.7% that were negative to tobacco control objectives, compared with 68.0% positive and 13.7% negative articles in the other large chain of Australian newspapers.⁵⁸

Despite the tobacco industry’s desire to influence media coverage, a growing number of studies (such as those reviewed above) have found that the news media often publish and broadcast news that is unfavorable to the industry’s interests. Indeed, internal tobacco industry documents demonstrate corporate officials’ frustration about negative news coverage. For example, in 1994, a Philip Morris official wrote of the news situation in Australia:

There is a vast amount of material published in the media which is predominantly negative. For example, in May 1993 1,659 national daily’s, metropolitan daily’s, suburban regional newspapers were published. These contained 450 unfavourable mentions concerning tobacco not including negative mentions in classified advertisements. In the same month, an examination of 460 magazines published during the month revealed 181 unfavourable articles.⁹⁸(Bates no. 2023248099)

An undated Brown & Williamson document lamented the news media's "lack of balance" in favoring anti-smoking coverage:

This case illustrated the problem we have in presenting to the public an alternative and balancing viewpoint to the anti-smokers [sic] strident claims. The media is biased and sensational, so that Industry responses do not get the headlines that the anti-smokers achieve.⁹⁹(Bates no. 620215679)

Like other types of manufacturers, the tobacco industry generally seeks to maximize positive and minimize negative news coverage germane to its interests. Research shows that, on average, magazines that accept tobacco advertising tend to provide less coverage of smoking and health.⁸⁷⁻⁹¹ However, this relationship has not been noted for newspapers. As more nations ban tobacco advertising after ratifying the World Health Organization's Framework Convention on Tobacco Control, tobacco industry influence on magazine content pertaining to smoking and health is likely to diminish.

Future Directions

Research on the volume of coverage of tobacco issues, particularly compared with other health topics, firmly establishes tobacco control as a highly newsworthy issue. News media coverage of tobacco control could have a significant impact on tobacco policy and individual tobacco use. Milestones in the epidemiology of tobacco use and disease (such as U.S. Surgeon General's reports) have attracted intensive news coverage during the past several decades, as have policy changes pertaining to curbing the tobacco epidemic and litigation aimed at tobacco industry activities. Over time, this has broadened to the extent that tobacco has long been one of the most covered issues in health reporting. Indeed, in June 2004 the *Wall Street Journal* deemed newsworthy a

finding that obesity "had eclipsed coverage of passive smoking" in global reportage in a news-monitoring study.¹⁰⁰

At the same time, the tobacco industry is no different from any institution in pursuing its strategic objectives in public communications and attempting to maximize the likelihood of news coverage favoring its economic interests. Some evidence suggests the industry may try to leverage its considerable advertising contributions to influence editorial coverage in magazines. However, a growing body of research focused on newspapers indicates that several decades of strong and continuing coverage of the negative aspects of tobacco issues is incompatible with any hypothesis that industry influence can seriously affect the ways in which the news media (except for magazine content) approach tobacco matters. As the tobacco control community continues to make strides in limiting the acceptable locales for print advertising, the influence of the tobacco industry even on magazine content is likely to diminish.

Further work needs to be done to elucidate the nature of tobacco-related news coverage and its broader impact on public health. The results of this work can, in turn, inform future efforts of the tobacco control community pertaining to the news media, including media advocacy, framing of key issues, and appropriate use of media channels in broader policymaking efforts. Five specific areas for future discussion are outlined here.

- 1. The tobacco control community has yet to give sufficient research attention to efforts to shape the nature of news coverage and understanding the impact of these efforts.** The public health research community has given relatively little research attention to the news media in tobacco control studies. This is despite the prominence given

in the news media to matters directly relevant to tobacco control and the acknowledgment of the importance of the news media in generating public and political interest in all aspects of public life. The tobacco control field could gain an important understanding of the role of news in advancing and retarding tobacco control objectives by studying three broad areas: the production of news accounts, the influence of news accounts on individual behaviors, and the impact of news coverage on policy outcomes.

2. Research is needed on the process for producing news coverage of tobacco issues.

News is produced by the decisions of those working in news organizations who—on a daily basis—apply precepts of newsworthiness to their selection and treatment of what will be published or broadcast. Studies examining this selection process and how news media gatekeepers interpret information presented for their consideration could bring important insights to those working in tobacco control. This could help frame news in ways that are more likely to interest journalists in tobacco control stories and to avoid engagement in news events and actions likely to attract coverage that is negative to tobacco control.

3. Better and more systematic research is needed on the nature of news coverage of tobacco and the relationship between this coverage and key behavioral and policy objectives.

More studies are needed to examine news texts that are published and broadcast about tobacco. This research ideally should move beyond content analysis studies that simply enumerate instances of categories of stories and into more text-based studies that examine matters

such as the dominant frames used to convey tobacco news, differences in how reportage positive to the tobacco industry or tobacco control is constructed, and predictors of news coverage. There appear to be few longitudinal studies of the coverage of tobacco and tobacco-control-related material in the news. Those running health promotion media campaigns routinely evaluate them. However, detailed examinations of tobacco-as-news tend to occur only irregularly and opportunistically. Therefore, this widespread and ongoing source of public discourse about smoking remains relatively unexplored.

4. Researchers need to explore how smokers, potential smokers, the general public, and key policymakers decode and interpret news about smoking.

Several research areas might enhance knowledge of the ways that news on smoking influences contemporary public thinking about tobacco use and its control. They include qualitative research among these groups seeking to explore how different styles of news are interpreted, how audiences understand key concepts such as risk as they apply to smoking, what people think of the credibility of tobacco control advocates and spokespeople for the tobacco industry, and how people assess policy debates covered by the media.

5. Systematic study beyond the newspaper is needed to understand niche market news, the emerging news media, and the role of infotainment.*

Again, largely due to pragmatic considerations, most studies of news coverage of tobacco issues have focused on print sources (primarily newspapers). While this provides valuable insights, there also is a growing need to include television, radio, and Internet

*A type of media broadcast program that provides a combination of current events news and feature news or feature stories.

news sources within studies to more accurately reflect the myriad sources of coverage. Thus, studies are needed that focus on the nature of news coverage and the influence of this coverage from a wide variety of news sources and a range of settings. The studies summarized here were intentionally those conducted using mainstream daily newspapers published in the United States. However, a few seminal studies from other developed countries (such as Australia, the United Kingdom, and New Zealand) and studies using magazines also were included. The applicability of the findings to other news media sources is uncertain in terms of the framing of tobacco issues, the influence of various stakeholders, and the influence of coverage on behavioral and policy outcomes, particularly in developing countries, but this is clearly an important area for future investigation. Furthermore, in an increasingly global and postmodern environment, studies are needed that examine patterns of coverage across both national and media boundaries, as well as niche media, to fully understand the impact on attitudes, behavior, and policy progression.

Summary

The news media represent an important area of influence for both tobacco policy and individual smoking behavior, yet they have not been adequately investigated. The volume of coverage of tobacco issues in news media may outweigh that in other communication vehicles such as paid advertising and promotion. Advocacy contained within this news coverage can form a key component of an overall tobacco control strategy.

Research shows that tobacco control interests often are favorably covered in the news media. Generally, the media focus on topical news stories such as secondhand

smoke, policy interventions, or economic issues such as the use of MSA funds. Content analyses of specific issues show that protobacco interests can sometimes be successful in framing issues or expressing their views. The tobacco industry has enjoyed the leverage of paid advertising in areas such as print media, especially magazines. However, studies have shown that this influence has not affected editorial coverage in other media such as newspapers. Proposed advertising restrictions—stimulated in many cases by the Framework Convention on Tobacco Control—hold the promise to further limit such influence in other communication channels.

Challenges for the future include further research to better establish the relationship between news media coverage and tobacco use outcomes as well as the social attitudes and public policy issues surrounding tobacco consumption. More information is needed about the impact of the changing landscape of media channels on tobacco control issues and advocacy. The existing base of research points to a promising role for leveraging news media efforts to help reduce tobacco use and improve overall public health.

Conclusions

1. The news media represent a key source of health information for the general public. More important, they serve as a framing mechanism for issues surrounding tobacco control. As a result, news coverage is a frequent aim of stakeholder activity on both sides of tobacco-related issues. However, only a small proportion of tobacco control research has been devoted to news media issues to date.
2. News coverage that supports tobacco control has been shown to set the agenda for further change at the community, state, and national levels. Despite this,

organized media advocacy efforts on behalf of tobacco control issues remain an underutilized area of activity within public health.

3. Key issues covered as news stories include secondhand smoke, tobacco policies, and the health effects of smoking. Studies of tobacco-related news coverage often show that the majority of stories favor tobacco control progress, including opinion pieces. Other studies have shown the tobacco industry to be successful in gaining consistent coverage for selected issues.
4. Content analyses of tobacco-related news articles have revealed some trends that remain favorable to protobacco interests. These trends include the underrepresentation of tobacco farming diversification in the farming press, a tendency of articles to challenge the science behind secondhand smoke issues, and positive coverage of the growth in cigar smoking.
5. Numerous factors can affect the volume and nature of tobacco news coverage. The American Stop Smoking Intervention Study found more support for tobacco control in letters to the editor in participating states, and editors largely support tobacco control efforts. However, news coverage often focuses on specific areas such as tobacco control policies, the outcomes of tobacco lawsuits, or the disbursement of Master Settlement Agreement funds.
6. Large-scale studies have yet to be undertaken investigating associations between tobacco-related news coverage and attitudes, behaviors, and outcomes related to tobacco use. These studies face challenges in separating the effects of news coverage from those of the interventions or policy changes they describe. Research shows potential evidence for such an impact, including a drop in per capita cigarette consumption after news coverage of the 1964 Surgeon General's report on smoking and health, a relationship between tobacco-related news coverage and cessation, and a link between news coverage of specific tobacco control efforts and lower adolescent smoking prevalence and consumption.
7. Paid tobacco advertising tends to suppress or reduce news coverage of tobacco-related issues, particularly in magazines. However, bans on tobacco advertising that accompany ratification of the World Health Organization's Framework Convention on Tobacco Control may impair the tobacco industry's ability to exert editorial control over published content.

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10

Role of Entertainment Media in Promoting or Discouraging Tobacco Use

Popular entertainment media are a powerful force in the lives of Americans. In particular, young Americans have been shown to spend an average of more than five hours per day exposed to a variety of media channels. This chapter examines the role of entertainment media in encouraging or discouraging tobacco use, including aspects such as

- *Channels of media exposure, particularly for children*
- *Studies performed on tobacco use in the movie industry, ranging from trends in tobacco prevalence by movie type to issues such as how tobacco use is depicted, not portraying the health consequences of smoking, and brand-specific exposure*
- *Studies examining the influence of smoking in the movies on the social attitudes and behaviors surrounding smoking*
- *A summary of research on the portrayal of tobacco use in other media channels, such as television, music, magazines, and the Internet*
- *Current and future strategies for reducing public exposure to tobacco use in entertainment media, including policy interventions, efforts at industry self-regulation, and advocacy efforts aimed at both the public and the entertainment industry*

The total weight of evidence from cross-sectional, longitudinal, and experimental studies indicates a causal relationship between exposure to movie smoking depictions and youth smoking initiation. Further research to better understand this relationship and to evaluate strategies to reduce youth exposure to tobacco portrayals in entertainment media is warranted.

It's the movies that have really been running things in America ever since they were invented. They show you what to do, how to do it, when to do it, how to feel about it, and how to look how you feel about it.

—Andy Warhol (1928–87)

Introduction

This chapter examines and summarizes what is known about the use of tobacco in entertainment media and its effect on tobacco use in the population. A detailed look at the influence of one of America's oldest entertainment media—the movies—is followed by a discussion of how today's overall media environment can influence tobacco use and steps that can be taken to reduce public exposure to tobacco use in the media. Given the continued rapid growth in media access, particularly among young people, reducing tobacco use in the media could serve as an important factor in changing social attitudes toward smoking.

It has long been believed that the entertainment industry has a profound impact on behavior, especially when it comes to what is perceived as fashionable. The entertainment industry produces stars who introduce large segments of the population to new products and behaviors depicted in mass media. To the extent that viewers form personal connections with these stars through their use of the media, the viewers' own behavior may be influenced. The entertainment industry also serves to maintain behaviors already established in the population.

This chapter begins with a look at the media environment and its evolution as a backdrop for examining media channels that could potentially model smoking behavior. Perhaps because television and movies are so prominent in people's leisure time entertainment, most of the research on the

impact of entertainment media on behavior focuses on these media. The next sections of this chapter describe what is known about the smoking images contained in movies and how viewing them affects attitudes and behavior. The text begins with the historical relationship between the tobacco and movie industries, both of which came of age during the early 1900s in the United States. The chapter also summarizes research on portrayal of tobacco in other forms of entertainment media including television, music, magazines, and the Internet. Finally, efforts to reduce audience exposure to tobacco-related media content are discussed, and overall chapter conclusions are drawn.

What Are Entertainment Media?

Entertainment media include print media (books and magazines), audio media (radio and music), and audiovisual media (television, movies, Web-based media, and video/computer games). Just two decades ago, options for media delivery in the home increased with the introduction of the videocassette. Today, the options also include digital media (digital versatile discs [DVDs], compact discs [CDs], video games) and access to entertainment programming through cable/satellite and the World Wide Web. The Web provides unique entertainment options through Web sites that deliver everything from traditional venues, such as news, to options for playing interactive video games with multiple players and downloading podcasts of movies and television shows. The increase in home options for media and the multiplication of media viewing sites within the home (60% of U.S. households contain three or more television sets) have transformed home media viewing from a family event to a much more individualized and tailored pattern of media viewing among family members. For example, parents who grew up before video games or Music Television (MTV) may know little about the specific content of the video games their children

play or the music videos and other video podcasts their adolescents watch because the parents generally do not play or watch them.

Surveys of media availability in U.S. households reveal broad access to each of the home media channels, with electronic media gaining market share over traditional media venues. Two studies that surveyed representative samples of U.S. families with children found similar results. Roberts and colleagues¹ surveyed more than 3,000 families in 1999. Woodard and Gridina,² surveyed some 1,200 families one year later. The proportions of families with two or more media delivery devices were 88% for televisions, 58% for videocassette recorders, 85% for radios, 71% for tape players, 59% for CD players, 38% for video game players, and 21% for computers. In addition, most families reported having access to a wide variety of television channels, with about three-quarters of American families having cable/satellite television.^{1(p.9)} The only media services strongly related to socioeconomic status were computer ownership and Internet access. All other products were equally distributed across socioeconomic groups. For example, the median number of televisions in households was 2.8 for families with incomes under \$25,000, 3.0 for those with incomes between \$25,000 and \$40,000, and 3.0 for families with incomes above \$40,000. The percentages with cable/satellite television access for these income groups were 71%, 73%, and 77%, respectively. However, the percentages with Internet access were 23%, 42%, and 58%, respectively.^{1(p.11)}

Media Use

The national surveys cited above also assessed media use by children and adolescents. These young Americans are considered most vulnerable to the effects of media messages, and much of the research discussed here addresses the effects of media on their use of tobacco. About one-half of U.S. children

have a television in their bedrooms (65% of children and adolescents older than age 7). Most adolescents also have a radio and a CD player in their bedrooms.^{1(p.13)} About one-half of families report that the television is almost always on, and 58% watch television during mealtimes.^{1(p.15)} Average media exposure among children is 5.3 person-hours per day (3.3 hours for 2–7 year olds and 6.4 hours for 8–18 year olds). Average media exposure is about one hour less for high-income families than for low-income families.^{1(p.19)}

One study noted that children and adolescents distribute their time in using entertainment media in the following proportions: television, 46%; CDs and tapes, 12%; movies and videos, 11%; print media, 11%; radio, 10%; video games, 5%; and computer, 5%.^{1(p.20)}

As children age, one-half of the additional time spent with media is due to an increase in television viewing; the remainder is due to increases in time spent watching taped television shows, taking trips to the movie theater, listening to the radio and music, and, for boys, playing video games.^{1(p.20–21)} Note that television viewing comprises both the viewing of television programming (traditional programming and movies from movie channels) plus nontraditional venues such as MTV. Thus, the viewing of television programming and movies takes up more than one-half of the five to six hours that children use media each day.

All of these media have the potential to influence the attitudes and behavior of young consumers toward tobacco products. A large body of research exists on the impact of tobacco use in movies on attitudes toward smoking. This medium therefore serves as a valuable exemplar for further study in how various mass media might influence the potential for tobacco use. Thus, movies are the primary focus of this chapter. Later sections examine research findings regarding exposure to tobacco in other media. Together

with the existing body of knowledge surrounding the portrayal of tobacco use in movies, this chapter forms a base for future work on the impact of entertainment media on tobacco-related health issues.

Historical Perspective: Movies

Examination of the role of entertainment media in tobacco marketing is increasingly becoming an area of active research. Most of this work has focused on portrayal of tobacco in movies. Quantitative studies suggest that youth exposed to on-screen smoking are more likely themselves to initiate smoking.³⁻⁹ These reports should prompt more careful examination of the historical role that the entertainment industry may have played in the marketing of tobacco. Pierce and Gilpin¹⁰ have identified four key periods in a historical analysis of tobacco marketing and smoking initiation among U.S. adolescents and young adults. Tobacco companies marketed cigarettes to men during the first period, from the inception of the industry's marketing practices in the 1880s to about 1920. By 1920, the market for men was established and considered mature.¹¹ The industry then turned its attention to increasing sales among women.¹² For the next two decades, the industry added to its marketing portfolio messages aimed at women. Campaigns explicitly targeted women, as exemplified by the Lucky Strike "Reach for a Lucky Instead of a Sweet" print media campaign during that period.¹³

This specific campaign focused on weight control. However, the cigarette also was positioned as a symbol of independence and equality for women. At about the same time, Chesterfield rolled out a campaign aimed at changing social norms regarding smoking, with an emphasis on the social interaction between men and women. The campaign was launched by a 1926 billboard depicting a man who is smoking, seated next



Early Lucky Strike advertisement targeted at women

to a woman who asks him to "blow some my way." The company also recognized the role movie stars play in establishing social trends and recruited prominent actresses of the time to endorse the brand in their print advertisements. Chesterfield advertisements regularly featured glamour photographs of a Chesterfield "girl of the month," primarily fashion models and Hollywood starlets. Some endorsers were actresses, including Joan Bennett, Claudette Colbert, Joan Crawford, Betty Grable, Rita Hayworth, Marion Hutton, and Rosalind Russell. During the late 1940s, the advertisements continued to feature glamorous women but also included male stars. Star endorsements during this period included Charles Boyer, Perry Como, Bing Crosby, Arthur Godfrey, Bob Hope, Dorothy Lamour, Virginia Mayo, Ethel Merman, Gregory Peck, Basil Rathbone, Ann Sheridan, Jo Stafford, and James Stewart.

From 1943 through 1946, advertisements for the Regent brand of cigarettes featured drawings of celebrities, including Fred Astaire, Diana Barrymore, Joan Blondell, Bing Crosby, Robert Cummings, Jinx Falkenberg, Arlene Francis, June Havoc, Celeste Holm, Guy Lombardo, Merle Oberon, and Jane Wyatt.¹⁴ These advertisements provide historical evidence of a strong,



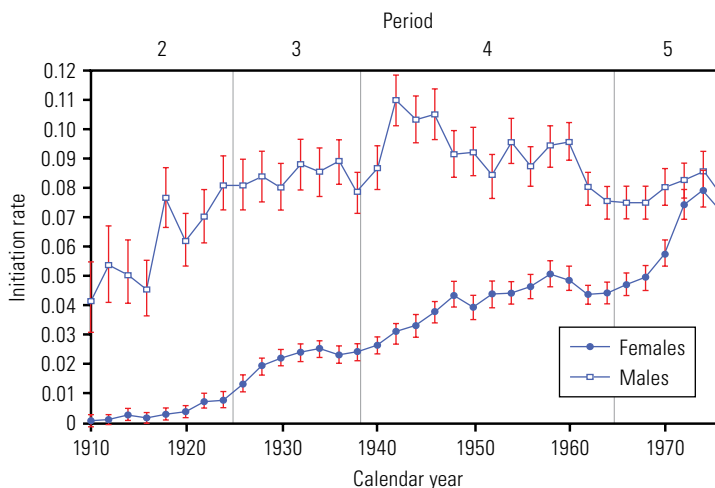
Chesterfield cigarette advertisement featuring actress Joan Crawford
 Note: from Ladies Home Journal 1949

mutually beneficial relationship between the cigarette industry and the movie industry. It would be reasonable to assume that the stars were paid for their appearances in the advertisements as well as receiving nonmonetary benefits, such as increased exposure. Public relations specialists of

that era were beginning to perceive the potential power of celebrities and the media (including motion pictures) as ways to change social norms around smoking. The work by public relations pioneer Edward Bernays¹⁵ is particularly relevant; for example, he sponsored, on behalf of the American Tobacco Company's Lucky Strike cigarettes, demonstrations in 1929 in which fashion models gathered on street corners to smoke their "torches of freedom."

The tobacco industry advertising campaign aimed at women is credited with the steady increase in cigarette smoking initiation rates among women during this period (1925–39) (figure 10.1). After 1939, and through the mid-1960s, tobacco marketing no longer focused on any particular subgroup.¹⁰ However, smoking initiation rates among women continued to increase at the same pace as they did through the 1920s and 1930s. Attending motion pictures was a national pastime by 1940, with Americans spending almost one-quarter of their total recreation dollars on movies

Figure 10.1 Smoking Initiation Rates Among U.S. Males and Females Ages 14–17 Years, by Year



Note. From Pierce, J. P., and E. A. Gilpin. 1995. A historical analysis of tobacco marketing and the uptake of smoking by youth in the United States: 1890–1977. *Health Psychology* 14 (6): 500–08. Copyright © 1995 American Psychological Association. Reprinted with permission.

Smoking: A Requirement of the Role

One case report describes an actor being introduced to smoking on the set of his first movie. In a *New York Times* Op Ed column,^a Kirk Douglas states he never smoked during his Broadway career in the early 1940s. Mr. Douglas goes on to describe his first movie role, in 1946.

“My first picture was *The Strange Loves of Martha Ivers*, with Barbara Stanwyck and Van Heflin, in 1946. I was intimidated, but proud to be playing the role of Miss Stanwyck’s husband. I arrived at the set, very excited, to do my first scene with her. But I had spoken only a few lines when the director, Lewis Milestone, stopped the action and said, “Kirk, you should be smoking a cigarette in this scene.”

“I don’t smoke,” I replied timidly.

“It’s easy to learn,” he said, and had the prop man hand me a cigarette.

I continued with the scene, lighting and smoking my first cigarette. Suddenly, I began to feel sick to my stomach and dizzy.

“Cut,” yelled the director. “What’s the matter with you, Kirk? You’re swaying.”

I rushed to my trailer to throw up. But Mr. Milestone was right. It’s easy to learn to smoke. Soon I was smoking two to three packs a day.”^a

^aDouglas, K. 2003. My first cigarette, and my last. *New York Times*, May 16.

(compared with only 2% today). Weekly attendance at U.S. theaters was more than 90 million.¹⁶ By 1940, depictions of actors and actresses smoking in movies were an established routine.

An example of how smoking depictions in movies might have affected the population’s social perceptions of smoking is the 1942 movie *Now, Voyager*, starring Bette Davis and Paul Henreid. Bette Davis plays a young Boston socialite who has been repressed and dominated by her mother. She smokes surreptitiously until she meets and falls in love with an older man (Paul Henreid) on a cruise.

The sequence is captured at the close of the voyage, when Henreid lights two cigarettes and hands one to his lover just before a parting embrace. Given the popularity of this movie and these stars at the time, this sequence may have influenced the socialization of women to take up smoking, in part by teaching men a novel way to offer a cigarette to a woman. Although no direct evidence supports an advertising motive

for such scenes, they mirror the romantic themes included in cigarette advertising at the time, as illustrated by the Lucky Strike advertisements from the mid-1930s.

The use of stars to endorse cigarettes in advertisements continued into the 1950s, with Chesterfield endorsements from women movie celebrities, such as Dorothy Lamour, Virginia Mayo, Ethel Merman, Ann Sheridan, and Jo Stafford. In addition to leading ladies, the advertising of the 1950s heralded new young stars, such as James Dean who depicted rebellious adolescent characters and consolidated the image of the “bad boy” smoker. In *Rebel Without a Cause*, the image of Dean smoking a cigarette was so intertwined with his character image that smoking was incorporated into publicity posters for his movies. Thus, smoking was promoted in another way—through publicity photographs and posters distributed worldwide (as the German rendition of the poster illustrates).

As television began to become a mass medium, the tobacco industry began



Scenes from *Now, Voyager* (1942)

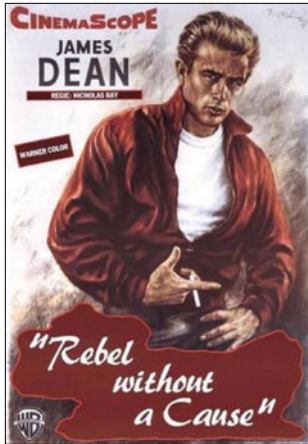


Magazine advertisements for Lucky Strike documenting thematic similarities between cigarette advertising and movie depictions of smoking

sponsoring television shows, providing cash to this fledgling entertainment industry before it had a sizable audience to attract other types of mainstream advertising.¹⁷ Tobacco companies remained prominent sponsors until television advertising of tobacco was banned in the United States in January 1991. Television advertisements produced during the 1950s included endorsements by prominent movie stars. For example, John Wayne appeared in a number of Camel commercials during this period.

The extent to which the tobacco industry played a role in tobacco product placement in movies was speculative until specific evidence of financial links between the tobacco and

movie industries emerged upon the release of tobacco company documents.¹⁸ Other documents indicate that several movie stars, including Pierce Brosnan, James Coburn, Roger Moore, and Charlie Sheen, were recruited to represent a James Bond type of figure in an advertising campaign for Lark cigarettes during the 1980s in Japan.¹⁹ Chapter 4 describes in detail paid product placement of tobacco images in movies. Although these documents pertain to brand placements in movies produced during the 1970s and 1980s only, the practice probably preceded those decades. Schudson²⁰ argues that the practice of deliberately mentioning or picturing particular products in films occurred earlier. "In the 1930s and 1940s,



Promotional posters for *Rebel Without a Cause* (in English and German)

De Beers increased the role of diamonds in Hollywood films, just as cigarette manufacturers saw to it that leading actors and actresses smoked cigarettes in movies in the 1920s.^{20(p.101)} It would be surprising if A. D. Lasker, Edward Bernays, and other public relations specialists of that era failed to recognize the potential power of motion pictures as a way to change social norms concerning smoking. As discussed below in “Movie Content,” smoking continues to be depicted in movies. Cigarette brands also appear, although movie scenes showing actors actually using a specific brand have declined.

In summary, the relationship between the media entertainment industry and the

tobacco industry dates back to the inception of the media industry. The first focus was on marketing cigarettes to the U.S. population by securing endorsements from prominent stars and through prominent depiction of smoking in motion pictures. There is no early evidence of paid placement of tobacco products in movies. However, it seems likely that the depiction of smoking in films contributed to the establishment of social norms that encouraged women to smoke as a mark of independence and equality, as a way to establish a conversation

(break the ice) between men and women, and in ways that paralleled other cigarette advertising themes at that time. Early movie images of male smokers as tough and independent also may have promoted to men the appeal of tobacco use. In addition, the entertainment industry was key in establishing the prototype of the rebellious adolescent cigarette smoker. This prototype continues to attract adolescents to smoking in the present.

Movie Content

Content analysis refers to a research method in which coders systematically count and

Tobacco Portrayal Goes Beyond the Movie Itself

Tobacco product exposure in movies is not necessarily limited to the actual film content. The depiction of smoking and brands in promotional photographs still occurs. For example, the photograph shown here, released with a set of promotional photos by Screengems Productions for the movie *Snatch*, was widely published in newspapers across the United States. The photograph shows Brad Pitt sitting at a desk with a pack of Marlboro Golds. Interestingly, no cigarette brand appeared in the actual movie. The practice of showing smoking and cigarette brands in movie promotional products has not been studied systematically. Therefore, it is difficult to determine how important these materials are from a communications standpoint.



Publicity photograph released with the movie *Snatch*, Screengems, 2000.

Thank You for Smoking

Jason Reitman's 2006 satirical film, *Thank You for Smoking*,^a based on Christopher Buckley's novel, highlights some of the realities of the relationship between the media and tobacco. The main character in the movie, Nick Naylor, is a spokesperson for the fictional Academy of Tobacco Studies run by cigarette manufacturers. Naylor suggests that declining rates of teen smoking can be turned around through the use of smoking in upcoming Hollywood films. He travels to Los Angeles to meet with an agent and negotiate the use of cigarettes in a futuristic film "where smokers and nonsmokers live in perfect harmony." Both Naylor and the agent acknowledge that the use of cigarettes by Catherine Zeta Jones and Brad Pitt will "sell a lot of cigarettes."

Real-life tobacco companies have been banned from sponsoring Hollywood films since the 1998 Master Settlement Agreement. However, the use of cigarettes in movies is still prominent, and studies examined later in this chapter show a positive correlation between exposure to on-screen smoking and smoking initiation rates for adolescents. One study^b of 6,522 randomly selected participants suggests that exposure to on-screen smoking is the primary independent risk factor for teen initiation rates. So Naylor's prescription to have actors smoke on screen in order to "sell a lot of cigarettes" is, at least among adolescents, supported by academic research.

The correlation between on-screen smoking and smoking initiation rates has led to some tobacco control groups pushing for more restrictive ratings for movies portraying tobacco use. So far, these efforts have been unsuccessful. It is unlikely that these groups will switch to *Thank You for Smoking's* final tobacco control idea: digital replacement of cigarettes in classic films with candy canes, steaming mugs of cocoa, and drum sticks.

^aReitman, J. 2006. *Thank You for Smoking* [Motion picture]. United States: Fox Searchlight Pictures.

^bSargent, J. D., M. L. Beach, A. M. Adachi-Mejia, J. J. Gibson, L. T. Titus-Ernstoff, C. P. Carusi, S. D. Swain, T. F. Heatherton, and M. A. Dalton. 2005. Exposure to movie smoking: Its relation to smoking initiation among US adolescents. *Pediatrics* 116 (5): 1183–91.

characterize media inputs. Published content analyses examining depictions of tobacco use in entertainment media have focused almost exclusively on movies. Less information is available concerning tobacco-related content in other entertainment media.

Study Selection

A number of content analyses have been conducted of portrayal of tobacco in popular movies. Fourteen peer-reviewed studies were identified as published in the medical literature (in English) by using a PubMed search strategy on MEDLINE with the following search terms and Medical Subject Headings (MeSH):

((“tobacco”[MeSH Terms] OR tobacco[Text Word]) OR (“smoking”[MeSH Terms] OR smoking[Text Word])) AND (movie[All

Fields] OR (“motion pictures”[MeSH Terms] OR motion picture[Text Word]))—
103 records obtained, May 9, 2006.

A search of PsycINFO using the key words (“tobacco” OR “smoking”) AND (“movie” OR “motion picture”) and restricted to journal articles written in English identified no additional articles on movie content analysis than those already captured by the MEDLINE search (23 articles retrieved, by PsycINFO, May 9, 2006).

Citations in some of the above papers²¹ identified one more peer-reviewed paper that examined tobacco as well as other health-relevant behaviors in movies. Further citations to a study by Mekemson and colleagues,²² a Web-based report,²³ provide additional findings from the American Lung Association's "Thumbs Up!

Thumbs Down!” ongoing content analysis. Four additional published reports on this subject were identified that were of methodological quality comparable with the peer-reviewed studies.^{24–27} These reports were commissioned by public agencies, including the White House Office of National Drug Control Policy and the U.S. Department of Health and Human Services’ Substance Abuse and Mental Health Services Administration;²⁷ Center for Tobacco Control Research and Education, University of California;²⁶ the Health Education Authority in the United Kingdom;²⁴ and the Massachusetts Public Interest Research Group (a nongovernmental, voluntary organization).²⁵ Table 10.1 summarizes the methods of movie selection and coding of tobacco use for the respective studies.

Methodological Issues

Together, various studies have sampled and coded tobacco content in popular movies released from 1937 through 2003. However, the studies’ methodological differences make it difficult to compare the results. The most common criterion for selecting movies was based on their revenue status as “top box-office” movies, mostly in the United States. Some studies^{28–30} selected a random sample of top box-office movies for a given period. Others coded the top 10,^{24,31} 25,^{32,33} 50,²² 100,³⁴ 125,³⁵ or 200 movies per year,²⁷ or those grossing at least \$500,000 at the box office²⁶ for a given period of years. In general, the longer the period examined, the fewer movies per year were coded. Other studies have selected the movie sample based on genre or rating only (e.g., G-rated animated movies)^{36,37} or a combination of rating and box-office revenue (e.g., top 10 PG movies and video rentals).²⁵ One study examining the prevalence of smoking among characters in contemporary American movies about American life in the 1990s relative to U.S. population smoking rates selected movies on the basis of box-office revenue, rating, genre, and time and

location of setting; that study excluded movies in which cigarette smoking was a central motif.³⁸

Another study identified the “top 10” most popular actresses per year for a given period, then randomly sampled movies in which each played a leading role. A number of studies have excluded from their samples movies that were not set in the present—that is, period dramas and science fiction set in the future.^{21,38} Despite sampling differences among some studies, most have used sampling criteria based on audience reach. Therefore, the media inputs they documented are likely to provide a valid indication of the amount and nature of on-screen tobacco content presented to viewers. Polansky and Glantz²⁶ extended their content analysis data to generating quantitative estimates of audience reach (see “Audience Reach” below).

Studies also vary in how they capture tobacco use, especially in terms of their unit of analysis. Many divided their movie samples into five-minute intervals and then counted the number of tobacco occurrences per five-minute interval of film.^{21,27–31,40} Others viewed and coded movies as a whole, counting tobacco occurrences within movies.^{22,24–26,32–38} Some included as one occurrence all smoking by one character during the course of a movie scene.³² Others counted an occurrence every time a cigarette entered the screen.²² These differences obscure comparisons in the absolute numbers of tobacco depictions reported among the studies. Moreover, it is not clear how well the various measures correlate or whether measurement affects trend analyses. However, Polansky and Glantz²⁶ found that parents’ qualitative ratings of the amount of smoking in movies (using a six-point ordinal scale ranging from “none” = no tobacco content through “extreme” = movie is full of tobacco scenes) bore a statistically significant correspondence with coding

Table 10.1 Summary of Methods for Content Analysis Studies: Tobacco in Movies

Authors	Publication year	Country	Movie years (release)	Movie criteria	Interrater reliability	Unit of analysis	Amount of smoking	Reported results of other variables
Goldstein et al. ³⁶	1999	U.S.	1937–99	All G-rated animation movies released by major production cos. (<i>n</i> = 50)	Not reported	Whole movie	Presence of tobacco use; duration	SC, HC, Chg, TT
Thompson and Yokota ³⁷	2001	U.S.	1937–2000	All G-rated animated feature movies (<i>n</i> = 81)	1 rater only	Whole movie	% movies depicting tobacco; duration of smoking scenes	SC, HC, Chg, CX, TT
McIntosh et al. ³⁸	1998	U.S.	1940–89	Random sample of 5 films per decade sampled from top 20 films per year for period (<i>n</i> = 100)	Ranged from 0.74 to 0.94. At least 3 trained raters rated each film.	Whole movie	% of characters who smoked at least once in target films	SC, HC, Chg
Glantz et al. ²⁹	2004	U.S.	1950–59, 2001–02	Random sample of 20 top films released 1950–59, and 5 of top 20 films for 2001–02 (<i>n</i> = 30)	One coder, cite validity of this approach as per Hazan et al. 1994 ²⁸	5-min intervals of movies	No. of tobacco incidents/hr of movie time	Chg, Brand
Hazan et al. ²⁸	1994	U.S.	1960–99	2 movies randomly selected from top 20 per year, for each year (<i>n</i> = 62)	0.92 (sd = 0.07)	Each movie divided into 5-min intervals (<i>n</i> = 1,505 5-min intervals)	% tobacco use per 5-min interval of movie (includes use and implied)	SC, HC, Chg, CX, TT (coded, but results not reported), Brand (coded, but results not reported)
Terre et al. ²¹	1991	U.S.	1977–88	Top 20 movies per year (<i>n</i> = 169)	95%	Each movie divided into 5-min intervals	Tobacco incidents	SC, HC, Chg, MT
Everett et al. ³¹	1998	U.S.	1985–95	Top 10 movies per year (<i>n</i> = 110)	Not reported	Each movie divided into 5-min intervals	Presence of tobacco use (includes use and implied)	SC, HC, Chg, CX
Dalton et al. ³²	2002	U.S.	1988–97	Top 25 movies per year (<i>n</i> = 250)	At least 70% agreement on all measures	Whole movie	No. of tobacco occurrences; time of tobacco use	SC, HC, CX, TT, MT

Note. cos. = companies; SC = smoker characteristics; HC = health consequences; Chg = change over time; TT = type of tobacco; CX = context; min = minutes; no. = number; hr = hour; Brand = brand appearances; sd = standard deviation; MT = movie type; MSA = Master Settlement Agreement; +ve = positive verbal reference; -ve = negative verbal reference; sci-fi = science fiction.

Table 10.1 Summary of Methods for Content Analysis Studies: Tobacco in Movies (Continued)

Authors	Publication year	Country	Movie years (release)	Movie criteria	Interrater reliability	Unit of analysis	Amount of smoking	Reported results of other variables
Sargent et al. ³³	2001	U.S.	1988–97	Top 25 movies per year ($n = 250$)	Double coding of brand appearances, not reported	Whole movie	% of movies with tobacco use	Chg: pre–post MSA, Brand, MT
Stockwell and Glantz ³⁰	1997	U.S.	1990–96	Random sample of 5 from top 20 movies per year ($n = 35$)	One coder, not reported	Each movie divided into 5-min intervals	% tobacco use per 5-min interval of movie	SC, HC (antismoking signs or comments), Chg, CX (motivation to smoke), TT, Brand
Mackinnon and Owen ²⁴	1998	U.K.	1990 and 1995	Top 10 U.K. box-office movies for these years ($n = 20$)	Not reported	Whole movie? (not clear)	No. of smoking incidents	SC, HC (verbal references: +ve/–ve), Chg, CX, Brand
Escamilla et al. ⁴⁰	2000	U.S.	1993–97	For each top 10 actress, coded random selection of 5 movies in which they had leading roles ($n = 50$)	99% agreement on smoking variables	Each movie divided into 5-min intervals ($n = 1,116$ 5-min intervals)	Occurrence of smoking in each interval coded % of 5-min intervals that depict smoking	SC, HC, CX, TT, MT
Mekemson et al. ²² American Lung Association of Sacramento ²³	2004	U.S.	1991–2000 (+1994–2003)	Top 50 U.S. movies per year (1991–2000: $n = 497$) (1994–2003: $n = 498$)	All movies coded by 3 teen reviewers, kappa reliability scores >0.85	Whole movie	Tobacco incident counted each time tobacco appears on screen	SC, HC, Chg, CX, TT, Brand, MT
Roberts et al. ²⁷	1999	U.S.	1996–97	200 most popular movie video rentals for 1996 and 1997 ($n = 200$)	Not reported	Whole movie	Tobacco appearances (use and implied) frequency of tobacco reported/5-min movie interval	SC, HC, CX, TT, Brand, MT
Ng and Dakake ²⁵	2002	U.S.	1996–97, 1999–2000 (i.e., pre–post MSA)	Top 10 PG-13 movies and top 5 PG-13 video rentals for these years ($n = 42$)	Not reported	Whole movie	Length of tobacco use and tobacco appearance	SC (minors smoking), HC (–ve statements about tobacco use), Chg, CX (of brand appearances), TT, Brand, MT

Authors	Publication year	Country	Movie years (release)	Movie criteria	Interrater reliability	Unit of analysis	Amount of smoking	Reported results of other variables
Polansky and Gantz ²⁶	2004	U.S.	1998–2003	U.S. produced, English-speaking movies grossing at least \$500,000 at box office (<i>n</i> = 776)	Not reported, although good correspondence with tobacco incident data in a study by Dalton and colleagues ³² for equivalent films	Whole movie	Qualitative descriptors of no. of tobacco incidents per movie	Chg, MT
Omidvari et al. ⁴¹	2006	U.S.	1990–98	U.S. movies in top 10 weekly box-office list, excluding G-rated, animated, and sci-fi movies, movies not set in 1990s, and movies with cigarette smoking as a central motif (<i>n</i> = 447)	Not reported	Whole movie	% of top 5 characters who smoke at least once in target films (excluding smoking by non-U.S. citizens or outside U.S.)	SC, MT
Stern ³⁵	2005	U.S.	1999–2001	Of 125 top-grossing movies per year, coded those where at least 1 adolescent was a central character (<i>n</i> = 43)	Ranged from 0.77 to 1.00	Whole movie	% of major adolescent characters who smoke at least once in target films	SC, MT
Dozier et al. ³⁴	2005	U.S.	2002	100 top-grossing films in 2002 (<i>n</i> = 100)	Ranged from 0.84 to 0.99.	Whole movie	% of movies with tobacco use, % of characters who smoke at least once in target films	SC, HC, CX, MT

Note. cos. = companies; SC = smoker characteristics; HC = health consequences; Chg = change over time; TT = type of tobacco; CX = context; min = minutes; no. = number; hr = hour; Brand = brand appearances; sd = standard deviation; MT = movie type; MSA = Master Settlement Agreement; +ve = positive verbal reference; -ve = negative verbal reference; sci-fi = science fiction.

conducted by Dalton and colleagues³² of the number of tobacco incidents for a sample of 389 movies coded by both studies ($p < 0.001$). This finding suggests a strong correspondence between the two different methods of coding the amount of on-screen smoking used in these studies.

The studies also vary in how rigorously they describe their coding procedure. Of the studies reviewed here, only eight reported interrater reliability agreement, with values ranging from 70% to 100% on key coding variables.^{21,22,28,32,34,35,39,40} Most studies used adults to code movie content, the exception being the “Thumbs Up! Thumbs Down!” project.^{22,23} The latter study trained teams of young people aged 14–22 years to code films according to a standard protocol. The adult coders in the study reported by Polansky and Glantz²⁶ were parents working for a parental review and screening service at ScreenIt.com, a movie content database.

The criteria for coding tobacco events also varied. Explicit depictions of tobacco use refer to instances in which the use of tobacco was directly portrayed (e.g., the actor smokes on screen). Incidental depictions of tobacco refer to those in which the use of tobacco was implied, without being explicitly portrayed (e.g., the actress is shown placing a cigarette pack in her handbag), or when smoking-related props were shown (e.g., an ashtray on a table in a movie set). Some content-analysis studies only coded explicit depictions of tobacco use.^{32,38} Others differentiated between types of tobacco depictions.²⁷ Some counted explicit and incidental depictions of tobacco together as tobacco events.^{29,31} Studies with broader criteria for a tobacco incident tended to report higher rates of depiction as a result of their more inclusive measure.

There is, however, considerable overlap in the content variables the studies attempted to assess (table 10.1). All quantified the amount of smoking in their movie samples.

Characteristics of smoking role models and depictions of contexts and consequences associated with smoking also have been recorded. Some studies examined the types of tobacco presented (e.g., cigarettes, cigars, chewing tobacco), the appearances of specific tobacco brands, and whether tobacco portrayal varied with movie release year, Motion Picture Association of America (MPAA) rating, or genre. Common themes recurred in the findings of these studies, despite their methodological differences. The results of these studies are summarized below.

Tobacco Use in Movies

Prevalence by Movie Type

Mekemson and colleagues²² found that most top box-office movies from 1991 to 2000 had some tobacco use. Polansky and Glantz²⁶ found that, of U.S. films released between 1999 and 2003, 80% included smoking. Similarly, content analyses of top box-office movies from 1988 to 1997 indicate that most movies (87%) portrayed tobacco use. However, tobacco use accounted for only a small proportion of screen time.³² In 75% of movies, tobacco exposure accounted for less than 4% of total screen time. Cigarettes were the predominant form of tobacco used, followed by cigars, with little use of smokeless tobacco.^{27,32} However, in children’s animated movies, cigar use was most common.³⁶ Tobacco use typically increased with the “adulthood” of the MPAA rating. R-rated movies contained more tobacco occurrences and were more likely to feature major characters using tobacco.^{22,26,27,32,34} For U.S. movies released from 1999 to 2003, a higher proportion of R-rated movies included smoking (90%) compared with PG-13 (80%) and G/PG movies (50%). However, because of a decline in the total number of R-rated movies released between 1999 and 2003, a shift occurred in the total distribution of movies containing smoking. Most of the movies

released in 2002 and 2003 that contained smoking scenes had a youth rating (PG-13 or G/PG).²⁶

Tobacco use was more common in dramas than in comedies, science fiction, or child and family genres.³² Similarly, Dozier and colleagues³⁴ found that characters in comedies smoked less frequently than in other genres among 2002's top-grossing movies. The amount of tobacco use in movies did not have a significant association with the movies' box-office success.³² This finding may suggest that including tobacco in movies provides no direct economic benefit to the entertainment industry. This notion is bolstered by experimental evidence that among adolescent moviegoers, stripping the smoking from a movie does not affect their satisfaction with the movie or willingness to recommend it to a friend.⁴²

Trends in the Amount of Tobacco Depicted in Movies Across Years

Examination of changes over the years in the frequency of on-screen depiction of tobacco highlights some discrepancies between movie portrayals of smoking and the social reality of smoking. In a content analysis by Dalton and colleagues³² of the top 25 box-office hits from 1988 to 1997, the rate of tobacco use among 1,400 major characters was 25%. This finding was not discordant with the prevalence of smoking among U.S. adults during that period. McIntosh and colleagues³⁹ found that the proportion of leading characters who smoked increased from 20% in the 1940s to 31% in the 1950s. The proportion then declined to 18% in the 1960s, 17% in the 1970s, and finally 12% in the 1980s. Omidvari and others³⁸ found that, among contemporary U.S. movie characters during the 1990s, smoking prevalence was similar to that in the general U.S. population. In these three studies, the proportion of characters who smoked does not appear

to exceed historical trends for smoking prevalence.

However, trends in the sheer frequency with which tobacco appears in movies across years do appear to be discordant with declining smoking rates in the actual population. In a sample of top box-office U.S. films from 1950 to 2002, the number of smoking incidents per 5-minute interval of film declined from 10.7 incidents per hour in 1950 to a minimum of 4.9 in 1980 to 1982 but increased to 10.9 in 2002.²⁸⁻³⁰ Another study found that, after an initial drop in the frequency of depicting tobacco in the 1970s and mid-1980s, the rate subsequently increased.²¹ Dalton and colleagues³² found that the number of tobacco occurrences in top box-office U.S. movies remained constant between 1988 and 1997, despite declining trends for smoking prevalence in the actual U.S. population. Mekemson and others²² found a weak decline in the amount of tobacco use per minute of film between 1991 and 2000. However, these rates appeared to increase again between 2001 and 2003.²³ MacKinnon and Owen²⁴ found that smoking was depicted more frequently in movies released in 1995 than in 1990.

The depiction of smoking in children's animated films did not decrease between 1937 and 1997.³⁶ Later analyses of the "Thumbs Up! Thumbs Down!" content analysis dataset²³ found that in PG-13 films, the total number of tobacco incidents depicted per year increased substantially between 2000 and 2003. Thus, the argument that on-screen smoking reflects social realism does not hold up as a reason for trends in the rate of smoking depiction in movies across the years. Movie content appears to be out of step with declining smoking rates in the U.S. population. These results raise questions about the role of films in amplifying notions of tobacco smoking being widespread. A number of movie content analysis studies observed a pattern of increased depiction

of smoking in the late 1980s and early 1990s. This time span follows the period during which there is documented evidence of paid tobacco product placement deals occurring in relation to film. Examination of trends in the rate of movie depictions of tobacco in relation to key tobacco-control events suggests these events have not precipitated marked reductions in on-screen tobacco portrayals.^{33,36}

Characteristics of On-Screen Smokers

As indicated earlier, smoking prevalence among characters in films was not markedly discordant with smoking prevalence in the actual population (i.e., 25%).³² However, Dalton and colleagues³² found that the social characteristics of leading characters were atypical (e.g., attractive, high socioeconomic status) so the characters represented as smokers did not reflect the social reality of smoking. Hazan and colleagues²⁸ found that between 1960 and 1990, the prevalence of smoking among major characters with high socioeconomic status was nearly three times as high as among people of similar socioeconomic status in the actual U.S. population. In the 1980s, tobacco events involving young adults (aged 18–29 years) more than doubled compared with the previous two decades. However, tobacco events involving somewhat older adults (aged 30–45 years) fell by nearly one-half.²⁸ More recent movies tended to portray smoking by adults more often than smoking by adolescents. For popular movies from 1996 and 1997, smoking rates of 17%, 26%, and 25% were recorded for major characters aged younger than 18, 18–39, and older than 39 years, respectively.²⁷

Stern³⁵ found an identical smoking prevalence (17%) among major teen movie characters for top-grossing films from 1999 to 2001. Dozier³⁴ found that only 2% of teenagers smoked in top-grossing films for 2002. The on-screen smokers tended to be adult, white, and male. Future studies

replicating sampling and coding methods over time will be necessary to confirm whether a significant decline has occurred in on-screen smoking among teen characters. Dalton and colleagues³² found that only 3% of tobacco occurrences were adolescents smoking and that the typical smoker in movies was white, male, middle-aged, and of high socioeconomic status—traits possessed by most leading characters. Omidvari and colleagues³⁸ found that among leading American movie characters portrayed in the United States in the 1990s, smoking on-screen was associated with being male and of lower socioeconomic class.

The different findings of these studies in relation to the apparent class of on-screen smokers may reflect the different sampling methods used. Dalton and colleagues³² and Dozier and colleagues³⁴ selected movies solely on box-office rating. Omidvari and others³⁸ selected a subset of top box-office movies based on a range of exclusion criteria (table 10.1). The findings of Dalton and colleagues provide an account of smoking prevalence among prominent movie characters during the 1990s across movies of all genres set in all eras. However, Omidvari and colleagues³⁸ evaluated smoking prevalence among U.S. movie characters in films of realistic genres set in the 1990s. These researchers focused on this subset of movies on the grounds that they were examining how movies portrayed smoking prevalence in contemporary life. Films set in the present may present smokers as more socially disadvantaged than did films in previous eras. The study by Omidvari and colleagues provides a useful snapshot of how contemporary on-screen smoking depictions compare with smoking prevalence in the general U.S. population. However, they do not represent a complete picture in terms of audience reach and impact of on-screen smoking (this was not their aim). As Glantz and Polansky⁴³ argue, there is no evidence that viewers, particularly adolescents, distinguish between portrayals of tobacco

in historical, contemporary, and futuristic films or between portrayals of tobacco in American and non-American films to which they are exposed.

The concern about the types of characters who are predominantly depicted as smokers in movies is that smoking is modeled by characters bearing aspirational traits—such as good looks, maturity, affluence, and power—similar to the sorts of images traditionally promoted in tobacco advertisements. Theories of media influence and persuasion predict that role models bearing such traits are the most influential to audiences.^{44,45} As described later in this chapter, in “Effects on Attitudes, Beliefs, and Behavior: Movies,” some audience studies suggest that the sheer frequency of exposure (across all movie genres and settings) is important to media impact. Audience studies have not yet examined whether responses vary with the historical setting of smoking. Evidence is emerging, however, that responses vary with character traits of smoking models.

Other Social and Emotional Imagery

McIntosh and colleagues³⁹ found that in popular films from 1940 to 1989, smokers were depicted as more romantically and sexually active and marginally more intelligent than nonsmokers. However, smokers and nonsmokers did not differ in terms of their attractiveness, goodness, socioeconomic status, aggressiveness, friendliness, or outcome at film’s end. In movies released from 1988 to 1997,^{32,34} smoking often is depicted (1) in association with intimacy and social activity; (2) as motivated by certain mood states (e.g., agitation, sadness, happiness, relaxation, pensiveness); or (3) in conjunction with other risk-taking behaviors (e.g., drug use or violence).³² Among American movie characters portrayed as contemporary in the 1990s, smoking was more common among

antagonists.³⁸ Two cross-sectional surveys of movie content report that in movies released during the 1990s, smoking was increasingly associated with stress reduction and hostility.^{24,28} It is unclear whether this shift in imagery reflects changes in social norms concerning smoking, cinematic style, or commercial factors.

Health Consequences

A key concern about depictions of smoking on screen is that the health consequences of smoking are rarely shown. Content analyses of children’s animated films released between 1937 and 1997 indicated that more than two-thirds of the films included tobacco use without clear verbal messages of any negative long-term health effects of smoking.³⁶ Similarly, Hazan and colleagues²⁸ found that most tobacco events in movies from 1960 to 1990 did not include health messages. Roberts and others²⁷ found that, among the 200 most popular movie rentals for 1996 and 1997, negative long-term health effects associated with substance use (smoking, drug use, or alcohol consumption) were rarely depicted (in less than 7% of movies). Similarly, an analysis by Everett and colleagues³¹ of top box-office U.S. films from 1985 to 1995 indicated that on average only 3.5% of tobacco events were antitobacco, compared with 32.3% of tobacco events that were categorized as protobacco. In top-grossing films for 2002, most (92%) incidents involving tobacco were portrayed without consequences.³⁴

In another study, youth viewers found that 74% of the top 50 movies between 2000 and 2003 that depicted tobacco contained protobacco messages.²³ Dalton and colleagues³² found that negative reactions to tobacco use (e.g., comments about health effects or gestures such as coughing) were depicted in only 6% of tobacco occurrences. Escamilla and others⁴⁰ found that movies rated as PG/PG-13 were less likely than R-rated movies to contain negative messages

about smoking. In PG/PG-13 films, only 9 of 22 tobacco messages were antitobacco, compared with 21 of 31 messages in R-rated/unrated films. It is especially of concern that health effects may be more frequently omitted from movies targeted toward younger audiences. As demonstrated by social learning theory,⁴⁵ showing hazardous behaviors in the absence of negative consequences is likely to make viewers more inclined to mimic them than if the negative consequences were shown.

Brand Appearances

Content analyses suggest that appearances of specific tobacco brands in movies occur frequently, despite a voluntary agreement on the part of the tobacco industry to stop paying for their brands to appear (the Cigarette Advertising and Promotion Code incorporated a voluntary ban on paid product placement circa 1991). In a 10-year sample of top box-office films from 1988 to 1997, the most highly advertised U.S. cigarette brands also accounted for the most brand appearances in the movies, and no decline occurred after 1991.³³ Most (85%) of the films contained some tobacco use, with specific brand appearances in 28% of the total film sample. Brand appearances were as common in films suitable for adolescent audiences as in films for adult audiences. Although 27 tobacco brands were depicted in the movies sampled, 4 cigarette brands accounted for 80% of brand appearances. The brands were Marlboro (40%), Winston (17%), Lucky Strike (12%), and Camel (11%). Other content analyses of movies sampled from the late 1990s have found that brand appearances for Marlboro occurred five to six times more frequently than those for other tobacco brands.^{24,27} The U.S. film industry's use of the most heavily advertised tobacco brands (see chapter 4 for advertising expenditures by brand) in internationally distributed films suggests that film serves as a global advertising medium for tobacco, as about

one-half of box-office receipts for these films are from overseas.³³

Often, brand appearances involve only glimpses of cigarette packaging in the ambient scene environment. A subset of brand appearance of particular concern, termed *actor endorsement*, is display of the tobacco brand while an actor handles or uses a product.³³ It is reasonable to single out actor endorsement, because the film industry does so in its negotiations for placements for various products, often asking for a higher payment when an actor uses a particular brand.³³ Table 10.2 is derived from an ongoing content analysis of the top 100 box-office hits and covers the years 1996–2002. The table lists all actor endorsement tobacco events captured during the seven-year period. The table documents 46 tobacco brand endorsement scenes from 43 of the 700 movies, thus giving a measure of the scope of the activity. Table 10.2 also illustrates that foreign cigarette brands are rarely depicted, the Marlboro brand captures most actor endorsements (25 of 46 endorsements), actor endorsement is not limited to one or two actors, and actor endorsement usually occurs only once or twice during the course of a movie. The one exception is the movie *28 Days*, which contains nine actor endorsements of Marlboro.

Audience Reach

One issue limiting the utility of content analysis studies is that most do not include an estimate of reach. *Reach* typically is defined as the number of people who see a particular form of advertising.⁴⁶ Polansky and Glantz²⁶ estimated reach among adolescents for smoking in movies released at the box office between 1999 and 2003. They first estimated the number of smoking depictions contained in 776 movies released during this period by using data from ScreenIt.com (i.e., about 5,500 tobacco incidents in all movies). They then used box-office data

Table 10.2 Brand Cigarette Use Depicted in Contemporary Movies

Actor name	Brand endorsed	Number of endorsement scenes	Movie name	Year of release
Drescher, Fran	Marlboro	1	Jack	1996
Eldard, Ron	Marlboro	1	Sleepers	1996
Davis, Geena	Parliament	1	Long Kiss Goodnight, The	1996
Addy, Mark	Foreign Brand	1	Full Monty, The	1997
Carlyle, Robert	Foreign Brand	1	Full Monty, The	1997
Roberts, Julia	Marlboro	2	My Best Friend's Wedding	1997
Sheen, Charlie	Marlboro	1	Money Talks	1997
Franz, Dennis	Camel	1	City of Angels	1998
Newman, Paul	Camel	1	Twilight	1998
Sarandon, Susan	Camel	1	Twilight	1998
Hawke, Ethan	Kool	1	Great Expectations	1998
Cage, Nicolas	Marlboro	1	Snake Eyes	1998
Janssen, Famke	Marlboro	1	Rounders	1998
Keaton, Michael	Marlboro	1	Desperate Measures	1998
Reno, Jean	Marlboro	1	Godzilla	1998
Eastwood, Clint	Camel	2	True Crime	1999
Bujold, Genevieve	Foreign Brand	1	Eye of the Beholder	1999
Leguizamo, John	Marlboro	1	Summer of Sam	1999
Quaid, Dennis	Camel	1	Frequency	2000
Bullock, Sandra	Marlboro	4	28 Days	2000
Buscemi, Steve	Marlboro	1	28 Days	2000
Dooly, Mike	Marlboro	1	28 Days	2000
Pratt, Wendee	Marlboro	1	28 Days	2000
Santoni, Reni	Marlboro	1	28 Days	2000
Skye, Azura	Marlboro	1	28 Days	2000
Vaughn, Vince	Marlboro	1	Cell, The	2000
Carrey, Jim	Marlboro	1	Me, Myself & Irene	2000
Wilhoite, Kathleen	Marlboro	1	Pay It Forward	2000
Schwimmer, Rusty	Marlboro	1	Perfect Storm, The	2000
Fisher, Carrie	Marlboro	1	Scream 3	2000
Scott, Dougray	VF	1	Mission: Impossible II	2000
West, Dominic	Winston	1	28 Days	2000
Washington, Denzel	Kool	1	Training Day	2001
Barrymore, Drew	Marlboro	1	Riding in Cars with Boys	2001
Rockwell, Sam	Marlboro	1	Heist	2001
Zahn, Steve	Marlboro	1	Riding in Cars with Boys	2001
Germann, Greg	Parliament	1	Joe Somebody	2001
Crowe, Russell	Winston	1	Beautiful Mind, A	2001
de Matteo, Drea	Winston	1	Swordfish	2001
Hoechlin, Tyler	Bugler	1	Road to Perdition	2002
Johnson, Carl J.	Marlboro	1	Men in Black II	2002

Note. From a content analysis of the top 100 movies each year from 1996 through 2002.

from the National Association of Theatre Owners and Nielsen data on average audience share by age as well as the MPAA ratings to determine the number of children 6–17 years of age who purchased tickets to see these movies. The MPAA is the lobbying arm of the film industry. The researchers estimated that the thousands of smoking incidents in hundreds of movies multiplied by the number of tickets purchased to see these movies resulted in about 8.2 billion smoking depiction impressions for children and adolescents during the five-year period. Although these estimates are subject to error and may be overestimated, they are a general measure for the very large scale of exposure from a population standpoint. They also do not include viewings of movies as DVD releases or on television in the years following the theatre release dates.

Effects on Attitudes, Beliefs, and Behavior: Movies

Content analysis studies are useful for documenting media inputs, but they do not provide evidence concerning audience responses to such content. This section reviews the results of research on audience responses to tobacco content in entertainment media. Most of the media-effects research on tobacco in entertainment media has focused on movies rather than on other forms of entertainment media. This section focuses, therefore, on the findings of that movie research.

Qualitative Studies

Researchers taking a cultural studies approach to media research place a heavy emphasis on the subjectivity of interpretation of media messages. They tend to use qualitative methods to investigate interpretations of media among small numbers of audience members. These

studies provide informative descriptive data but do not provide conclusive information as to impact of the media. A search of PubMed identified seven such studies by using the following strategy:

```
((“focus groups”[MeSH Terms] OR focus
group[Text Word]) OR qualitative[All
Fields]) AND ((“tobacco”[MeSH Terms] OR
tobacco[Text Word]) OR (“smoking”[MeSH
Terms] OR smoking[Text Word]))
AND (movies[All Fields] OR (“motion
pictures”[MeSH Terms] OR motion
picture[Text Word]) OR media[Text Word]))
41 records obtained, May 9, 2006.
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Five of the studies reported on focus groups conducted with adolescents;^{47–51} one was on focus groups and interviews with college students;⁵² and one was on interviews conducted with a convenience sample of writers, actors, directors, producers, studio executives, and others involved in the film industry.⁵³ Two additional relevant focus group studies were identified via citations in other papers by MacFadyen and colleagues⁵⁴ and the World Health Organization (WHO).⁵⁵ All of these studies used an acceptable qualitative research methodology.

Similar results concerning young people’s interpretations of smoking imagery in film have been found for focus group studies conducted with college students in India (8 groups, $N =$ approximately 50)⁵² and adolescents in Australia (16 groups, $N = 117$),⁴⁷ New Zealand (approximately 10 groups, $N = 76$;⁴⁸ and approximately 10 groups, $N = 88$),⁴⁹ India (8 groups, number not reported),⁵⁵ and the United States (178 groups, $N = 1,175$;⁵¹ and 31 groups, $N = 205$).⁵⁰ Young people reported that movies are an important source of information about smoking and that these images convey the notion that smoking is a normative, acceptable behavior; offers a means of stress relief; conveys a certain social image; and may serve as a marker of adult independence. Together, these

findings indicate that young people perceive images of smoking in movies as leading to positive social or personal consequences rather than as presenting information about the negative health consequences of smoking. Qualitative research further indicates that other mass media with a visual component (e.g., television, magazines) convey mainly protobacco information about smoking to youth audiences (12 groups, $N = 70$ approximately,⁵⁴ and 178 groups, $N = 1,175$).⁵¹

Cross-Sectional Studies

Cross-sectional studies attempt to quantify the relationship between exposure to media and attitudes, beliefs, or behavior in population-based samples. One unpublished and eight published cross-sectional studies of the relationship between exposure to smoking in movies and adolescent smoking were identified. Articles from the medical literature were identified through the following PubMed search strategies:

1. (“Smoking”[MeSH] OR “Tobacco”[MeSH]) AND “Motion Pictures”[MeSH],
79 records obtained, May 10, 2006
2. (“Smoking”[MeSH] OR “Tobacco”[MeSH]) AND (“movie star” OR “movie stars”),
5 records obtained, May 10, 2006

Articles from the literature on psychology, marketing, and communications were identified by searching PsycINFO, using the following search strategy and limiting to articles in English:

KW=(smoking or tobacco) and
KW=(movies or (motion picture)),
26 records obtained, May 10, 2006

The studies were reviewed for inclusion of design characteristics that increased the reviewer’s confidence that the relationship demonstrated in the studies was a true media effect for the study sample and

that the findings were generalizable (see table 10.3 for summary scores of the studies). On the basis of these criteria, two cross-sectional studies were excluded from the review^{5,6} because they included no controls for covariate influences. The remaining studies—seven published and one unpublished—involved four cross-sectional analyses of three U.S. samples^{7,9,56,57} and one unpublished Australian sample of adolescents.⁵⁸

As shown in table 10.3, researchers have tended to use two general measures of movie influence. One assesses the smoking status of favorite movie stars,^{4,9,56,58} and the other relies on movie title recognition.^{3,7,57} The first measure, smoking status of favorite movie stars, is an exposure measure that taps the self-concept and the prototypical smoker. People choose behaviors that are consistent with their self-concepts.⁵⁹ Self-concept ratings of adolescent smokers, as well as susceptible nonsmokers, are more similar to their ratings of the prototypical smoker than are the self-concept ratings of nonsmokers.^{60–62} In theory, adolescents also may initiate behaviors as they modify their self-images. Behavioral depictions by favorite stars shape that process by determining what is “cool,” attractive, and grown up. To the extent that smoking portrayals are consistent with adolescents’ actual or ideal self-images or a prototype of the ideal group member (that is, appearing grown up), adolescents will be motivated to smoke to align their self-perceptions with personal ideals.^{63,64}

In determining the smoking status of favorite stars, Distefan and colleagues^{4,56} and Dixon⁵⁸ asked adolescents to list their favorite male and female movie stars. The researchers developed lists of the top 10 male and female actors and subsequently used content analysis to determine the on-screen smoking status for these individuals. The Distefan study also determined these stars’ real-life smoking status. Other

Table 10.3 Summary of Results of Cross-Sectional and Longitudinal Studies: Smoking and Movies

Study	Study design	Recruitment	Subjects	Country	Media influence measure
Distefan et al. 1999 ⁵⁶	Cross-sectional	Random digit dial	3,053 adolescents aged 12–17 years	U.S.	Chooses favorite movie star of ever (vs. never) smokers
Dixon 2003 ⁵⁸	Cross-sectional	School based	2,610 adolescents aged 12–18 years; attitudes assessed among subgroup of 1,858 never/experimental smokers	Australia	Movie smoking status of favorite star
Tickle and Sargent 2001 ⁹	Cross-sectional	School based	632 adolescents aged 10–19 years; attitudes assessed among subgroup of 281 never smokers	U.S.	Movie smoking status of favorite star
Sargent and Beach 2001 ⁷ Sargent et al. 2002 ⁵⁷	Cross-sectional	School based	4,919 adolescents aged 10–15 years; attitudes assessed among subgroup of 3,766 never smokers	U.S.	Two-stage direct measure (movie title recog × amt of smoking)
Sargent et al. 2005 ⁶⁵	Cross-sectional	Random digit dial	6,522 adolescents aged 10–14 years	U.S. (national sample)	Two-stage direct measure (movie title recog × amt of smoking)
McCool et al. 2005 ⁶⁶	Cross-sectional	School based	3,041 adolescents aged 12–16 years	New Zealand	Perceived frequency of viewing films (cinema and video)
Dalton et al. 2003 ³	Longitudinal	School-based recruitment with teleph F/U	2,603 adolescents aged 10–15 years at inception	U.S.	Two-stage direct measure (movie title recog × amt of smoking)
Distefan and Pierce 2004 ⁶⁷	Longitudinal	Random digit dial	2,084 adolescents aged 12–17 years at inception	U.S.	Movie smoking status of favorite star

Note. Teleph F/U = telephone follow-up; recog = recognition; amt = amount; S = sociodemographics; P = personality characteristics; Sch = school attachment and function; SI = other social influences (friend and family smoking); PS = parenting style; M = other media/advertising influences.

^aStatistically significant relation ($p < .05$) between movie smoking exposure and this outcome after covariate adjustment.

^bSignificant correlation (no covariate adjustment).

Validity, reliability	Additional outcome measures	Smoking outcome measure	Measure of association	Association size	Covariate adjustment categories
Not reported	Susceptibility ^a	0	0	0	S, P, Sch, SI, M
Not reported	Intentions	Index	Adjusted proportional odds	1.16 ^a	S, Sch, SI
Not reported	Susceptibility ^a	Initiation	Adjusted odds	1.5 ^a	S, Sch, SI, M
3-week test–retest (average percent agreement) 92%. Correct recall of titles seen up to 1 year prior = 90%. Recalls having seen a sham title 3%.	Susceptibility ^a Norms—adult ^a Norms—peer Positive expect ^a	Initiation	Adjusted odds	1.7–2.7 ^a	S, P, Sch, PS, SI, M
3-week test–retest (average percent agreement) 92%. Correct recall of titles seen up to 1 year prior = 90%. Recalls having seen a sham title <2%.	0	Initiation	Adjusted odds	1.7–2.6	S, P, Sch, PS, SI
Cronbach’s alpha = 0.65	Norms—movies ^a Nonchalance—movies ^a Norms—peer ^b Judgment—peer ^a Intentions	0	0	0	S
3-week test–retest (average percent agreement) 92%. Correct recall of titles seen up to 1 year prior = 90%. Recalls having seen a sham title 3%.	0	Initiation	Adjusted relative risk	2.0–2.7	S, P, Sch, PS, SI, M
Not reported	0	Initiation	Adjusted odds	1.3 ^a	S, Sch, PS, SI, M

researchers⁹ asked adolescents to name their favorite stars and determined smoking status in recently released movies for any star chosen by five or more adolescents. One problem with favorite star measures was the loss of sample size due to the great diversity of stars adolescents chose as “favorite.” Adolescents were excluded if their chosen star did not make the top 10 list—51% were excluded in the Distefan study,⁵⁶ and 37% were excluded by Dixon⁵⁸—or because fewer than five adolescents chose the star (50% excluded in a study by Tickle and colleagues).⁹

All studies have examined associations between stars’ on-screen smoking status and adolescents’ attitudes toward smoking. Two used an adolescent smoking measure termed *susceptibility to smoking*, which captures an individual’s inability to rule out smoking in the future or to rule out smoking if a peer offers cigarettes; this measure has been found to be a strong predictor of future smoking.⁶⁸ Distefan and colleagues⁵⁶ determined the favorite movie stars for a random sample of California adolescent smokers. They found that adolescent never smokers who preferred the favorite star of smokers were more likely to be susceptible to smoking. The favorite stars of smokers also were more likely to have smoked on screen and in real life. Tickle and colleagues⁹ determined favorite movie stars for a school-based sample of northern New England adolescents. Among never smokers, those choosing stars who smoked were significantly more likely to be susceptible to smoking. For each of these studies, the adjusted odds ratio (OR) was the measure of association with smoking and susceptibility to smoking. For the study by Distefan and colleagues, the adjusted OR was 1.3 for adolescents who chose a favorite star among smokers. For the study by Tickle and others, the adjusted OR was 4.8 if the star had smoked in two or more recent movies. Dixon⁵⁸ found no relationship between the on-screen smoking status of favorite stars

and intentions to smoke in a sample of Australian adolescent never smokers and experimental smokers.

It is unclear whether the lack of association for intentions observed in Dixon’s study in contrast to the U.S. studies is due to a cultural difference in responsiveness to on-screen smoking by stars or due to methodological differences between the studies. For example, the Australian adolescents in Dixon’s study may have been less susceptible to the influence of smoking in movies because it did not resonate with their other media exposure in relation to tobacco. Unlike in the United States, most direct forms of tobacco advertising are illegal in Australia. Cross-cultural surveys using identical methods would be necessary to test these hypotheses.

Two studies^{9,58} also examined whether the smoking status of favorite stars was linked with adolescent smoking. Overall, the relationship between favorite stars’ smoking and adolescent smoking was statistically significant in both cases. Dixon⁵⁸ estimated the effect on a smoking uptake index with a proportional odds model (adjusted proportional OR = 1.16). Tickle and colleagues⁹ estimated the effect on trying smoking with a logistic regression (adjusted OR = 1.5 [95% confidence interval (CI), 1.01–2.32] for adolescents whose favorite stars smoked in two recent movies and 3.1 [95% CI, 1.34–7.12] for adolescents whose favorite stars smoked in three or more movies). Dixon separated the effect by whether the favorite actor was male or female and the gender of the subject. She found that the association was significant for male actors’ smoking, and only in girls. Tickle and colleagues found no such gender-based interactions.

The second approach to measuring exposure to smoking in movies is a two-stage method that directly estimates exposure to smoking in movies.^{3,7} The first stage involves

content analysis to determine the amount of smoking contained in the movie sample of interest. Because adolescents cannot be surveyed on all movies, the second stage of this method requires special survey techniques that present the adolescent with a movie title list (Sargent and colleagues⁷ chose to include 50 titles) that was randomly selected from the larger content-analyzed sample (table 10.4). This method has the advantage that exposure to smoking in movies can be estimated directly and in an unbiased fashion for all adolescents in the survey sample.

The method relies on adolescents' ability to recall accurately whether or not they had seen a movie, when prompted by the movie title, and has been extensively validated by Sargent and colleagues.⁶⁵ As a test of face validity, these researchers evaluated whether box-office success was related to the probability adolescents would say they had seen a movie. In their cross-sectional study, there was a high correlation ($r = -0.73$) between the box-office success of the top 100 movies released the year before the survey and the percentage of adolescents who had seen these films. Two of the movies included were foreign films not released in the United States and served as a validation against false reports. Of the students queried regarding the two foreign films, only about 1% or less reported that they had seen the unreleased movies. These were the two lowest viewing rates reported for the survey. To further evaluate validity, Sargent and colleagues⁷ recontacted the 49 students

who participated in their longitudinal pilot study. As part of the pilot, students were called once a month for 12 months; they were asked at each interview what movies they had seen in the past week. One year after the final interview, adolescents were asked whether or not they had seen items on a list of 50 movies. Each list contained up to 30 movie titles they reported having seen the previous year (average = 19), 10 false movie titles with real stars, 10 false movie titles with false stars, and other real movie titles to complete a list of 50. As shown in table 10.4, adolescents had excellent recognition of the movies they had seen and were very unlikely to report seeing false movies, even when associated with real actors.

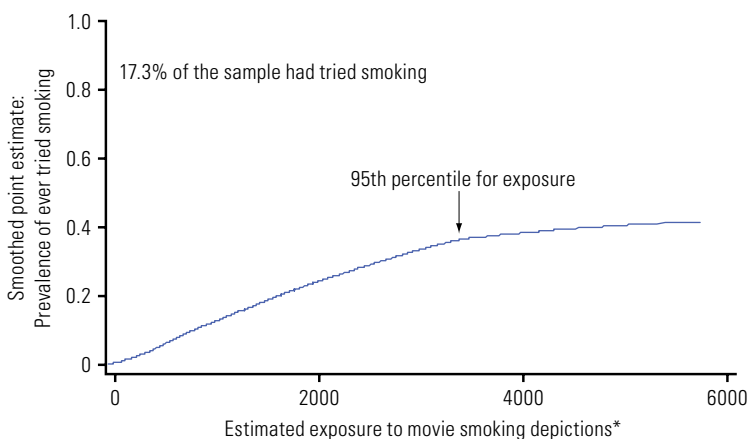
Sargent and colleagues⁵⁷ used the direct method described above to estimate exposure to smoking in movies from a sample of 601 popular contemporary movies among 4,919 adolescents in northern New England. The movie exposure measure provided an estimate of lifetime exposure to smoking scenes from the 601 movies. The subjects had seen an average of 30% of the movie sample; in these, they were exposed to an average of 1,160 depictions of smoking in movies (interquartile range 640–1,970).⁶⁹ A smoothed curve for the dose response shows a direct linear relationship between higher exposure to smoking in movies and higher rate of smoking through most of the exposure range, with the dose response flattening out past the 95th percentile of exposure (figure 10.2).

Table 10.4 Validity of Adolescents' Recognition of Movie Titles

Movie category	Have you seen this movie? (ascertained in 2001)		
	Yes	No	Don't know
Adolescent reported seeing it in 1999	87.2%	12.6%	0.6%
False movie title, real actors	2.7%	96.7%	0.5%
False movie title, false actors	3.0%	96.4%	0.6%
Other movies	41.1%	54.2%	4.6%

Note. Data derived from research by Sargent, J. D., M. O. Beach, M. A. Dalton, and T. F. Heatherton.

Figure 10.2 Lowess Smoothed Curve Showing Cross-Sectional Relationship between Exposure to Movie Smoking Depictions and Adolescent Smoking Initiation in a Study of Northern New England Adolescents



Note. Based on sample described in Sargent, J. D., M. L. Beach, M. A. Dalton, L. A. Mott, J. J. Tickle, M. B. Ahrens, and T. F. Heatherton. 2001. Effect of seeing tobacco use in films on trying smoking among adolescents: Cross sectional study. *British Medical Journal* 323 (7326): 1394–97.

*From 601 popular contemporary motion pictures.

There was almost no smoking among adolescents with little exposure to movies, and smoking peaked at almost 40% above the 95th percentile. The relationship between viewing smoking in movies and adolescent smoking remained after a broad range of confounders was controlled.⁵⁷ The measure of association was the adjusted OR, with the adjusted odds of trying smoking being 1.9 (95% CI, 1.3–2.7), 2.6 (1.8–3.7), and 2.5 (1.7–3.5) for quartiles 2, 3, and 4, respectively, compared with quartile 1. The effect of moving to a higher category of exposure to smoking in movies was similar to the adjusted OR for having siblings who smoke (1.7 [95% CI, 1.3–2.1]); the effect was higher than the effect of having parents who smoke (1.3 [95% CI, 1.1–1.6]) or owning tobacco-branded merchandise (1.2 [95% CI, 0.97–1.5]) and lower than the effect of having peers who smoked (5.1 [95% CI, 4.0–6.4]).

The relationship between exposure to smoking in movies and attitudes toward smoking also was assessed among never smokers in the northern New England

sample.⁵⁷ Exposure to smoking in movies was associated with susceptibility to smoking, an indexed measure of positive expectations for smoking, and normative beliefs about adult smoking. The measure of association was the adjusted OR. Ranges (for the three higher quartiles) for the effect size for the association with exposure to smoking in movies were 1.2–1.7 for susceptibility to smoking, 1.2–1.4 for the endorsement of adult smoking as normative, and 1.2–1.4 for the endorsement of positive smoking expectations. Exposure to smoking in movies was not associated with normative beliefs about peer smoking, a finding that is consistent with the predominantly adult nature of depictions of smoking in movies. This finding is consistent with content analyses showing that movies rarely depict adolescent characters as smokers.³²

Sargent and colleagues⁶⁵ used the direct method described above to estimate exposure to smoking in movies from a sample of 532 popular contemporary movies among a nationally representative sample of

6,522 U.S. adolescents. Adolescents' level of exposure to smoking in movies was divided into quartiles. Compared with adolescents in quartile 1, the adjusted ORs for having tried smoking were 1.7 (95% CI, 1.1–2.7) for quartile 2, 1.8 (95% CI, 1.2–2.9) for quartile 3, and 2.6 (95% CI, 1.7–4.1) for quartile 4 after controlling for potential confounders. This association between exposure to smoking in movies and smoking initiation was similar in size to the association with parent and sibling smoking (adjusted odds of smoking 1.8 [95% CI, 1.5–2.3] and 2.3 [95% CI, 1.8–2.9], respectively) and held true within broad racial and ethnic categories, and regardless of residential location. The association was lower than the association with peer smoking (OR 3.3 [95% CI, 2.6–4.2]). An adjusted attributable risk fraction indicated that among 38% of adolescents who had tried smoking, exposure to smoking was an independent, primary risk factor for smoking initiation.

In addition to the measures of smoking status and movie title recognition, a third measure of movie influence—used in a single study—asked adolescents their perceived frequency of viewing movies. Using this crude estimate of exposure to on-screen smoking, McCool and colleagues⁶⁶ examined a sample of 3,041 New Zealand adolescents. The self-reported frequency of movie exposure was positively associated with perceived smoking prevalence among adolescents and among people in movies, and with nonchalance/apathy concerning smoking in films, when controlling for demographic variables. These researchers did not find a statistically significant association between exposure to film and smoking intentions (“smoking expectations”). However, path analytic techniques revealed that certain smoking belief variables that bore a direct association with movie exposure also were significantly associated with smoking intentions, leading the authors to argue that

exposure to movies had an indirect effect on intentions, through its influence on mediating cognitions. Thus, this study, like that of Dixon,⁵⁸ failed to find a statistically significant association between the movie exposure measure and smoking intentions. Owing to differing methods in the studies, it is not clear whether the lack of association observed with intentions is because on-screen smoking does not directly affect smoking intentions, whether the two studies that examined intentions used measures of exposure to media that lacked specificity in quantifying actual exposure to on-screen smoking, or whether the tobacco control environments in those countries (Australia and New Zealand) “dampen down” the protobacco effects of on-screen smoking. Inter-country surveys that use identical methods (including more direct measures of on-screen smoking) would be necessary to test these hypotheses.

The cross-sectional surveys not included (because of the lack of controls for confounding) are still interesting, because they suggest that an association between exposure to smoking in movies and youths' smoking also occurs in non-Western countries. However, because of the limitations of these studies, further research is needed to establish more clearly the effect of smoking depicted in movies on adolescents in non-Western countries. A survey of 1,338 Thai adolescents (aged 14–17 years) found that exposure to American movies was related to heightened levels of smoking-related behavior but not to smoking intentions.⁶ In addition, a survey of more than 1,700 Hong Kong adolescents indicated that viewing a greater number of movies was significantly associated with being more likely to have ever smoked and with intentions to smoke.⁵

Longitudinal Studies

Longitudinal studies attempt to quantify the relationship between exposure to

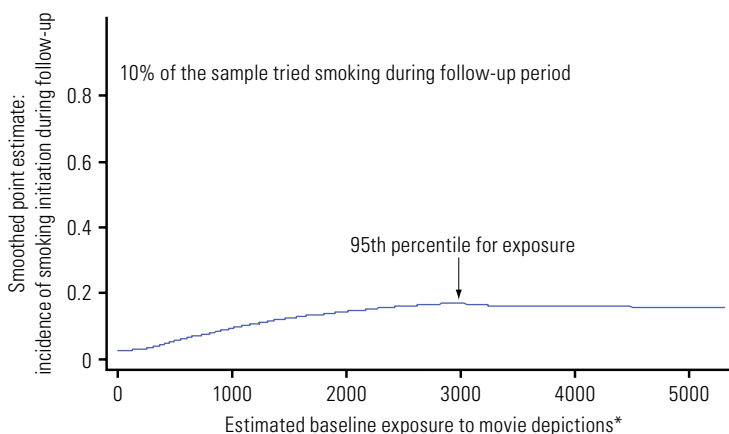
media and behavior in population-based samples by using multiple-wave survey designs. These studies have the advantage of determining more clearly whether the exposure precedes the adoption of the behavior. Never smokers in two U.S. samples were followed longitudinally to determine which persons initiated smoking in the future as a function of baseline movie exposure.^{3,4} A longitudinal study published in 2004 examined the status of smoking in movies by favorite stars (assessed at baseline) as a predictor of trying smoking in the future.⁴ This study identified “favorite stars” who smoked in at least two movies during the three-year period prior to the survey. Consistent with Dixon’s cross-sectional study,⁵⁸ female, but not male, adolescents who chose stars who were smokers were significantly more likely to initiate smoking during the follow-up period.

Initiation of smoking also was determined for never smokers in the study of northern New England adolescents in which exposure to smoking in movies was estimated

directly.³ Figure 10.3 shows a smoothed curve for the dose response. As shown in the cross-sectional sample, there was a direct linear relation between higher exposure to smoking in movies and a higher rate of smoking through most of the exposure range. The dose response flattened past the 95th percentile of exposure. Smoking during follow-up was almost zero for adolescents with minimal exposure to smoking in movies at baseline and approached 20% for adolescents in the highest exposure range.

The effect persisted when controlling for a large set of covariates, including other social influences, advertising influences, personality characteristics (e.g., rebelliousness), and parenting style. The effect size, measured as adjusted relative risk of smoking initiation, with baseline movie exposure categorized into quartiles, was 2.0 (95% CI, 1.3–3.2), 2.2 (95% CI, 1.4–3.4), and 2.7 (95% CI, 1.7–4.3) for quartiles 2, 3, and 4, respectively, compared with quartile 1. This range of relative risks was similar in magnitude to the relative

Figure 10.3 Lowess Smoothed Curve Showing the Longitudinal Relationship between Exposure to Movie Smoking Depictions and Adolescent Smoking Initiation in a Study of Northern New England Adolescents



Note. Based on sample described in Dalton, M. A., J. D. Sargent, M. L. Beach, L. Titus-Ernstoff, J. J. Gibson, M. B. Ahrens, J. J. Tickle, and T. F. Heatherton. 2003. Effect of viewing smoking in movies on adolescent smoking initiation: A cohort study. *Lancet* 362 (9380): 281–85.

*From 601 popular contemporary motion pictures.

risk of smoking associated with having parents who smoke (1.6 [95% CI, 1.2–2.0]), and higher than the relative risk associated with friends' smoking (1.1 [95% CI, 0.87–1.5]) or ownership of tobacco-branded merchandise (1.1 [95% CI, 0.85–1.5]). It is also notable that the estimates of the effect of viewing smoking in movies on smoking initiation in both longitudinal studies were almost identical to estimates obtained for the cross-sectional samples. This finding suggests that exposure to smoking in movies and its effect on adolescent smoking persist over time.

Taken together, these cross-sectional and longitudinal studies provide strong support for a direct association between exposure to smoking in movies and attitudes toward smoking and smoking initiation. The cross-sectional study of attitudes among never smokers⁵⁷ suggests that exposure to smoking in movies enhances perceptions about the utility of smoking and increases adolescents' intentions to try smoking. The longitudinal studies provide evidence of a temporal association—that is, exposure to on-screen smoking precedes smoking behavior among adolescents. The strongest associations have been demonstrated in studies using a direct measure of exposure. Cigarette smoking by a favorite movie star has a weaker association, probably because tobacco use by favorite stars is not a true measure of exposure to all smoking depicted in movies but instead taps the much narrower effect mediated by the adolescent's identification with his or her favorite star. If this is the case, the gender findings in the studies by Dixon⁵⁸ and Distefan and colleagues⁴ indicate that, in relation to movies, identification processes are more important in determining smoking onset for girls than they are for boys.

Experimental Studies

Experimental research enables media content variables of interest (e.g., smoking

versus nonsmoking footage) to be manipulated and allows controlled assessment of audience reactions to such content. This method overcomes a key limitation of cross-sectional studies—the inability to control for unknown or unmeasured confounders. In experimental studies, randomization of subjects to exposure categories is used to control for known and unknown confounders. The limitations of experimental studies are that the viewing conditions tend to be nonnaturalistic and it generally is feasible to assess only short-term responses to relatively brief media exposure. Nonetheless, these studies complement the cross-sectional studies and provide further insights into the impact on audiences of movie depictions of tobacco and tobacco use.

The PubMed and PsycINFO searches reported under cross-sectional studies yielded two experimental studies^{42,70} and two quasi-experimental studies^{71,72} assessing reactions to depictions of tobacco in movies. The latter two studies are best classified as quasi-experimental, as they assessed naturalistic exposure to whole movies among actual cinema audiences.^{71,72} The strength of these studies was their larger audience sample size relative to the other studies. Their limitation was that viewers were not randomly allocated to conditions. The authors identified two further peer-reviewed experimental studies: one published⁷³ and another conducted as part of a doctoral dissertation.⁵⁸

Table 10.5 summarizes the methods and findings of the respective experimental studies assessing reactions to on-screen portrayals of tobacco. Most designs of the studies included an experimental manipulation that compared audience responses to movie footage depicting smoking (intervention) with responses to movie footage that did not depict smoking (control). Some studies included further experimental manipulations, such as varying

Table 10.5 Summary of the Methods and Results of Experimental Studies Assessing Responses to On-Screen Tobacco Use

Study	Subjects	Subgroups examined	Methods		
			Country	Stimulus movie	Experimental manipulation
Jones and Carroll 1998 ⁷³	51 college students	<i>n</i> = 40 females, <i>n</i> = 11 males	Australia	Video clips (role plays, not actual movie footage)	Smoking compared with nonsmoking footage
Pechmann and Shih 1999 (study 1) ⁴²	607 ninth graders, nonsmokers	—	US	Scenes from <i>Reality Bites</i> and <i>Wild at Heart</i>	Smoking compared with nonsmoking footage x high compared with low positive arousal elicited by scenes
Pechmann and Shih 1999 (study 2) ⁴²	232 ninth graders, nonsmokers	—	US	Whole movie <i>Reality Bites</i>	Smoking compared with nonsmoking footage x prefilm antismoking advertisement compared with no advertisement
Gibson and Maurer 2000 ⁷⁰	120 college students	<i>n</i> = 36 smokers, <i>n</i> = 84 nonsmokers	US	20-minute clip of <i>Die Hard</i>	Smoking, nonsmoking footage
Hines et al. 2000 ⁷⁴	151 college students	—	US	6 scenes from 6 popular films	Smoking compared with nonsmoking footage
Dixon et al. 2001 ⁷¹	383 adult cinema patrons ^a	<i>n</i> = 192 who completed follow-up interview within 2 weeks of seeing movie	Australia	Whole movie	Antitobacco message (<i>The Insider</i>) compared with control film (<i>Erin Brokovich</i>)
Edwards et al. 2004 ⁷²	2,038 female adolescent cinema patrons ^a	<i>n</i> = 186 smokers, <i>n</i> = 1,852 nonsmokers	Australia	Whole movies (depicting smoking)	Prefilm antismoking advertisement compared with no advertisement
Dixon 2003 ⁵⁸	374 seventh and eighth graders	—	Australia	2 x 5 minute clips from popular movies	Smoking compared with nonsmoking footage of different character types

Note. — = variable not assessed; ns = variable not significantly affected by experimental manipulation.

^aQuasi-experimental study, using subject's self-selected cinema exposure.

p* < .05. *p* < .01. ****p* < .001. Variable significantly affected by experimental manipulation (lowest *p* value achieved for variables in this response category).

the level of emotional arousal for the sample movie footage (study 1)⁴² or varying the social characteristics of the characters in the movie footage.⁵⁸ Two studies assessed whether exposure to an antismoking advertisement (intervention) before viewing a movie that featured smoking promoted different audience responses compared with responses to viewing a movie without such an advertisement (control). One study assessed whether including antitobacco content within the movie⁷¹

(intervention) produced a different audience response than the response to viewing a movie that did not contain such content (control). Most of the studies used actual movie footage or whole movies for their stimulus material, often with some editing performed to achieve the experimental manipulation. The exception, the study by Jones and Carroll,⁷³ used video clips of role plays produced specifically for the study. For studies using actual movie footage as stimuli, the strength is that

Response variables							
Ratings of the movie	Ratings of characters	Ratings of actors	Beliefs about smokers	Beliefs about personally smoking	Personal intentions to smoke	Arousal	Beliefs about the tobacco industry
—	** (females) ns (males)	—	—	—	—	—	—
—	—	—	**	*	—	**	—
*	**	—	**	*	*	**	—
—	* (smokers) ns (nonsmokers)	* (smokers) ns (nonsmokers)	* (nonsmokers)	—	ns (nonsmokers)	—	—
—	***	—	—	—	*	—	—
—	—	—	—	—	* (completed follow-up within 2 weeks of movie)	—	***
ns (smokers) *** (nonsmokers)	—	—	—	—	* (smokers) ns (nonsmokers)	—	—
—	**	—	ns	*	ns	—	—

the stimuli represent those the viewers might be exposed to in the “real world.” The disadvantage of this method is that to achieve the intended experimental manipulation (e.g., smoking versus nonsmoking footage), it is not always possible to obtain directly comparable control footage.⁵⁸ Conversely, studies using nonprofessionally produced footage can more readily produce stimuli that are identical, with the exception of the experimental manipulation.⁷³ However,

the footage is of nonprofessional quality, limiting generalization of the results to the likely effects on audiences of “real world” movie viewing.

Most of the studies consisted of a posttest-only design in their assessment of the audience’s tobacco-related attitudes, beliefs, and intentions. Only one⁷¹ used pretest and posttest assessments of smoking-related beliefs, which would have increased the power to detect the effects of the media

manipulation within subject analyses. However, several of the studies did include a pretest assessment of participants' smoking status and demographic characteristics. This information enabled examination of responses as a function of key audience subgroups or inclusion of these variables as covariates in data analyses.^{70,74}

The main methodological difference between the studies related to their respective sample sizes. The smallest audience sample consisted of approximately 40 subjects, with about 20 viewers per condition.⁷³ The largest audience sample consisted of 2,038 subjects, with about 1,000 viewers per condition.⁷² Despite these marked differences in sample size, even the smaller studies found some statistically significant effects of the experimental manipulation on viewers' responses.

To help inform the assessment of the effect sizes of these experimental studies, the authors examined meta-analyses of effect sizes observed in experimental research assessing the effects of violent media depictions on viewer aggression⁷⁵ and of thin media models on body dissatisfaction.⁷⁶ The meta-analysis of media violence studies found a mean effect size for laboratory experiments of approximately 0.25 (95% CI, 0.23–0.28) and for field experiments approximately 0.2 (95% CI, 0.15–0.25). The absolute values for effect sizes in the body image studies were of a similar magnitude. The mean effect size across studies was -0.31 (95% CI, -0.40 to -0.23). (The positive direction of the effect in the violence studies reflects increased aggression following exposure to violent movie content. The negative direction of the effect in the body image studies reflects more negative body image perceptions following exposure to thin models in the media.)

To determine the effect sizes observed in experimental research assessing audience

reactions to smoking in films, power calculations were performed, using the results observed in studies in which significant effects of the experimental manipulations were found on smoking-related beliefs and intentions, with the use of *Power and Precision* software. To perform such calculations comparing mean response scores postintervention, it was necessary to specify means, standard deviations, and cell sizes for each experimental condition. This process was possible for all of the experimental studies, except for two that did not publish standard deviations with their results.^{42,70} The effect sizes achieved were within a range similar to those observed in the above meta-analyses of media experiments on other health topics (absolute values 0.1 through 0.8). The strongest effect size, 0.8 (95% CI, 0.41–1.19), was observed in the study by Jones and Carroll⁷³ for the effects of a video character's on-screen smoking status on perceptions of that character's social characteristics. According to Cohen's⁷⁷ effect size conventions, this observation would be viewed as a "large" effect for social science research. The effect sizes observed for more self-referent beliefs about smoking (e.g., intentions) tended to be "small" (range: 0.1–0.3), as might be expected for studies assessing reactions to a brief media exposure. However, it is theoretically plausible that recurrent, naturalistic exposure to movie images of smoking have a larger cumulative effect on viewers' propensity to smoke, and the findings of cohort studies^{3,4} are consistent with this hypothesis.

Effects of On-Screen Smoking on Viewers' Smoking-Related Beliefs

Theories of media influence predict that role models bearing favored social attributes are likely to be especially persuasive.^{44,45} Several experimental studies have assessed whether stars who smoke on screen promote prosmoking beliefs among audiences.^{42,70,74}

Results of experimental studies suggest that viewing movie characters who are smoking enhances viewers' perceptions of how socially acceptable smoking is. Pechmann and Shih⁴² found that exposure to movie scenes of popular, young stars smoking (versus nonsmoking) prompted adolescent viewers to report that adolescent smokers had higher social stature. This finding was replicated in a second experiment that assessed reactions to a whole movie (*Reality Bites*) depicting smoking compared with an edited version of the movie that excluded smoking depictions. Similarly, Gibson and Maurer⁷⁰ found that, among nonsmoking college students, viewing a movie clip of a leading male character smoking (versus a comparable clip in which this character does not smoke) resulted in a greater willingness to become friends with a smoker. However, further analyses revealed that this effect was most marked for viewers low on "need for cognition" (a trait predicted to render someone more susceptible to persuasion via the peripheral route).⁷⁸ This finding suggests that some people may be more susceptible than others to the persuasive impact of movie depictions of smoking.

Dixon⁵⁸ found evidence suggesting that adolescents who watched footage of movie adult characters smoking on screen perceived adult smoking prevalence in the "real world" to be higher than did adolescents who watched footage of nonsmoking movie characters. This effect occurred irrespective of the social characteristics of the on-screen smokers that students viewed. Together, these findings suggest that movie depictions of smoking may promote perceptions that smoking is a normative behavior in the real world. These findings are of concern, since social learning variables, "especially peer smoking and approval, prevalence estimates, and offers/availability"^{79(p.1171)} have been found to be strongly predictive of smoking onset.

Exposure to on-screen smoking also has been found to influence viewers' beliefs about the social consequences of personal smoking. Pechmann and Shih⁴² digitally changed the image frame to edit smoking out of the 1990s film *Reality Bites*. Comparing adolescents' responses to the original versus the nonsmoking version of the movie, they found that adolescent never smokers exposed to the original version showed enhanced perceptions of how their social stature would be viewed by others if they were to personally smoke. The video manipulation had no significant effects on participating adolescents' perceptions of how popular, vital, or poised they would look if they were to smoke. Dixon⁵⁸ found that beliefs about the social consequences of personal smoking were affected differentially, depending on the social characteristics of the on-screen smoker. Among adolescent viewers, attractive, high-status characters who smoked on screen promoted positive beliefs about the benefits of smoking. However, unattractive, low-status characters who smoked on screen detracted from such beliefs.

Pechmann and Shih⁴² also found that exposure to the original version of *Reality Bites* promoted increased personal intentions to smoke among adolescent never smokers. For older viewers, two studies (with sample sizes of 150 or more) found a significant effect of on-screen tobacco depictions on personal intentions to smoke.^{71,74} However, another study (examining a smaller subgroup of 84 nonsmokers) did not find such an effect.⁷⁰ Hines and colleagues⁷⁴ found that college students who viewed movie scenes in which the main characters smoke were more likely than those who viewed nonsmoking scenes to indicate a likelihood to smoke in various situations in which smoking is likely to occur. This effect persisted with controls for the smoking status of the participant. Furthermore, among male viewers who were regular or occasional smokers, the

smoking film footage also promoted a higher current desire to smoke. In contrast, the study by Gibson and Maurer,⁷⁰ with less statistical power, found that nonsmoking college students were no more likely to report intentions to smoke in the future after exposure to movie footage of a leading character smoking (versus nonsmoking). However, the direction of the trend in the overall cell means was toward smoking scenes promoting slightly higher scores on intentions. Because the sample size for this analysis was small ($N = 84$), it is likely that this study had insufficient power to detect a small or moderate effect size, if it existed.

Dixon and colleagues⁷¹ found that viewing a movie that portrayed the tobacco industry in a negative light and included information on the negative health consequences of smoking within the story (*The Insider*) promoted a short-term reduction in intentions to smoke among adult smokers and former smokers. Content analyses suggest that portrayal of information about the negative health consequences of smoking is a rare phenomenon. Experimental research indicates, however, that inclusion of such information in a movie can promote an antitobacco message. Dixon and colleagues⁷¹ also found that viewing *The Insider* promoted more negative views among audience members of the tobacco industry's business conduct. These results have some parallels with findings of evaluations of public responses to antitobacco media campaigns exposing industry manipulation. Surveys indicate that cigarette consumption declined in association with California's Proposition 99 media campaign.⁸⁰ Moreover, evaluation results for Florida's "truth" campaign advertisements show evidence of a decline in youth smoking and a relationship between youth smoking behavior and changes in youth attitudes toward the tobacco industry's manipulation.⁸¹ Chapter 12 on the effectiveness of mass media in discouraging smoking includes details of these antismoking campaigns.

Pechmann and Shih⁴² found that showing youth an antismoking advertisement immediately before viewing a movie depicting popular young stars smoking inoculated them against the prosmoking influence of the movie footage. The advertisement also generated more negative thoughts toward the leading movie characters, but it did not detract from the ratings of the movie's overall action or storyline, or from the likelihood of recommending it to a friend. In fact, those who saw a movie preceded by an antismoking advertisement rated the movie storyline more favorably than those who saw a movie without such an advertisement. These findings are of great practical importance in providing evidence concerning the efficacy of one possible strategy for reducing the negative impact on-screen smoking has on youth audiences. That is, screening an antismoking advertisement before the movie immunized young viewers against the prosmoking effects of the movie, without detracting from their overall enjoyment of the movie.

This approach was subsequently evaluated using a quasi-experimental study of 2,037 female adolescent moviegoers in Australia who had self-selected to see movies depicting smoking.⁷² The intervention group who viewed an antismoking advertisement before the movie was compared with a control group who did not view an antismoking advertisement screened before the movie. Among nonsmoking viewers, those who saw an antismoking advertisement before the movie showed stronger disapproval of smoking by characters in the movie. Among viewers who were current smokers, those who saw the antismoking advertisement showed significantly reduced intentions for future smoking. The antismoking advertisement did not affect nonsmokers' intentions to smoke. Most nonsmoking subjects (95%) in both conditions reported they were unlikely to be smoking at this time next

year. The results of these two studies suggest that screening antismoking advertisements before movies depicting smoking is an effective strategy for reducing the prosmoking persuasive effect of on-screen tobacco use by movie stars.

Effects of Smoking Depictions on General Reactions to Movies

In discussing audience reactions to smoking in movies, it also is relevant to examine responses from the perspective of audiences' entertainment experience. Evidence is mixed as to whether audience perceptions of movie characters are affected by their on-screen smoking. Pechmann and Shih⁴² found that, among adolescent never smokers, there were no significant differences in the number of negative, neutral, or positive thoughts about the leading characters in a movie as a function of whether scenes of their smoking were viewed. Similarly, Gibson and Maurer⁷⁰ found that, among college students who were nonsmokers, viewing movie scenes of a leading male character smoking (versus nonsmoking) did not markedly affect their ratings of that character. However, among college students who were smokers, viewing such movie scenes led them to rate the male actor and the character he played as more likeable when he smoked, compared with when he was not depicted as a smoker. Reactions appear to vary, however, depending on the movie character's gender—smoking by females may be associated with negative character traits. Hines and colleagues⁷⁴ found that female characters depicted as smokers were rated less favorably on a range of social characteristics (e.g., attractive, sexy, popular), but they found no such effects for male characters. Smoking by female characters also led audience members who were occasional smokers or nonsmokers to perceive themselves as less similar to the character. Jones and Carroll⁷³ found that young women who viewed a

young female smoking rated her as more outgoing, more sophisticated, not as easy to manipulate, and less emotional about breaking up with her boyfriend than those women who viewed a control video in which the young female did not smoke. In a study examining reactions to different movie character depictions of smokers, Dixon⁵⁸ found that adolescents associated smoking by female antagonists with low social status. Ratings of the male characters did not differ in this way. Together, these results suggest that audience members may identify more with movie characters of similar smoking status. Moreover, on-screen smoking by female characters appears to carry some negative social connotations.

Pechmann and Shih⁴² found that, in more general reactions to on-screen smoking, viewing movie scenes depicting smoking evoked higher levels of positive arousal than did viewing similar scenes without smoking. Despite the effects of smoking on viewers' emotional arousal, Pechmann and Shih⁴² found that adolescents' ratings of a movie's action or storyline or their willingness to recommend the movie to friends was no different for a version of the movie that edited the smoking out of the scene, compared with the original version of the movie. This finding has relevance to filmmakers in suggesting that excluding smoking from films does not detract from their overall appeal. This argument is further corroborated by Dalton and colleagues.³² They found that the amount of tobacco use depicted in movies is not significantly associated with box-office success. Pechmann and Shih⁴² also found that, for adolescent viewers who were shown an antismoking advertisement before viewing a movie depicting smoking, the effect of smoking depictions in the movie on arousal, perceptions of a smoker's social stature, and personal intent to smoke were eliminated. This finding and those of Edwards and colleagues⁷² imply that

showing antismoking advertisements before movies with smoking could modify the effect of prosmoking movie depictions on the audience's smoking behavior.

Conclusions Concerning Media Effects Research

The findings from experimental studies contribute to the understanding of how vicarious learning effects may occur in response to smoking behavior symbolically modeled in movies. Along with the results of cross-sectional and longitudinal population-based studies, experimental research indicates that images of smoking in film can influence people's beliefs about social norms for smoking, beliefs about the function and consequences of smoking, and ultimately their personal propensity to smoke. Certain movie depictions may be more likely than others to promote prosmoking beliefs. Audience members' responsiveness to such imagery may vary as a function of their personal characteristics (especially smoking status and gender). Experimental studies found many statistically significant effects—of a similar magnitude to the effects observed in experimental media research on other health topics—for only brief exposure to movie images of smoking.

Across the different study designs used to assess audience responses to on-screen tobacco use, there is considerable convergence in findings. Protobacco film content has been found to promote prosmoking beliefs and intentions in both experimental and cross-sectional studies. Exposure to on-screen smoking has been associated with smoking behavior in cross-sectional studies and predictive of smoking behavior in longitudinal studies. A similar convergence of findings across different study types was observed in a meta-analysis examining the effects of media violence on aggression.⁷⁵

Tobacco Content in Other Media

Television

Television began a close relationship to the tobacco industry in the 1950s. As it became clear that smoking was a cause of cancer, and with the elimination of cigarette advertising in the broadcast media in 1971, tobacco use also dropped out of network television in the United States. This resulted, in part, from the Public Airways Act.⁸²

Several authors have analyzed content samples of prime time television programming for smoking depictions. Breed and De Foe's⁸³ content analysis of prime time U.S. television dramas and situation comedies produced between 1950 and 1982 found a steady drop in the use of cigarettes over the three decades. In the period before the release of the first Surgeon General's report (1950–63), nine times more cigarettes were used per hour than for the season 18 years later. Several authors have found that television smoking is more common in dramas than in other genres.^{83,84} Table 10.6 lists the number of smoking acts per hour observed in samples of television dramas selected for content analyses of television programming. The studies used similar coding methods but differed slightly in their methods of sampling television content. Taken together, the results suggest that the rate of smoking in prime time television dramas declined dramatically from 1950–63 (4.52 smoking acts per hour) to 1981–83 (0.35 smoking acts per hour). However, studies conducted in 1984 and 1993 found slightly higher smoking rates (1.01 and 1.20 smoking acts per hour, respectively). A content analysis of television drama aired on Japanese television between 1995 and 1996, however, found a rate of smoking depiction (4.22 per hour) similar to that found on U.S. television in the 1950s.⁸⁵

Table 10.6 Number of Smoking Acts per Hour of Television Drama for Different Content Analysis Studies Conducted in the United States

Year of programming	Smoking acts per hour	Study
1950–63	4.52	Breed and De Foe 1984 ⁸³
1964–70	2.43	
1971–77	0.70	
1981–82	0.35	
1976–77	0.71	Fernandez-Collado et al. 1978 ⁸⁶
1976–77	2.19	Greenberg et al. 1984 ^{87,a}
1977–78	2.66	
1984	1.01	Cruz and Wallack 1986 ⁸⁸
1993	1.20	Hazan and Glantz 1995 ⁸⁹
1998–99	Not reported	Christenson et al. 2000 ⁹⁰

^aUnlike the other studies, this one did not restrict its sample to prime time television.

Christenson and colleagues⁹⁰ analyzed content of 168 episodes of top-rated television dramas and situation comedies broadcast from 1998 to 1999. Tobacco was used in 19% of episodes. Comparing these results with those obtained in their content analysis of movies,²⁷ they concluded that young viewers were considerably less likely to view smoking on television than in movies.

Gerbner and colleagues⁸⁴ found that, in a 10-year sample of prime time dramatic television and a 3-year sample of television commercials, the prevalence of smoking

among major television characters was quite low: 11% of males and 2% of females smoked. Similarly, Cruz and Wallack⁸⁸ found that smoking was more prevalent among male than female television characters. Fernandez-Collado and colleagues⁸⁶ found that in a sample of prime time dramatic television from 1976 to 1977, fewer smoking incidents occurred per hour during television programming with the largest child audiences. Similarly, Christenson and others⁹⁰ found that in television programs from 1998 to 1999, tobacco was used less frequently in TVG-rated episodes (6%)

Smoking Shifts to the Bad Guys

Social trends can influence not only the quantity of tobacco portrayal on television but also the context in which it is portrayed. For example, Breed and De Foe observed a shift over time in the manner of portraying smoking on television. Between 1950 and 1963, “all kinds of adults—heroes and heroines as well as villains—were seen smoking.”^{a(p.263)} Between 1971 and 1982, however, the typical smokers on television were villains or insecure characters; by the 1980s, scenes parodying cigarette smoking began to emerge. Cruz and Wallack, however, found that in prime time television in 1984, the majority of male smokers (70%) were in strong and enduring roles, with a minority viewed as antagonists.^b

^aBreed, W., and J. R. De Foe. 1984. Drinking and smoking on television, 1950–1982. *Journal of Public Health Policy* 5 (2): 257–70.

^bCruz, J., and L. Wallack. 1986. Trends in tobacco use on television. *American Journal of Public Health* 76 (6): 698–99.

compared with TVPG-rated (20%) and TV14-rated (24%) episodes. In their total sample of television episodes, 8% of adult major characters used tobacco and no characters younger than 18 years of age were portrayed smoking. Byrd-Bredbenner and colleagues⁹¹ found that during 1998 prime time children's television programming, depiction of tobacco was rare (shown in 2% of scenes), typically portrayed as a background activity performed by adults, mostly men.

Tobacco portrayal in prime time television is less common than in movies. Only a minority of portrayals (23%) express negative statements about smoking, almost none (less than 1%) mention or portray negative consequences of smoking, and none of the major characters depicted as smokers made on-screen attempts to quit smoking.⁹⁰ These content analyses relate primarily to television programming in the United States. The studies document some smoking content but not to the extent seen in movies.

Three studies have examined the association between television viewing and smoking. One examined the association between viewing and smoking initiation for a sample of U.S. adolescents.⁹² The authors examined smoking initiation among 592 adolescent never smokers enrolled in the National Longitudinal Study of Youth and for whom data on television viewing were available at baseline (1990, when subjects were 10–15 years of age). Initiation of smoking during the following two years was examined as a function of baseline television viewing, controlling for several socioeconomic and demographic factors (ethnicity, household poverty, marital status, number of children in the household), maternal factors (education, measured intelligence, employment), and child factors (gender and baseline child aptitude test scores). Children who watched more than five hours of television per day (above mean exposure) had significantly higher adjusted odds of smoking initiation (adjusted OR of 5.99) during the follow-up

observation period than did those who watched less than two hours per day. A cross-sectional survey of adolescent smokers in Belgium found a positive, curvilinear association between television viewing volume and smoking volume; the relationship was stronger for higher levels of viewing.⁹³ This association occurred in a multivariate regression analysis that controlled for other predictors of adolescent smoking. Adolescent smokers who watched five or more hours of television per day smoked 60–147 more cigarettes per week than those who watched one hour or less. Another longitudinal study of a New Zealand birth cohort⁹⁴ found an association between higher exposure to television during childhood and smoking in young adulthood. This study controlled for childhood socioeconomic status and parental smoking.

These studies suggest the possibility that television viewing could be linked with smoking initiation and maintenance. If a social influence effect is assumed, it is not clear how much of the effect is mediated by smoking seen in television programming versus smoking depicted in televised movies, because movies comprise a substantial share of television programming. Additionally, in the longitudinal study by Dalton and colleagues³ on the relationship between exposure to smoking in movies and adolescent smoking initiation, self-report measures of exposure to daily television were not associated with smoking initiation after controlling for other social influences (exposure to smoking in movies, friend smoking, family smoking). Therefore, the argument for a social-influences link between exposure to smoking in television programming and adolescent smoking is not as well established as is the link for exposure to smoking in movies.

Popular Music

Roberts and colleagues²⁷ analyzed the content of lyrics for the 1,000 most

popular songs from 1996 and 1997. They found tobacco references were relatively uncommon in song lyrics (3% of songs). Tobacco references occurred more frequently in rap song lyrics than in other musical genres (7% of rap songs compared to 4% of alternative rock songs and 2% or less of other music genres). Similarly, a content analysis by DuRant and others⁹⁵ of a sample of music videos ($N = 518$) televised during 1994 found that rap music videos (30%) were most likely to depict smoking, followed in order by adult contemporary (23%), rock (22%), country (12%), and rhythm and blues (11%). A small number of videos ($N = 11$) contained 10 or more instances of smoking behavior. The results in these two studies suggest that visual references to tobacco in popular music videos are more common than verbal references to tobacco in popular song lyrics. However, because these studies used different sampling methods, the results are not directly comparable.

DuRant and colleagues⁹⁵ found that portrayal of tobacco use was more common in music videos televised on MTV (26%) than on other networks (Video Hits 1 [VH1], 23%; Black Entertainment Television, 17%; and Country Music Television, 12%). Few videos contained branded tobacco advertising, and most of those were on MTV ($N = 4$) and VH1 ($N = 3$). In music videos that portrayed smoking, the lead singer was twice as likely to smoke as a background singer or musician. Smokers in music videos were mostly young adults (76%) and were more commonly Caucasian and male. Smoking scenes tended to have a positive emotional tone, but they were no more likely to contain sexual content than were videos that did not depict smoking.

Magazines

Numerous studies have examined the amount and nature of tobacco-related content in high-circulation magazines, particularly magazines for women and young people. Recognizing that magazines

can present both positive and negative images and messages about smoking, these studies have focused on two key questions. First, what coverage do magazines give to smoking and health, and is this coverage related to whether they accept tobacco advertisements? Second, what is the nature and extent of positive images of smoking in editorial material, such as fashion pictures? Both questions are addressed below, and further discussion of the first question appears in chapter 9 in the section “Tobacco Industry Influence on News Reporting.”

Between 1967 and 1979, coverage of the health hazards of tobacco smoking in major women’s magazines in the United States was generally uncommon. Whalen and colleagues⁹⁶ found that editors of such magazines frequently encouraged health writers to avoid the subject of tobacco. Those magazines that did run frequent articles on smoking and health did not accept tobacco advertising. Warner and others⁹⁷ found, in a sample of 99 U.S. magazines published between 1959 and 1996, strong statistical evidence that cigarette advertising in magazines was associated with diminished coverage of the hazards of smoking—especially in magazines directed toward women. These studies’ findings suggest that financial dependence on tobacco industry advertising may have influenced editorial policy. In the United States, between 1996 and 1999, popular general interest and health magazines covered tobacco less than other health topics, and this discrepancy was more marked in the latter group.⁹⁸ The authors argue that the relatively low coverage of tobacco and its hazards presents readers with a skewed account of the importance of smoking as a threat to their health relative to other health issues.

A survey of the tobacco policies of the most widely read European women’s magazines published in 1996 found that most of the magazines accepted cigarette advertisements, but a minority reported

having published a major article on smoking and health.⁹⁹ Magazines that accepted tobacco advertising were slightly less likely to have covered smoking and health compared with magazines that did not accept tobacco advertising. Other apparent obstacles to coverage of the health effects of smoking mentioned by editors were their opinions about smoking, their perceptions of their readers, a perception that the smoking story had been “done,” or, in some countries, a general ignorance of the subject. In contrast, nearly half of the magazines allowed editorial images of smoking, such as models smoking on fashion pages and celebrities smoking in feature articles.

In a study of popular Australian magazines, Chapman and colleagues¹⁰⁰ found, after the introduction of a ban on tobacco advertising in print media in 1991, an initial increase in incidental depictions of smoking (6 months after the ban), followed by a reduction in such depictions in the subsequent 18 months. The authors found that photographs of smoking were infrequent in Australian magazines, with a mean of one incidental depiction of smoking per 147 pages. These findings indicate that, in Australian magazines produced in the context of bans on paid tobacco advertising, incidental magazine content presents nonsmoking as normative. In contrast, a study of cigarette advertising and health aspects of smoking in British magazines, before and after the introduction of a voluntary restriction on cigarette advertising in 1986, found that while the proportion of magazines accepting cigarette advertising decreased, the new restrictions did not cover the most popular magazines; thus, protobacco content remained prevalent in the highest circulation magazines.¹⁰¹ Furthermore, editorial coverage of the health aspects of smoking was low and did not increase following the voluntary ban.

A content analysis of the most popular British young people’s style magazines

published in 1999 found major differences between young women’s and young men’s magazines.¹⁰² Young men’s magazines carried considerably more tobacco advertising and positive images and coverage of smoking in editorial pages than did young women’s magazines. In addition, very few young men’s magazines carried any smoking-or-health coverage. Editorial images of smoking were most frequent in features about personalities, such as an interview accompanied by a picture of the celebrity smoking. Second most common were smoking images in fashion pictures that included both posed as well as pseudo “real-life” fashion shots. Similar, though less prevalent, were smoking images in “slice of life” items about “real” people out having fun, for example, at nightclubs and music events. The amount of prosmoking coverage in the three most widely read young men’s magazines in 1999 averaged more than eight pages per issue, an increase of more than 400% since 1991.^{102,103}

Content analyses found that print media coverage of cigars also increased during the 1990s. In a sample of high-circulation U.S. newspapers and magazines, articles focused on cigars increased substantially between 1987 and 1997.¹⁰⁴ The articles tended to portray cigars and the tobacco industry favorably but rarely mentioned the health risks of cigar smoking. Between 1992 and 1998, a significant upward trend occurred in cigar images and images of women smoking cigars in U.S. women’s magazines with the highest readership of adolescent girls.¹⁰⁵ Wenger¹⁰⁴ found that cigar “lifestyle” magazines recurrently presented content that associated cigars with business stories, social events (including fundraisers for charities), and celebrities. Of the celebrities and public figures quoted or described in the articles, most (87%) were portrayed as having favorable attitudes toward cigars. Only 1% of cigar-focused articles focused primarily on the health effects of cigars. Cigar use was

presented as normative behavior and as a key element of a successful lifestyle.

The second question addressed in research on tobacco-related content in magazines is the nature and extent of positive images of smoking conveyed in fashion pictures. Magazines have a potentially important influence on the social image of smoking, as they often have high readerships; are targeted toward and therefore tailored to appeal to different audiences on the basis of age, gender, ethnicity, and socioeconomic status; and are printed so they remain available for longer periods than other media (as reflected in the often high ratio of readership to circulation). Of particular concern are magazines aimed at young people. As discussed earlier, adolescence is a period of considerable change and transition during which young people engage in the active construction of their adult identities, not only about who a young person wants to become, but also how an image can be projected in particular social contexts.¹⁰⁶ Young people's magazines, by promoting certain styles, brands, and images, not only help create the latest fashions but define what and who is "in." To appeal to young readers, these magazines attempt to embody attitudes and values by incorporating them into fashion spreads and articles that tap into and articulate what it means to be a young person today. Thus, it is theorized, both the extent to which magazines show smoking images and the types of such images may be important in influencing young people's perceptions of the desirability of adopting a smoking identity and consequently affecting their behavior. So far, however, very few studies have explored how young people engage with magazine images of smoking or the effect of such images.

Two British studies used different methods to explore this question. A study by Amos and colleagues examined whether young people perceived smoking and nonsmoking images

differently.¹⁰⁷ Young people rated perfectly matched (other than the presence or absence of a cigarette) smoking and nonsmoking fashion pictures taken from youth and style magazines on a range of attributes. The study found that the presence of a cigarette affected how the pictures were rated and that the nature of this effect differed between pictures. In general, the smoking images were rated as being more "druggy," wild, and depressed. Identical nonsmoking images were rated as being more healthy, rich, nice, fashionable, slim, and attractive. On the surface, the smokers' attributes were negative, but some of the attributes represented images that young smokers aspired to and admired. Smokers, especially males, identified more strongly with the smoking images and attributes than did nonsmokers.¹⁰⁷

The second study, by MacFadyen and colleagues, used focus groups of first-year college students, all smokers, to explore perceptions of smoking images in youth style magazines and the relationship between these perceptions and their own smoking images and identities.⁵⁴ The research found the students perceived this imagery to be, on the whole, attractive, sociable, and reassuring. There was considerable synergy among the image of smoking, the personality of the magazines, and respondents' self-images. The most popular magazines had personalities that were similar to the students' image of smoking—carefree hedonism, risky behavior, and antipolitical correctness. This finding suggests that the display of smoking in these magazines was likely to reinforce positive perceptions of smoking and contribute to the belief that smoking is a normative and important part of student culture.

The findings by MacFadyen and colleagues are similar to those from an Australian study that used focus groups to explore secondary school (both smoker and nonsmoker) students' perceptions of smoking images in magazines and films.⁴⁷ Smoking in

magazines and films was perceived as normal and acceptable. Additionally, the young people felt that most of the images used in the study portrayed smoking positively in terms of mood attributes, such as being in control or confident. Such positive images of smoking portray smoking in a way that young people interpret as being a normal part of life.

Internet

Hong and Cody¹⁰⁸ conducted a content analysis of protobacco Web sites ($N = 318$). These sites were predominantly e-commerce sites (50%), followed by hobby/recreation sites (19%), erotic/fetish sites (15%), other tobacco-related sites (8.8%), corporate sites (5.7%), and smoker's rights/lobbyist sites (2.5%). Ribisl and colleagues¹⁰⁹ also conducted a content analysis of protobacco Web sites ($N = 30$ sites). However, their sample excluded sites for individuals or organizations that manufacture or sell tobacco products. Despite the different sampling criteria used in these studies, they yielded similar findings. On e-commerce sites and sites featuring hobbies, recreation, and "fetishes," imagery depicting smoking in association with glamour, relaxation, leisure, sex, or alternative lifestyles was prevalent; negative health effects of smoking were rarely depicted or mentioned.^{108,109}

The models portrayed on such sites were predominantly young (18–34 years old) and Caucasian in appearance. Females tended to be portrayed as attractive and slim while males appeared more average in appearance.¹⁰⁸ Hong and Cody argue that, in addition to portraying predominantly young role models, many protobacco Web sites contained features characteristic of the Web sites young people frequent. For example, they contain content related to "shopping, hobbies and recreation (including entertainment), sites featuring celebrities and sites featuring sex or sexually arousing visuals."^{108(p.291)} Both studies found that,

despite sexually explicit content and/or the capacity to order tobacco-related products online on a number of these sites, most do not require age verification procedures. Ribisl and others also found that one-third of such Web sites featured smoking stories that "instructed would-be smokers on the merits of smoking and provided reasons for resuming smoking for those who have already quit."^{109(p.74)}

Further information on the use of the Internet in tobacco marketing appears in chapter 4.

Other Entertainment Media

Smoking content in newer forms of entertainment media, such as increasingly realistic video games (e.g., cigar smoking in the video game *Halo 2*), has been largely ignored despite the widespread use of these games (see chapter 4). T-rated (teen-rated) video games comprised 28% of video and computer sales in 2002.¹¹⁰ In a content analysis of T-rated video games, Haninger and Thompson¹¹¹ found that 5 (6%) of 81 games showed tobacco use (either a character used tobacco or a tobacco product otherwise appeared in the game). It is unclear what social normative effects (e.g., smoking norms) are associated with playing these games. However, in domains other than smoking, the games have influenced behavior in children and young adults. For example, playing violent video games has been shown to increase aggression in children and young adults.⁷⁵ More research is needed on these influences. Assessing whether tobacco is portrayed in a negative or positive light also is important. Haninger and Thompson¹¹¹ state that a character in the video game *Shadow of Destiny* decides to quit smoking cigarettes because, he says, "I don't want to die," reinforcing negative health consequences of cigarette smoking.

The effects of smoking by people performing in live concert and theater venues also

might be studied. Some research on a live theater production to encourage nonsmoking has been reported.¹¹² However, the effects of characters smoking on stage during live theater performances have not been examined. Some of the other entertainment venues in which smoking influences have been understudied include smoking by musicians in live concerts, depictions of smokers in comic books,^{113,114} and (noted earlier) smoking images in movie promotional material.

Efforts to Reduce Exposure

Legal/Policy Issues: Artistic or Commercial Speech?

One of the foundations of democratic society involves freedom to express a diversity of views (see chapter 8). Expression of diverse viewpoints is valuable for enabling communicators to espouse a cause or position and defend it. The expression of diverse viewpoints provides audiences with material on which to base informed judgments about the world around them. This freedom applies not only to political commentary but also to commentary on behaviors within the culture. Thus, most free societies give artists and other communicators the ability to reflect on, depict, and comment on their perception of the world around them. In the United States, this freedom is incorporated into the constitution as the First Amendment of the Bill of Rights.

Interviews conducted by Shields and colleagues⁵³ with film industry representatives illustrate the value producers and actors place on freedom of speech and their fears about censorship. The movie industry does not welcome public health strategies that advocate for restricting the freedom to depict

tobacco use in its films. However, paid product placement deals between some movie production companies and tobacco companies, and contracts precluding unattractive movie depictions of smoking,¹⁸ reveal that some in the entertainment industry have been compensated by the tobacco industry to add branded smoking and other signage to their artistic output. Given the history of product placement in movies and the similarities between the social imagery of smoking in movies and in tobacco advertising, it is likely that the social iconography of smoking in films derives in large part from images of smoking that the tobacco industry cultivated strategically.

In the past, the American movie industry was not afforded the First Amendment protections it now enjoys in the United States¹¹⁵ and was subject to censorship at both state and local levels. The movie industry fought censorship, arguing that it interfered with First Amendment speech. But in 1915, in *Mutual Film Corporation v. Industrial Commission of Ohio*, the U.S. Supreme Court determined that motion pictures did not constitute part of the “press” and therefore were not entitled to First Amendment protection from censorship. This case arose in response to the passing of a statute creating a Board of Censors that had to approve all motion pictures prior to their exhibition. Localities continued to censor movies until 1952, when the Supreme Court granted full First Amendment protection to movies in *Joseph Burstyn, Inc. v. Wilson*. At that time, there was little or no product placement in movies, but this is no longer the case. Paid product placement is an integral commercial element in almost every movie. Given the increasing number of product placements in movies, the question is now whether or not depictions of brands in movies should be reclassified as commercial speech, which would be subject to a lower level of First Amendment protection.

Self-regulation by eliminating cigarette brands already is happening in some movie production companies. For example, Robert Reiner requires justification for smoking scenes in movies he produces for Castle Rock Entertainment.¹¹⁶ As a WHO document on this issue states, “The film industry cannot be accused of causing cancer, but they do not have to promote a product that does.”¹¹⁷ In contrast to violence, which may be linked with box-office success, the evidence indicates that the inclusion of smoking is not necessary for the commercial success of movies.^{32,42}

Product placement deals are not the sole reason for on-screen smoking. The decision to portray a character as a smoker may arise from a range of motives, such as a desire to make the character seem realistic, reliance on cigarettes as a prop, and personal smoking behavior of an actor.⁵³ Nevertheless, movie characters for the most part represent the affluent and most powerful segment of society.^{3,28} When these actors smoke, whether they play the bad or good guy, the risk is that adolescents will emulate the behavior.^{3,4}

Movie Rating Systems

In most countries, movie rating systems exist to protect children from exposure to forms of media society deems harmful or objectionable. The rationale for most rating systems is that society wishes to protect children from seeing media that may have undue influence on their behavior. Most countries have government-sponsored censor boards charged with evaluating the appropriateness of entertainment media for children. The procedures of government-sponsored censor boards are subject to regulation by government and to revision if new data arise regarding a media threat to children. Governments in some countries have attempted to regulate smoking content in entertainment media. In 2001, Russia’s lower house of parliament passed a bill to ban images of people smoking in movies

and television programs unless smoking is an essential part of the action.¹¹⁸ The Indian Government had planned to impose a ban on smoking scenes in new films and television serials in July 2006.¹¹⁹ Thailand’s Film Censorship Board has censored depictions of smoking in movies. For example, the release of the movie *Som + Bank* (Bangkok for Sale) was delayed, as the board required that the images of smoking be blurred out.¹²⁰ In other countries, efforts are under way to incorporate smoking into government censorship and movie rating systems. For example, the Lung Association in Ontario, Canada, has called upon the government to censor smoking.¹²¹ Some countries also censor aspects of films considered offensive to most adults in their societies. For example, many Arab countries do not allow movies that depict use of tobacco and alcohol to be shown in public places, because doing so violates mainstream religious beliefs (personal communication from R. Kelishadi, M.D., Isfahan University of Medical Sciences, Isfahan, Iran, to J. Sargent, 2004).

Because of unique protections on First Amendment speech in the United States, this country does not have censor boards. Instead, the United States is the only country that allows its film industry to rate its own motion pictures. Rating is done through the MPAA. This rating system, established in November 1968, has undergone only minor changes. In the voluntary MPAA rating system, most producers allow their films to be subjected to review by a rating board. Movies are rated primarily according to what the board determines parents would find objectionable (or what Congress might regulate). In its explanation of the ratings system, the MPAA lists violence, nudity, sensuality, language, and drug use as factors the board considers when rating movies. Board members must have parental experience, and the board president is chosen by the MPAA’s president. The MPAA and the National Association of Theatre Owners presidents jointly set decisions regarding rating criteria.¹²²

The MPAA promotes the ratings system as a guide to parents. Some might argue that the real purpose of the voluntary movie ratings system is to protect the studios from more intrusive government regulation. In that regard, the film industry has operated in much the same way as the tobacco and alcoholic beverage industries, with the former changing its voluntary rating standard, the Cigarette Advertising and Promotion Code, only when Congress was considering stricter regulations (see the section “Failure of Self-Regulation” in chapter 3).

Voluntary Efforts

Tobacco Industry

Voluntary Advertising Standards

U.S. tobacco companies’ voluntary Cigarette Advertising and Promotion Code was modified in 1990 to prohibit paid product placement. The tobacco industry initiated the voluntary ban on paid product placements in the same year that the U.S. Federal Trade Commission conducted an inquiry into product placement activities of various tobacco firms. Little change occurred in the prevalence of cigarette brand appearances after the initiation of the voluntary ban.³³ Moreover, the frequency of on-screen smoking increased in the 1990s, compared with the 1970s and 1980s, suggesting that the ban had little impact on either on-screen product placement or smoking practices.^{28–30}

Master Settlement Agreement

In 1998, the U.S. Master Settlement Agreement (MSA) prohibited participating cigarette manufacturers (e.g., Brown & Williamson, Lorillard, Philip Morris, R.J. Reynolds) from product placement activities. The settlement bans payments to promote tobacco products “in any motion picture, television show, theatrical production or other live performance, live or recorded performance of music, commercial film or video, or video game.”^{7123(p.18)} The MSA also prohibits participating tobacco companies

from directly or indirectly targeting youth in marketing. No studies have yet been published on cigarette brand placements in movies since the signing of the MSA. However, a number of movies released after this agreement have included cigarette brand placements. Because the U.S. attorneys general are charged with enforcing the MSA, the continued appearance of cigarette brands in movies has become a topic of interest. So far, the tobacco industry has denied violating the MSA by obtaining cigarette brand placements; the denials are in response to several inquiries by the state attorneys general (for more information, see the statement by J. Joseph Curran, Jr., Attorney General of Maryland in appendix 10A).

Movie Industry

Before describing efforts by some in the movie industry to limit the depiction of smoking, it is necessary to describe the industry. Although the industry changes from year to year with buyouts and mergers, the U.S. film industry in 2004 was organized around seven major production companies that finance and distribute motion pictures: Buena Vista Pictures (Disney), Sony Pictures, Metro-Goldwyn-Mayer, Paramount Pictures, Twentieth Century Fox, Universal City Studios, and Warner Brothers Entertainment. Many of the names seen in movies are subsidiaries of these companies. For example, Miramax is a subsidiary of Buena Vista Pictures. These large studios hire production executives responsible for financing their major in-house movie efforts. Many independent film producers also make movies. For independent movies to be successful, the producer must partner with one of the major studios for the widespread distribution of the film. Other players in the industry (the artists) are organized through guilds, bodies that serve as financial advocates for their constituents (directors, actors, screenwriters, etc.) in much the same way that labor unions act on behalf of their members.

The MPAA represents the domestic interests of the major studios, and the Motion Picture Association represents the international interests. The president of the MPAA is also the chief lobbyist for the industry in Washington, D.C. When approached by the state attorneys general in August 2003, Jack Valenti, the MPAA president at the time, sponsored a series of meetings that included himself, the NATO president, and various guilds. However, Valenti declined to incorporate smoking into the MPAA rating system. (For more information on the dialogue between the state attorneys general and the motion picture industry, see the statement by Maryland Attorney General Curran in appendix 10A.) Four years later, in February 2007, the Harvard School of Public Health recommended that the MPAA take action to “eliminate the depiction of tobacco smoking from films accessible to children and youth.”¹²⁴ In May 2007, 31 attorneys general wrote a letter to major movie studio heads supporting this recommendation and stating the dangers of exposing children to smoking depictions in movies. In a response released that same month, former congressman Dan Glickman, Valenti’s successor as president of MPAA, stated that the MPAA would begin to consider smoking depictions when rating movies. However, a letter to the MPAA in June of 2007 from U.S. Senators Durbin, Kennedy, and Lautenberg described MPAA’s new policy as “not enough to curb the influence of smoking in the movies on the health of children.”¹²⁵ Six months after the new policy began, Polansky, Glantz, and Titus reported that there was no substantial change in the percentage of G, PG, or R-rated movies that included smoking depictions compared with the same time period in each of the four previous years.¹²⁶

Efforts to Induce/Promote Change

A number of interested government and citizen groups have attempted to exert influence on media policy and production in relation to tobacco use and other

health behaviors in entertainment media, particularly movies. Their strategies can be broadly categorized as collaborative or confrontational.

Collaborative Approaches

The Council for Excellence in Government and the University of Southern California, Annenberg School for Communications, Norman Lear Center, published a review of all efforts to engage the entertainment industry in developing prosocial messages into entertainment.¹²⁷ The report, *How Pro-Social Messages Make Their Way into Entertainment Programming*, summarizes these programs and provides a guide to some of the following discussion.

Office on Smoking and Health

The Office on Smoking and Health (OSH) is a division of the National Center for Chronic Disease Prevention and Health Promotion of the Centers for Disease Control and Prevention (CDC). The OSH maintains a Web page that encourages members of the public to work with the entertainment industry to promote accurate depiction of tobacco use and health information in movies, television, and other media.¹²⁸ By “accurate,” the group means that movies should show the health consequences of smoking. Since 1997, the OSH has developed a collaborative relationship with the entertainment industry to achieve three strategic aims: (1) educate and provide accurate science and resources to the creative community for television programming and films containing tobacco-related themes; (2) develop public relations campaigns and provide media training for volunteer celebrity advocates who want to use their public profile to advance tobacco-free lifestyles; and (3) develop educational materials, with the cooperation of the entertainment industry, that can be used in schools and by health partners to teach and reinforce messages about the dangers of tobacco use. The approach is to encourage the entertainment industry to deglamorize

and denormalize tobacco and its use. It is not clear how successful the group has been in persuading individuals in the entertainment industry to reduce or eliminate smoking.

Seeking Tobacco Alternatives with Realistic Solutions Project

The American Lung Association of Sacramento-Emigrant Trails initiated the Seeking Tobacco Alternatives with Realistic Solutions (STARS) project in 1998. The aims of the project were to work

with the entertainment industry to reduce the unintentional glamorization of smoking in film and television, provide media education to the general community regarding pro-tobacco messages, and conduct research regarding the impact of the tobacco industry on the entertainment community and acts to reduce this impact.^{129(pp.10-11)}

With support from the California Tobacco Control Program, STARS produced an award-winning documentary, *Cigarettes, Cinema, and the Myth of Cool*.¹²⁹ This film features writers, directors, and actors speaking about social responsibility and smoking in movies. During the course of the project, a Blue Ribbon Advisory Committee regularly convened; the committee included Hollywood directors and producers. It is not clear that progress was made during the project in eliminating smoking from movies, and the project ceased in 2003 because of lack of funds. However, STARS did result in a well-regarded documentary that showed both sides of the debate over smoking in film.

Entertainment Industries Council

The Entertainment Industries Council (EIC) is a nonprofit organization that aims to provide information, awareness, and understanding of major health and social issues among the entertainment industries and to audiences at large. The EIC was founded in 1983 by entertainment industry leaders. The EIC has three areas of focus:

“First Draft,” a technical resource service that provides information on request; “Spotlight on Depiction,” resources for writers; and “Generation Next,” educational resources for film students. In addition, the EIC annually presents the PRISM awards, a nationally televised awards show recognizing the accurate depiction of drug, alcohol, and tobacco use and addiction in film, television, interactive, music, video, and comic book entertainment.¹³⁰ Established in 1997, the PRISM awards honor productions that are powerfully entertaining and realistically show substance abuse and addiction. The Robert Wood Johnson Foundation, the OSH, the National Institute on Drug Abuse, and the CDC are among the groups that jointly sponsor these awards. The intent of the PRISM awards is to encourage artists to “make the most of their rights to free creative expression, while at the same time showing the reality of substance abuse and addiction on screen, in song and on the page.” The awards serve to communicate and reward realistic depictions of substance use. However, it is not clear to what extent the awards foster change or even to what extent directors and screenwriters are aware of them or use the resources the EIC provides.

Attorneys General/Master Settlement Agreement

The state attorneys general have an interest in reducing youth smoking as part of their involvement in the MSA (see appendix 10A, a statement from Maryland Attorney General J. Joseph Curran Jr., for details on this initiative). To this end, they have begun to collaborate with the movie industry with the aim of decreasing the prevalence of depictions of smoking in movies. The underlying concern raised by the attorneys general is the role movies play in smoking by youth. In August 2003, 28 state attorneys general, led by Mr. Curran, approached Mr. Valenti, the MPAA president, asking the organization to reduce smoking in movies. A letter from Mr. Valenti then invited the attorneys general to a series

of discussions on the issue (see letters in appendix 10B). This letter may have been the first public statement made by a movie industry spokesperson on smoking in movies, despite many press inquiries as a result of scientific publications that linked smoking in movies with teens' smoking. The initial dialogue resulted in a series of meetings among scientists, several attorneys general, and movie industry leaders. In May 2007, 31 attorneys general once again approached the MPAA, NATO, and major studio heads to decrease depictions of smoking in movies directed at youth.¹³¹ It also led to a hearing convened in April 2004 by the Senate Committee on Commerce, Science, and Transportation, to consider the impact of smoking in movies on children. The Senate hearing is evidence of an expanding demonstration of substantial interest in major political institutions in the United States regarding tobacco use in movies and its potential impact on children. In addition to meeting with industry representatives, the attorneys general have addressed the tobacco industry with respect to movie brand appearances. Assistant Attorney General Dennis Eckhart of California sent letters to the legal counsels of tobacco companies whose brands appeared in movies after the MSA. In each case, the letters prompted communication between counsel for the tobacco industry and counsel for the movie industry to verify that there was no violation of the MSA in the form of a payment to place the brand (see example in appendix 10C). This legal activity was a sign to tobacco companies that they are being monitored. It is also possible that, as a result, the motion picture industry will act upon requests by tobacco companies not to have their brands used in movies.

Confrontational Approaches

Smoke Free Movies and the Rate Smoking "R" Public Health Campaign

Smoke Free Movies is a public health campaign started by Stanton A. Glantz in

2001.¹³² The campaign aims to reduce the impact of smoking in movies on adolescents through four specific, voluntary changes in movie industry policy:

Rate new smoking movies R. Any film that shows or implies tobacco use should be rated R. The only exceptions should be when the presentation of tobacco clearly and unambiguously reflects the dangers and consequences of tobacco use or is necessary to represent smoking by a real historical figure.

Certify no payoffs. The producers should post a certificate in the credits at the end of the movie declaring that nobody on the production received anything of value (cash money, free cigarettes or other gifts, free publicity, interest-free loans, or anything else) from anyone in exchange for using or displaying tobacco or its use.

Require strong antismoking advertisements. Studios and theaters should require a genuinely strong antismoking advertisement (not one produced by a tobacco company) to run before any film with any tobacco presence, regardless of its MPAA rating.

Stop identifying tobacco brands. There should be no tobacco brand identification and no presence of tobacco brand imagery (such as billboards) in the background of any movie scene.

The aim of the Smoke Free Movies campaign is to create a groundswell of support for these policy aims within the public health community and, eventually, among public policymakers to bring pressure to bear on the industry. By 2004, the campaign gained the endorsement of many mainstream health organizations, including WHO, the American Medical Association, the American Academy of Pediatrics, and the American Heart Association. The Smoke Free Movies media campaign began by rolling out a

[ONE IN A SERIES]

An R-rating for smoking: Why it's reasonable, effective, and *inevitable*.

Smoking appeared in 77% of movies rated PG-13 over the last five years. Research shows movies are the biggest pro-smoking influence on children today, more powerful than traditional tobacco advertising. 590,000 kids every year start smoking because of exposure to smoking on screen; as adults 100,000 of them will die from it. A common-sense change to Hollywood's rating system can cut this death toll by 60% or more.

WHY IT'S TIME TO RATE SMOKING "R":

Research published last June in one of the world's leading medical journals confirms a decade of findings: smoking in movies recruits over half of all new teenage smokers in the United States.

The effect of movie smoking on kids is clear and direct: the more they see, the more likely they are to start smoking. The teens most powerfully influenced are the children of non-smoking parents.

The good news: the less smoking teens see in the movies, the less likely they are to light that first cigarette.

Because kids get 62% of their exposure to movie smoking from G, PG, and PG-13 movies, rating smoking "R" will reduce smoking rates proportionally.

Of the 590,000 kids each year who now start smoking because of what they see on screen, 100,000 a year will eventually die from tobacco-related disease.

Averting 62% of those deaths a year is equal to ending all U.S. deaths from drunk driving, AIDS, violent crime and illegal drugs. Worth doing? Well, yes.



"R" FOR RESPONSIBLE. The MPAA claims the First Amendment is the reason it won't rate smoking "R." But it R-rates offensive but perfectly legal language now. Surely it doesn't consider its own age-classification system censorship? After all, the First Amendment prohibits the government from banning movies, not voluntary, responsible rating choices by the studio-controlled MPAA.

HOLLYWOOD CAN DO IT TOMORROW.

It's no stretch to make the "R" cover smoking. It already covers other legal activities, while giving parents "cautionary advance warning," says the MPAA.

When it rates 4-letter words "R," for example, the MPAA is distinguishing between talk appropriate for kids and speech intended for adult audiences.

It doesn't censor. It age-classifies.

Treat smoking the same way. If a studio decides it's vital for a character to smoke, it can accept an "R" rating just as it does now for cursing or removing a bra—two legal activities that kill nobody at all.

That's no bar to creativity. Studios would still be free to make all the smoking films they want. Many smoking films are already rated "R" for other reasons.

Kids could still see them, too, if their parents take them—that's what an "R" rating means. Real progress is when "R" takes smoking out of the G, PG and PG-13 films that kids are exposed to most.

In fact, only an "R" can keep smoking out of new youth-rated movies, cut teen smoking rates, and save 62,000 lives a year.

A MILLION TOBACCO DEATHS LATE...

The studios have been stalling public health groups on this issue for more than a decade. "Dialogue" has only produced more on-screen smoking, more real-life addiction, billions for tobacco companies.

That's why medical professionals, including L.A. County's own Department of Health Services, now join socially-responsible shareholders and thousands of young people across the country to demand that smoking be rated "R."

Smoking on screen poses the single greatest public health danger to America's children. Chief executives of the seven major studios and their corporate parents could reduce the danger by 60% or more tomorrow.

The "R" is inevitable. Why not now?

Learn more about the "R" at SmokeFreeMovies.ucsf.edu



Example of a Smoke Free Movies advertisement

controversial print advertising campaign in March 2001 that was aimed at members of the movie industry. The campaign was designed to raise awareness about the effect of smoking in movies on adolescent smoking; to place responsibility for change on studio executives, theater owners, and actors; and to suggest government oversight.¹³³ Along with the advertising campaign, Smoke Free Movies has organized and maintains a network of public health activists at state and local levels. These groups have developed awareness campaigns aimed at youth (in New York, Texas, and Vermont, among others), have engaged in a national letter-writing campaign to movie stars, and have encouraged other forms of activism, such as e-mail messages to movie executives.

The most controversial policy aim of Smoke Free Movies is the R rating for smoking. This policy aim has been under the control of the movie studios and theater owners, the two entities that run the MPAA rating system. From the original perspective of the movie industry, the movie rating system was designed for concerned parents and was not designed in relation to public health considerations. However, the ratings do include violence. After the Columbine High School shootings in 1999, public health considerations were added when efforts by President Clinton, the Senate, and public health experts led to changes in the movie industry's depiction of violence in R-rated films. The movie industry deleted the most violent scenes from soon-to-be released films and increased restrictions on how R-rated movies are marketed. From a public health perspective, limiting the portrayal of tobacco in movies is important because of its link to adolescent smoking (see earlier discussion) and the severity of the health consequences of smoking compared with some other depictions of behavior (e.g., using foul language).

Another issue that has been raised is whether the balance between adolescents' desire to see R-rated movies and parental attempts to limit viewing of these movies weighs in favor of higher or lower exposure rates for R-rated movies among young adolescents. If adolescents successfully circumvent attempts by parents and theaters to restrict their exposure to these movies, their viewing rates would be expected to be similar to other rating categories. The R rating for the smoking campaign, in this case, would be futile and possibly even counterproductive. If view rates for R-rated movies are in fact lower among young adolescents, then the argument could be made that rating movies with smoking R could limit adolescent exposure despite making them "forbidden fruit." To shed light on these possibilities, researchers^{7,134} examined the reach of movies, as determined by MPAA ratings, for a sample of young adolescents.

The adolescents were part of an already published cross-sectional survey of 4,946 students, 10–14 years of age, attending 15 junior high schools in New Hampshire and Vermont.^{7,134} Each student was surveyed on whether he or she had seen a randomly selected subsample of 50 movies, drawn from 601 popular contemporary movies (based on year of release and box-office success). Almost 50% of the movies were rated R. Because movies were randomly selected, each title appeared on an average of 470 surveys (standard deviation of seven). Therefore, it was possible to determine accurately the percentage of adolescents who had seen each title (termed *reach* in the marketing literature). G-rated movies were seen by most of the adolescents, with a median reach of 67% of adolescents. As the rating becomes more restrictive toward adolescents, reach drops. This is especially true for the transition from PG-13 rating to R rating, for which the median and interquartile ranges for reach drop substantially. Whereas the

75th percentile for reach in PG-13 movies was more than 60%, the 75th percentile for R-rated movies barely exceeded 30%. These data provide convincing evidence that movies in the R-rating category are seen by many fewer young adolescents compared with movies that are not rated R. This result is probably because parents restrict access (see below) and because theaters generally enforce the R-rating as part of their participation in the MPAA ratings system.

Would the R rating for smoking have a substantial immediate impact on adolescents' exposure to smoking in movies? Smoke Free Movies is calling for the R rating to be applied only to new movies. Most adolescents' exposure to R movies is through seeing older movies on video and DVD. The prospective R rating for smoking would therefore substantially cut exposure to depictions of smoking at theaters that air new releases and would have a more pronounced impact over time because of the cumulative effects of the rating change. On the other hand, if the R rating for smoking caused parents to pay less attention to the ratings system, it could result in the reach of R-rated movies increasing among younger adolescents. Because of these concerns, it may be wise to also consider, along with implementation of this policy change, surveillance of R-rated movie viewership among adolescents and inclusion of a motivational effort to convince parents to take the ratings system literally and seriously.

Other Potential Strategies

Parental Supervision of Entertainment Media

Most media exposure occurs in the household. Therefore, parental supervision of their children's access to media could affect the children's exposure to media

depictions of smoking, and some evidence supports this idea. Most research involves restriction of access to movies in the R-rated category.

R-Rated Movie Restriction

The prevalence of smoking depicted in movies increases with high levels of movie rating. In a sample of 250 contemporary movies, Dalton and colleagues³² showed that the median number of smoking depictions was 8.5 for R-rated movies, 4 for PG-13-rated movies, 3.5 for PG-rated movies, and 1 for G-rated movies. About one-half of the movies produced in 1990 were R rated, and that percentage dropped to one-third after 2000. Thus, by restricting access to R-rated movies, parents reduce movie exposure overall by a factor of one-third to one-half and eliminate movies that contain the highest concentration of smoking.

Two studies examining the effect of parental R-rated movie restriction on adolescent smoking were identified. The studies of a sample of Vermont and New Hampshire children aged 10–14 years at baseline assessed parental restriction of R-rated movies through the question, "How often do your parents allow you to watch movies or videos that are rated 'R'?" (never, once in a while, sometimes, all the time). In the cross-sectional study,¹³⁵ 90% of the 4,544 students were younger than 14 years of age. However, only 16% reported they were never allowed to watch R-rated movies. One-third (31%) indicated that their parents never restricted them from viewing R-rated movies. Thus, restriction of R-rated movies was not a major focus for most of the parents of the children in this sample. Among adolescents who reported R-movie restriction, exposure to R-rated movies was about one-eighth as high as that for adolescents who reported no restriction. Exposure to PG-13 movies was also reduced by about 50%. Thus, reports of R-rated parent restriction seemed to be associated with lower exposure to such movies.

Importantly, initiation of alcohol consumption and tobacco use was much lower in adolescents reporting movie restriction, even after controlling for a number of other covariates. These variables included sociodemographics, social influences (smoking by friends and family), personality (sensation seeking, rebelliousness), and parenting style (authoritative parenting). Compared with adolescents with no R-rated movie restriction, the adjusted relative risk (95% CI) for smoking initiation was 0.74 (0.65–0.85) for adolescents with partial restriction and 0.29 (0.19–0.45) for those who were completely restricted from viewing R-rated movies.

The never smokers in the cross-sectional study were followed up one to two years later. Smoking incidence (10% tried smoking during the observation period) was examined as a function of parental R-movie restriction at baseline.⁸ Adolescents allowed to see R-rated movies at baseline were three times more likely to try smoking (relative risks adjusted for a full set of covariates) compared with those who were never allowed to watch R-rated movies. The effect was stronger for adolescents from nonsmoking families, among whom only 3 of 399 with complete R-rated movie restriction tried smoking. In this group, the adjusted relative risk of smoking given no R-movie restriction was 10. Students were asked again about movie restriction at follow-up. Most reported no change in restriction status, indicating that many parents are able to continue enforcing restriction as adolescents age during junior high school. Moreover, compared with adolescents reporting no change, relaxation of restriction was associated with higher risk of smoking in each of the baseline restriction categories. This longitudinal study provides strong evidence that supports interventions to motivate and assist parents in enforcing media restrictions as a smoking prevention measure aimed at young adolescents.

Devices That Restrict Access

This is a rapidly changing area as technology offers parents more control of the home media environment. The shift toward automated control of home media was spearheaded by the television V-Chip, a device that enables parents to block television channels and also to block based on television and movie ratings. In the Telecommunications Act of 1996,¹³⁶ Congress required manufacturers of televisions to include a control device that could be used by parents to block unwanted programming. In the words of the legislation, the device

enables parents to block programming based on identifying programs without ratings,

is available to consumers at a cost which is comparable to the cost of technology that allows parents to block programming based on common ratings, and

will allow parents to block a broad range of programs on a multi-channel system as effectively and as easily as technology that allows parents to block programming based on common ratings ...

Since 2000, the V-Chip is included on all televisions distributed in the United States with screens larger than 13 inches. In addition to the V-Chip, many modern video and DVD players contain software that gives parents the ability to block television programs by rating, so that their children cannot play material above a certain threshold rating. Given the prevalence of this kind of technology and the interest in protecting children from the ill effects of media, one would have expected a number of interventions involving the V-Chip. Yet a MEDLINE search on “V-Chip” conducted in September 2004 yields only four articles, and a search on PsycINFO yields only six—none of which involves cross-sectional or interventional data. Although this technology is in its infancy, the potential benefits of

widespread application are clear. One study examining the effect of a blocking device that restricted television time showed that mean daily television time for children in the intervention dropped, as did their increase in body mass index.¹³⁷ This randomized clinical trial provides strong evidence for a powerful intervention effect.

Internet

It may be too early to consider interventions aimed at the Internet as relatively little is known about how people use it. In a study published in 2004, a sample of underage adolescents were asked to purchase cigarettes over the Internet.¹³⁸ The authors reported that 29 of 30 subjects were able to make a purchase by using a parent's credit card, and 75% received the product in the mail. This study shows that access to cigarettes by minors is possible. However, as yet the prevalence of such purchasing behavior among the adolescent population is unknown.

Hong and Cody¹⁰⁸ recommend the following actions to counteract the presence and influence of tobacco on the Web: (1) online tobacco retailers should be required to use age verification and should not sell tobacco products without a bona fide age check; (2) consumer awareness information on the hazards associated with smoking should be displayed for visitors to protobacco Web sites; (3) popular portal sites for the general public and adolescents should be encouraged to provide links or banner advertisements to sites on tobacco cessation or to provide educational material on the health effects of smoking; and (4) tobacco control advocates should use the Web more proactively to advocate smoke-free, healthy environments (e.g., work to have a more noticeable Web presence and use some of the engaging, interactive features that appeal to audiences). By 2004, however, Congress had not passed any restrictions on Internet purchases.

Efforts to Modify Response to Exposure

Antitobacco Advertising in Theaters

As described in the experimental studies section, there is some evidence that showing an antitobacco advertisement before a movie with smoking blunts the movie's effect on attitudes. On the basis of this evidence, one aim of Smoke Free Movies is to require the distributing production studio to pay for antitobacco advertising in theaters. Another possibility raised in discussions between the representatives of the National Association of Attorneys General and the movie industry is attaching an antismoking message ahead of any videotape or DVD that contained smoking. This action would cost the industry little or nothing. In 2007, at least one major studio executive announced that the studio planned to add anti-smoking PSAs on DVDs of future films that feature cigarette smoking.¹³⁹

As noted earlier, through the impetus of state attorneys general, the possibility of communications about smoking depictions in movies has been raised with the president of the National Association of Theatre Owners as well as owner-members. Because movies appeal strongly to adolescents, movie theaters may be ideal places for antitobacco advertising campaign messages. However, the source of funding for such a campaign is unclear.

Media Literacy

Media literacy refers to educational approaches to help viewers better understand media inputs. Some counteradvertising campaigns and contests, discussed in the section "Media Activism" in chapter 11, can be considered a form of media literacy. Critical viewing skills are a

major component of most media literacy educational programs.¹⁴⁰ From the standpoint of persuasion theory,^{44,78,141} these programs aim to affect the way the recipient processes media information. Many of the media images viewers see are processed implicitly, without much thought. In theory, adolescents are affected in a cumulative fashion by the images of smoking in the media. As they see literally thousands of depictions of smoking—by affluent characters and without portrayal of negative health effects—in movies, television, and tobacco marketing materials, over time, they associate smoking with positive expectations. By teaching about the mechanisms by which media persuade, media literacy programs should cause the recipient to become a more effortful processor of the media—for example, to be more skeptical of commercial messages and images.¹⁴¹ An adolescent who is knowledgeable about the role of product placement in marketing and the persuasive power of movie images of smoking will be more resistant to automatically accepting the positive expectancies associated with the image.

Media literacy has great appeal as theory. However, only scant evidence suggests that these programs have short- or long-term effects on adolescents. One study was identified that evaluated a youth tobacco use prevention intervention that included media literacy skills among high school students.¹⁴² Using a quasi-experimental design, the investigators assigned 448 students in 15 classes in three schools to receive the intervention; 161 students in 5 classes in one school served as a control group. The intervention curriculum included health education (consequences of tobacco use, social norms, parental use of tobacco), media literacy skills training (media analysis, media production, product presentation, and media advocacy), and skills training in resisting peer influence. The investigators measured preintervention (one week before intervention) and postintervention (one week

after the intervention) knowledge about health consequences, protobacco attitudes, and use of tobacco. The intervention was associated with significantly higher knowledge scores, a decrease in protobacco attitudes, and a decrease in current tobacco use. Limitations of the study include measurement of short-term outcomes only and inability to attribute attitudinal and behavior change to the media literacy component of the intervention.

Another study examined the effect of a media literacy curriculum on attitudes toward alcohol use in a sample of third-grade students. Austin and colleagues¹⁴³ examined the immediate and delayed effects of a media literacy program on alcohol in 246 third-grade students. They proposed a model in which more critical attitudes toward televised portrayals of alcohol use (less perceived realism, less identification, less desirability) would affect alcohol expectancies and, ultimately, behavior. Students were randomly assigned to one of four groups according to two factors: pretest/no pretest and treatment/no treatment. Outcomes were measured immediately and at three months posttest. Children in the intervention group watched a 28-minute videotape *Buy Me That*, which *Consumer Reports* produced for children and which discusses techniques used by advertisers to make products look appealing. The videotape was followed by a guided discussion of four advertisements (two for beer and two for soda pop). Outcomes surveyed included understanding of persuasive intent (“Ads on TV tell the truth”), realism (“Real people act like people in ads”), social norms (“Most teens drink”), similarity (“I do things that people in ads do”), desirability (“People in beer ads are popular”), identification (“I want to have my life like people in beer ads”), and expectancies (“Drinking makes you happier”). Results of the experiment generally were very supportive of the notion that media literacy training has a strong

immediate effect on raising skepticism toward advertising and decreasing participants' intent to engage in the behaviors depicted in advertisements. Some of these effects persisted, albeit to a lesser degree, at delayed posttest.

These studies suggest that media literacy may have a role in training children to resist entertainment messages. However, this intervention area is still very little studied, especially considering the extent to which this practice already has been implemented in educational settings. Until better data are available regarding the long-term effectiveness of media literacy, emphasis—especially for young children and adolescents—should be directed at reducing exposure.

Summary

Content analyses of popular entertainment media indicate that portrayal of tobacco use is common in movies and is often modeled by stars bearing favored social attributes. The negative health effects of tobacco use are rarely depicted. Tobacco portrayal appears to be less common in popular television and music than in movies. Tobacco exposure in online media is an area for further study.

The results of cross-sectional and longitudinal studies assessing audience responses to portrayals of tobacco use in movies are remarkably consistent in showing an association between seeing smoking in movies and more positive attitudes toward smoking and adolescent smoking initiation. The population-based data include cross-sectional samples from different regions of the United States, Australia, New Zealand, and Asia, and a nationally representative sample of U.S. adolescents—all supporting a link between viewing smoking in movies and adolescent smoking.

The two published longitudinal studies show an independent link between exposure to smoking in movies at baseline and smoking initiation in the future; estimates of the effect size are consistent with their cross-sectional counterparts. The experimental studies examine short-term responses, generally supporting an effect of seeing movie stars smoking on screen on attitudes such as favorable ratings of smokers and intent to smoke in the future. The experimental studies suggest also that the findings among adolescents may be applicable to young adult college students. As a whole, this rich research base provides strong support for the notion that smoking in entertainment media plays a causal role in smoking initiation among adolescents, and this role warrants action at the individual and societal levels.

Still more research is needed on the important role of popular entertainment media, such as movies, in influencing young people to initiate smoking. Research has not yet determined the role entertainment smoking may play in maintaining experimental smoking or in prompting relapse among smokers who have quit. In addition, no published intervention studies have evaluated whether adolescents' exposure can be decreased by motivating parents to restrict access or by teaching adolescents to process depictions of smoking in movies with more skepticism.

Such research should continue to inform the ongoing effort to reduce exposure through media to tobacco use and/or counteract the effects of such exposure. Numerous efforts already have contributed to reducing tobacco use in the media. These efforts include policy interventions such as tobacco advertising and product placement restrictions, public education, and advocacy efforts targeting entertainment providers. In the future, research on trends—ranging from encouraging increased parental responsibility to controversial initiatives

such as R ratings for movies featuring tobacco use—will continue to build on this base of knowledge. Continued efforts to reduce exposure to tobacco through media may potentially affect social attitudes and behavior toward smoking, which in turn may have a long-term effect on the public's disease burden attributable to tobacco use.

Conclusions

1. Children and adolescents in the United States have heavy exposure to entertainment media, with an average of 5.5 person-hours of media use per day. Tobacco use often is integrated into entertainment media programming, especially in movies.
2. Portrayals of tobacco in movies include images of tobacco use and images of tobacco product brand names and logos. Depictions of smoking are pervasive in movies, occurring in three-quarters or more of contemporary box-office hits. Cigar use also is commonly depicted in movies, but use of smokeless tobacco is not. Smoking is more common in movies rated for adults (i.e., R-rated), but depiction of smoking is not related to box-office success. Identifiable cigarette brands appeared in about one-third of movies released during the 1990s. In contrast to its frequent depiction in movies, tobacco use is found in about 20% of television shows and 25% of music videos.
3. Smoking prevalence among contemporary movie characters is approximately 25%, about twice what it was in the 1970s and 1980s. In contrast, smoking in the general population has declined since the 1970s. Smokers in movies differ from smokers in the general population: the former are more likely to be affluent and white. The health consequences of smoking are rarely depicted in movies.
4. Cross-sectional studies show that, among adolescents, exposure to smoking in movies is associated with initiation of smoking, independent of several other factors such as smoking by friends and family. Cross-sectional studies also indicate that among adolescent never smokers, exposure to smoking in movies is associated with more positive attitudes toward smoking.
5. Two longitudinal studies demonstrate that adolescents with higher exposure to smoking in movies at baseline are 2.0 to 2.7 times more likely to try cigarette smoking in the future. More studies are needed on the role exposure to smoking in movies plays in adolescents' smoking beyond the initiation phase.
6. Experimental studies show that images of cigarette smoking in film can influence adolescent and adult viewers' beliefs about social norms for smoking, beliefs about the function and consequences of smoking, and their personal intentions to smoke. Protobacco movie content (e.g., stars smoking, absence of health consequences portrayed) appears to promote prosmoking beliefs and intentions. The effects observed for experimental studies of smoking in movies on viewers' smoking-related beliefs are of a similar magnitude as those observed in experimental media research on other health topics (e.g., effects of media violence on viewers' aggression).
7. Experimental studies indicate that antitobacco advertisements screened before films can partially counter the impact of tobacco portrayals in movies.
8. The total weight of evidence from cross-sectional, longitudinal, and experimental studies, combined with the high theoretical plausibility from

the perspective of social influences, indicates a causal relationship between exposure to movie smoking depictions and youth smoking initiation.

9. One longitudinal study indicates that parental steps to reduce the exposure of never smokers (aged 10–14 years) to R-rated movies, which have higher numbers of smoking events, produced a corresponding reduction in their smoking initiation.
10. Efforts to reduce media exposure to tobacco include restrictions on tobacco advertising and product placements, advocacy targeted to entertainment providers, media literacy interventions aimed at the general public, continued dialogue with key stakeholders in the entertainment industry, and proposed self-regulation by the movie industry (e.g., tobacco-related ratings).

Appendix 10A. Statement by Attorney General Curran of Maryland on Role of the State Attorneys General

EFFORTS OF STATE ATTORNEYS GENERAL
TO SEEK MOVIE INDUSTRY COOPERATION
IN REDUCING YOUTH EXPOSURE TO SMOKING IN MOVIES

By

J. JOSEPH CURRAN, JR.

ATTORNEY GENERAL OF MARYLAND

TOBACCO LITIGATION & THE 1998 MASTER SETTLEMENT AGREEMENT (MSA)

When I filed Maryland's lawsuit in 1996 against the nation's largest tobacco companies, as did my fellow Attorneys General from across the country, we sought restitution for the billions of dollars paid by our states to treat tobacco related illnesses. Just as important, we also sought to stop the tobacco companies' marketing campaigns that target and encourage children to purchase and consume tobacco products.

In November 1998, I was one of the 46 state Attorneys General who signed the historic Master Settlement Agreement (MSA) which settled our state suits. Under the MSA, the tobacco companies are required to pay the settling states more than \$200 billion over 25 years. Equally important, tobacco companies are restricted from targeting youth or making tobacco brand names ubiquitous through apparel or other merchandise, billboard and bus ads, sponsorships or product placements in the media, including movies.¹

The MSA states in part:

No participating tobacco manufacturer may...make, or cause to be made, any payment or other consideration to any person or entity to use, display, make reference to or use as a prop any Tobacco Product, Tobacco Product package, advertisement for a Tobacco Product, or any other item bearing a Brand Name in any motion picture, television show, theatrical production or other live performance, live or recorded performance of music, commercial film or video, or video game ("Media")....

¹The MSA prohibits, generally and with exceptions not listed here: any action to target youth in the advertising or marketing of tobacco products; cartoons in cigarette advertising or packaging; outdoor and transit ads; brand name sponsorships of concerts or sporting events and naming rights to sports venues; tobacco brand name merchandise; free samples of tobacco products; tobacco coupons or credits to children; and payment for use of tobacco products in the media.

MSA, Section III (e).² Moreover, the MSA also prohibits the participating manufacturers from authorizing any third party to use a brand name in a way in which a participating manufacturer may not.³

IN SPITE OF THE MSA PROHIBITIONS, DEPICTIONS OF SMOKING AND BRAND APPEARANCES PERSIST IN THE MOVIES

In spite of these express prohibitions, smoking in movies—particularly in youth rated movies—remains as prevalent today as it was before the MSA—and by some measures has increased. Since the MSA, movie stars continue to smoke on-screen.

Most films portray smokers and smoking in a positive or neutral light and few films appear to contain negative statements about tobacco use. Moreover, even after the MSA, movies continue to show tobacco brand names.

THE TOBACCO COMPANIES DENY A ROLE IN MOVIE BRAND APPEARANCES

In March 2003, California Attorney General Bill Lockyer wrote to each of the four major tobacco companies to express concern over depictions of smoking and tobacco brand appearances since the MSA. In light of the MSA's express prohibitions, General Lockyer asked each manufacturer whether it had played a role in the appearance of its cigarette brands in post-MSA movies identified in his letters. All four companies denied any role in the appearances of their products in movies. Indeed, at General Lockyer's urging that the tobacco companies take commercially reasonable steps against brand appearances, Philip Morris, Lorillard and R.J. Reynolds have sent letters notifying movie studios that they do not want their products to appear in the movies. Most recently, we are pleased that Philip Morris and R.J. Reynolds have taken commercially reasonable steps to ask studios to remove references to their tobacco brand names from two particular movies before the films are released on DVD or video or licensed for broadcast.

IN LIGHT OF THE SCIENTIFIC EVIDENCE AND POLICY RECOMMENDATIONS, ATTORNEYS GENERAL SEEK COOPERATION OF THE MOVIE INDUSTRY

In August 2003, compelled by the strength of the research linking seeing smoking in movies with teen smoking, I wrote a letter, joined by the Attorneys General of 27 other states and jurisdictions, to Mr. Jack Valenti, President of the Motion Picture Association of America (MPAA), seeking cooperation of the motion picture industry to reduce the depiction of smoking in movies. Mr. Valenti promptly responded by extending an invitation to my

²Under the MSA, "Tobacco Products" means cigarettes and smokeless tobacco products. Section II (vv).

³MSA Section III(i) provides that "no Participating Manufacturer may license or otherwise expressly authorize any third party to use or advertise within any Settling State any Brand Name in a manner prohibited by this Agreement if done by a Participating Manufacturer itself... Following such written notice, the Participating Manufacturer will promptly take commercially reasonable steps against any such non-de minimis third party activity." In other words, tobacco companies are required to take affirmative steps such as written demands to third parties to cease and desist the unauthorized activity.

colleagues and me to meet and share with him the details of the study. Mr. Valenti further proposed setting up a round-table in discussion in Los Angeles with representatives of the creative guilds and movie production companies.

My colleagues and I have followed up on Mr. Valenti's offer, several times over. In October 2003, Connecticut Attorney General Richard Blumenthal, former Pennsylvania Attorney General Mike Fisher, Utah Attorney General Mark Shurtleff, Vermont Attorney General Bill Sorrell, and I met with Mr. Valenti and his staff in Washington, D.C. After presenting the research, Dr. James D. Sargent, a pediatrician and lead investigator of the Dartmouth study, handed Mr. Valenti the following "prescription" which mirrors the policy recommendations endorsed by a growing number of our leading major medical and public health organizations:

- Give smoking movies an R-rating;
- Eliminate brand identification;
- Certify that no consideration was received for smoking in the movie; and
- Run antismoking messages before any movie that depicts smoking.

Although Mr. Valenti unequivocally rejected the R-rating for movies that depict smoking, he proposed a series of round table discussions with other members of the movie industry. Since that initial October 2003 meeting, my colleague attorneys general and I have taken our message, accompanied by Dartmouth scientists Dalton and Sargent, to Hollywood. As proposed by Mr. Valenti, on December 17, 2003, we spent a morning in Los Angeles at the Directors Guild of America (DGA) with their executive staff and directors who serve on the DGA's Social Responsibility Task Force. Later that same day, we met and discussed the research and its implications for movies and youth smoking with senior production executives of the MPAA studios: Metro-Goldwyn-Mayer Studios, Paramount Pictures, Universal Pictures, Warner Bros., Sony Pictures Entertainment, Walt Disney Pictures, and 20th Century Fox Film Corporation. Representatives of the Screen Actors Guild and the Writers Guild of America also participated in the afternoon discussion. In these two sessions, after Dr. Dalton presented her findings, the attorneys general voiced our concerns directly to these directors, writers, actors and movie studio executives that depictions of smoking in their youth rated films and the persistence of cigarette brand names in any movie works against the goals of the MSA. We encouraged them to adjust and enhance their voluntary movie ratings system—designed to provide America's parents with the information necessary to make informed and responsible decisions about their childrens' movie-going choices—so that parents can be as informed about smoking in movies as they currently are about foul language. Given the state attorneys general's responsibility to enforce the MSA prohibition against cigarette brand placements in the media by tobacco companies, we also asked for the opportunity to learn more from the MPAA studio executives about the circumstances surrounding appearances of cigarette brands in movies.

We also have taken our message to the National Association of Theatre Owners. In April 2004, Vermont Attorney General Bill Sorrell, Dr. Dalton and I had the opportunity to address the NATO Board of Directors at its annual meeting in Washington, D.C. In addition to the Dartmouth research, Dr. Dalton also reviewed the promising findings that antismoking PSAs

run before movies can “inoculate” youth to depictions of smoking in films.⁴ Given NATO’s joint power with the MPAA over the movie ratings system and its members’ exclusive control over their movie screens, NATO has a unique opportunity to protect our youth from smoking by making smoking a criterion in movie ratings (equal to foul language) and by running antismoking PSAs before movies.

And, because we believe that educating the movie industry is a crucial first step toward achieving the changes we seek in reducing youth exposure to smoking depictions and eliminating cigarette brand appearances, we are very pleased to report that the DGA has agreed to feature an article on this important subject in the June issue of its widely circulated magazine. We are hopeful that this message will be communicated most effectively by directors to directors and other movie makers and will guide their creative decisions.

With regard to the MPAA and its member studios, we will continue our educational efforts by seeking mutually agreeable ways to sensitize these individuals and organizations to the public health benefits of reducing youth exposure to smoking depictions and eliminating cigarette brand name appearances.

Most recently, on May 11, 2004, I presented the concerns and efforts of the state attorneys general at a hearing before the United States Senate Committee on Commerce, Science & Transportation which was convened to consider the impact of smoking in movies on children. At the hearing, at which Senator John Ensign presided, Mr. Valenti testified on behalf of the MPAA and Mr. LeVar Burton testified on behalf of the Social Responsibility Task Force of the Directors Guild of America. Dr. Madeline Dalton reviewed the method and compelling findings of the Dartmouth research. Dr. Stanton Glantz argued for the adoption by the movie industry of the four policy recommendations. I was very pleased that Senators Ensign, Ron Wyden and Bill Nelson agree that the movie industry should avail itself of its unique opportunity to eliminate cigarette brand appearances, reduce or eliminate smoking depictions in movies and run antismoking public service announcements in theaters. Moreover, Mr. Burton announced at the hearing that he and other colleagues would donate their time and talent to create antismoking public service announcements.

CONCLUSION

Reducing youth exposure to depictions of smoking and eliminating tobacco brand appearances in movies will require bold, voluntary action by the entire movie industry. The DGA’s pledge to feature this issue in their magazine and Mr. Burton’s willingness to create antismoking PSA’s to be run in theaters are very important and positive steps. I am hopeful that such leadership will prompt similar commitments of resources from the entire movie industry—studios, actors, writers and theater owners—to become part of the solution to the nation’s deadliest preventable problem of smoking.

⁴Pechmann, C., Shih, C-F. Smoking scenes in movies and antismoking advertisements before movies: effects on youth. *J. Marketing*. 1999; 63(3) 1-13.

Appendix 10B. Letter from 28 State Attorneys General to Jack Valenti and Response

STATE ATTORNEYS GENERAL

A Communication From the Chief Legal Officers of the following States and Jurisdictions:

Arkansas • California • Colorado • Connecticut • Hawaii • Illinois • Maine • Maryland •
Massachusetts • Minnesota • Mississippi • Northern Mariana Islands • New Hampshire •
New Jersey • New Mexico • New York • Ohio • Oklahoma • Oregon • Pennsylvania •
Tennessee • Utah • Vermont • Washington • West Virginia

August 26, 2003

Jack Valenti, President
Motion Picture Association of America
15503 Ventura Boulevard
Encino, California 91436

Dear Mr. Valenti:

We, the undersigned Attorneys General, write to ask you, with your longstanding prominence and influence in the American motion picture industry, to exercise your exemplary leadership to effect potentially far reaching benefits for public health. A Dartmouth Medical School study released last month confirms what other research has suggested: reducing the prevalence of cigarette smoking in motion pictures could significantly decrease the initiation of smoking in youth. With this new evidence of how effective reducing smoking in motion pictures would be in preventing youth smoking, the motion picture industry stands in a uniquely powerful position to bring about a profoundly beneficial impact on the health and well-being of millions of Americans.

Smoking is the leading cause of preventable death in each of our states and across the country, accounting for the death of over 400,000 Americans each year -- more people than alcohol, AIDS, car crashes, illegal drugs, murders, and suicides combined.

The good news is that smoking rates have declined -- attributable directly to the major efforts undertaken and sustained at the federal, state and local levels. State attorneys general sued the major tobacco manufacturers resulting in the 1998 historic settlement under which the tobacco companies agreed not only to pay the states \$206 billion dollars but also to make unprecedented changes in the way cigarettes are sold, advertised, and marketed -- especially when it comes to youth. The battle to decrease smoking, especially among our youth, has been waged by public health initiatives at every level of government, by the American Legacy Foundation, and by increases in cigarette excise taxes.

However, despite the declines in youth smoking rates across the country, our teens continue to smoke at an unacceptable rate. Given our knowledge that almost 90% of current adult smokers began smoking as teens, we are disheartened that 28.5% (over 4.5 million) of all high school students smoke, with an estimated 2,000 young people (under age 18) becoming new daily smokers every day. These numbers translate into a horrifying projection: more than 5 million children alive today will die prematurely from their smoking.

Mr. Jack Valenti
August 26, 2003
Page 2

Attorney General Bill Lockyer recently wrote to you asking for industry cooperation on World No Tobacco Day. The motion picture industry holds an enviably powerful position to build upon efforts to reduce youth smoking in this country in a way no one else can. In June, and the impetus for our letter to you now, a research team from the Dartmouth Medical School published the broadest research to date in the growing body of uncontroverted scientific evidence that exposure to smoking in motion pictures has a significant impact on youth initiation of smoking. The study, published in *The Lancet*, provides additional "strong evidence that viewing smoking in movies promotes smoking initiation among adolescents." With funding by the National Cancer Institute, Dr. Madeline Dalton and her research team found that the children, ages 10-14, who watched the highest amount of smoking in movies were almost three (2.71) times more likely to start smoking than those children who watched the least amount of smoking in movies.

While recognizing the need for further study, the researchers offered the following insight:

The effect of exposure to movie smoking is important, both because the effect on smoking initiation is moderately strong and because the exposure is almost universal. Based on the lists of 50 randomly selected movies, only five (0-2%) participants were unexposed to movie smoking. If the link between exposure to smoking in movies and smoking initiation proves to be causal, our data suggest that eliminating adolescents' exposure to movie smoking could reduce smoking initiation by half.

The motion picture industry, therefore, is uniquely situated to bring about sweeping change to prevent youth smoking. Simply by reducing the depiction of smoking in movies, the industry can protect our nation's youth from the known perils of smoking. Mr. Valenti, you have demonstrated your leadership and willingness in the past to join forces to protect our youth from violence in the media. We are hopeful you will use your best efforts again here to rally the motion picture industry to move from being a source of the problem to being recognized as a critically important force in solving the nation's deadly problem of youth smoking.

We look forward to hearing your ideas about how the motion picture industry will pursue this tremendous opportunity. Thank you in advance for your thoughtful consideration of this important matter.

Very truly yours,

[signed]

Attorney General J. Joseph Curran, Jr.
Attorney General of Maryland

09/02/2003 14:49 FAX 202 452 9823

MPAA-EXECUTIVE OFFICE

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MOTION PICTURE ASSOCIATION
OF AMERICA, INC.
1600 EYE STREET, NORTHWEST
WASHINGTON, D.C. 20006
(202) 298-1966
FAX: (202) 452-9822

JACK VALENTI
PRESIDENT
AND
CHIEF EXECUTIVE OFFICER

August 28, 2003

Dear General Curran

I am most respectful of the views of you and your colleagues on any subject, as well as the issue of smoking in movies.

There are conflicting emotions which connect to this issue. Even as I personally fret uneasily over smoking in movies – I am opposed to smoking in movies unless it is requisite to defining the “character” of the actor’s role – I am reminded there are in this free and loving land a good many legal products that have the capability of producing tragedy in the lives of far too many Americans – too much smoking for too long – the abuse of alcohol intake which agonizes too many families – the terrible sorrow that guns inflict on too many neighborhoods.

How to deal with those dark facts of real life in the art of visual story-telling? How do creative artists confront conflicting themes of the human condition as they try to construct a dramatic narrative? The question is not conspiratorial, not at all. As a passionate partisan of the First Amendment, as one who believes that those forty-five words comprise the one clause in our Constitution which guarantees all the others, I am awfully reluctant to offer counsel to creative filmmakers about how they shape their story, what to put in and what to leave out. I have on a good many occasions discussed films’ philosophic tracings and the responsibility of filmmakers with many directors, writers, producers, actors, and studio executives. But I must tell you that I only offer my opinion, never fiat. Dialogue with

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MPAA-EXECUTIVE OFFICE

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film makers and studio executives continues. These are open and free exchanges, fastening on all aspects of the creative process.

I believe that worthy public officials who have by solemn oath sworn to do their duty, must always do what they believe to be the right thing to do, even though a good many of their constituents might be in opposition. I also believe that film makers must do the same, that is, tell a story the way they choose to tell it, though others might be unsettled by what they see.

I am not acquainted with the details of the Dartmouth Medical Team study which was published in *The Lancet*. I know nothing about the study's methodology or the entrails of its findings. But I do not question whatever were the results. I have faith in the integrity of the Dartmouth Medical Team.

Would you find it suitable to designate someone with detailed knowledge of the study to give me guidance on it? I would be pleased to meet with whomever you select. Moreover, once I have had an opportunity to learn more about the study, I propose setting up a round-table discussion in Los Angeles with representatives of the creative guilds and production companies, and whomever from your group you would choose to attend. So, please tell me if both these suggestions strike a responsive chord within you. I'll wait to hear from you.

The Honorable J. Joseph Curran, Jr.
Attorney General
200 St. Paul Place
Baltimore, MD 21202-2212

Respectfully,
JCC

Appendix 10C. Letter from Lorillard to California Assistant Attorney General Dennis Eckhart Regarding Brand Appearance of Newport in the Movie *City by the Sea*



Ronald S. Milstein
Vice President,
General Counsel and Secretary

June 6, 2003

(336) 335-7718
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E-Mail: rrmilstein@loritobco.com

Mr. Dennis Eckhart
Senior Assistant Attorney General
State of California
Department of Justice
1300 I Street, Suite 125
Sacramento, California 94244-2550

Dear Dennis:

I have received your letter of May 29, 2003, responding to mine of April 29, 2003.

As you requested, Lorillard has sent a letter to Warner Brothers Studio concerning their use of Newport brand cigarettes in their movie *City By The Sea*. A copy is attached. I will forward their response to you.

Lorillard disagrees that in every circumstance "commercially reasonable steps" include the type of action we have agreed to take in this instance. I explained why this is in my letter to you. However, you are correct that our "respective positions are not very far apart," and we are most willing to address your request in this situation.

We await information about your efforts to reduce or eliminate smoking in motion pictures and other forms of media, and are ready to assist these efforts. In that regard, I wanted you to know that this spring, Lorillard launched a partnership with a company named Screenvision, which works with movie chains and individual movie houses to place advertisements on movie screens. Lorillard's acclaimed Youth Smoking Prevention Program ads, "Roommates" and "Piercing Parlor," will be seen throughout the summer on more than 5,000 movie screens throughout the country, with a projected 20 million teens viewing the ads. If you would like more information about this initiative, or would like to discuss this issue further, please don't hesitate to call.

Very truly yours,

Ronald S. Milstein

RSM/rh

Attachment

Corporate Office:
714 Green Valley Road
Greensboro, NC 27408

Mail to:
P.O. Box 10529
Greensboro, NC 27404-0529

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Tobacco Control Media Interventions

The success of tobacco control efforts over the last several decades is closely intertwined with use of the media, ranging from antismoking advertisements under the 1960s Fairness Doctrine to today's integrated media campaigns and Internet-based resources. This part examines how media interventions are used in tobacco control efforts and assesses their effectiveness.

After tracing the evolution of media efforts in tobacco control and the most successful advertising themes used in these interventions, the first chapter weighs the potential for new media approaches such as interactive health communications. The chapter closing this part examines the evidence that mass media antitobacco campaigns alone or in conjunction with other interventions can affect smoking behavior. The discussion recognizes the methodological challenges in measuring the effectiveness of media interventions, including the infeasibility of randomized studies or the presence of concurrent secular trends that complicate the evaluation of the evidence. Both chapters discuss key findings in the current evidence on the role of media in tobacco control that point to an overall positive impact in the reduction of smoking behavior.

An Overview of Media Interventions in Tobacco Control: Strategies and Themes

Media interventions for tobacco control have a history dating back to the 1960s. This chapter examines current and future trends in these types of interventions, including

- *The evolution of media efforts in tobacco control, from their roots under the Federal Communications Commission's Fairness Doctrine to initiatives involving tobacco prevention and cessation advertising campaigns funded by state authorities and the 1998 Master Settlement Agreement*
- *Examples of advertising themes used in public-health-sponsored tobacco control programs, as well as other efforts, such as commercial advertising for smoking cessation products and the tobacco industry's own youth smoking prevention campaigns*
- *A summary of research on factors that determine performance of antitobacco advertisements*
- *The potential impact of and future directions for new-media channels such as interactive health communications using the Internet*

Today, a solid evidence base exists for developing antitobacco advertising that can garner positive outcomes in terms of target audience appraisal, recall, and indicators of message processing. Numerous areas for future study exist, ranging from better understanding of effects on specific population groups to designing effective online interventions.

Introduction

This chapter examines how media interventions have been used in tobacco control, their trends over time, and factors that make them effective. It begins with an historical overview of mass media interventions aimed at discouraging tobacco use. Subsequent sections describe traditional antitobacco mass media interventions that have been or continue to be used, how their characteristics and intensity have varied, and the target audiences to whom they have been directed. Next, the relative effectiveness of different antitobacco televised advertising messages is summarized. The chapter then concludes with observations about the development and direction of traditional and new media interventions in tobacco control.

This chapter describes the environment for tobacco control media interventions, with media channels being used as a key tool for stakeholders on both sides of the tobacco issue. Chapter 12 describes studies of the effects of antitobacco advertising interventions as a whole on smoking behavior, and other chapters explore countervailing media efforts on the part of protobacco interests. Chapter 10 examines the influence of the entertainment media, including “new media,” such as the Internet and video games, on adolescent and adult smoking behavior. A later section of this chapter summarizes how new-media interventions could be applied to tobacco control to make effective cessation practices available to a broader audience at lower costs.

Historical Overview

Over the past 50 years, the representation of cigarettes on television and radio has changed radically. Fifty years ago, cigarettes were associated with glamour, good times, and fun. Their images were accompanied



Dancing cigarette advertisement from 1950s quiz show

by jaunty jingles extolling their quality, taste, and mildness. Tap-dancing Old Gold cigarette packs appeared at the opening of some of the most popular television shows.¹

This feel-good atmosphere was interrupted in September 1968 when William Talman, who played the prosecutor on the Perry Mason television series, appeared in a public service announcement looking thin and pale from the ravages of lung cancer. After opening pictures of the actor's children playing in the yard of their home in Encino, California, the camera focused on Talman. The actor explained that he had lost his first case when he was only 12 years old by starting to smoke cigarettes. He knew he now was going to die and would have only a little more time “with this family that I love so much.” He enjoined the audience, “Don't be a loser. Don't smoke.” Indeed, Talman had died the month before the spot aired.² In the years following this memorable appeal, numerous other celebrities went on the air to decry the health damage done by smoking. In 1985, Yul Brynner, best known as the Siamese king in *The King and I*, advised, “Don't smoke whatever you do!” in a spot aired shortly after he had died of lung cancer.

The use of the mass media in the United States to discourage tobacco use often is traced back to July 1, 1967. At that time, lawyer John Banzhaf III succeeded in having the Federal Communications Commission apply the Fairness Doctrine to cigarette advertising, requiring that broadcasters offer free air time for one antitobacco message for every three cigarette commercials they aired.³ This practice was followed until 1971, when cigarette advertising in the broadcast media was banned. Over that period, nearly \$200 million in commercial advertising time (in 1970 dollars) was donated for this purpose.⁴ That figure is equivalent to approximately \$341 million in 2006 dollars. Chapter 12 describes several empirical studies assessing the effect of these antitobacco advertisements, concluding that they essentially neutralized the effect of cigarette advertising during the period.

Since 1970, mass media have been used in a variety of formats to promote the goals of tobacco control. The National Clearinghouse for Smoking and Health (NCSH) produced public service announcements.⁵ (NCSH was the forerunner of the Office on Smoking and Health [OSH] of the Centers for Disease Control and Prevention [CDC].) Voluntary agencies such as the American Lung Association and the American Cancer Society (ACS) used television and media events to involve the public in community-based smoking cessation programs. The National Institutes of Health sponsored research on community intervention trials, which sometimes included a mass media component.⁶⁻⁸

In the United States, the first statewide antismoking mass media campaign was conducted in Minnesota in 1986 as a

result of state government funding of approximately \$2 million per year.^{9,10} The decision to invest in such a campaign followed presentations of the experience of a successful mass media intervention in Australia.¹¹⁻¹³ Advertisements designed to increase youth awareness of the negative social consequences of smoking and to change normative expectations for smoking among adolescents were broadcast on television and radio and displayed in newspapers and on billboards.

Developments Since 1990

Starting with California in 1990, 44 states have used mass media as part of comprehensive antitobacco programs to reduce tobacco use among their adult and youth citizens. Eighty percent of these efforts began after 1998 with funds received as part of the Master Settlement Agreement (MSA).^{*} However, in practice, since the MSA, few states have devoted the amount recommended by CDC to tobacco control efforts.^{14,15} Since 1992, with the development of pharmaceutical products to help smokers quit, extensive commercial advertising on television and in print media has promoted these products.

In 1998, two tobacco companies, Philip Morris and Lorillard, initiated their own mass media youth smoking prevention campaigns, with advertisements directed toward youth and parents.¹⁶ From early 2000, the American Legacy Foundation (Legacy)—the nonprofit foundation created as part of the MSA—mounted a national antitobacco campaign.

Wakefield and colleagues¹⁷ used archival records of television advertising exposures from Nielsen Media Research

^{*}The MSA was an agreement between 46 state attorneys general and U.S. tobacco companies in November 1998 to settle state lawsuits to recover billions of dollars in costs for treating smoking-related illnesses (<http://www.naag.org/tobacco.php>; see chapter 3).

for the largest 75 media markets in the United States to compare the levels of potential exposure of households and adolescents aged 12–17 years with a variety of types of antitobacco advertising. These marketing messages included advertisements produced by state tobacco control programs and the national Legacy program, tobacco-company-sponsored youth smoking prevention advertising targeted toward youth and parents, pharmaceutical company advertising for nicotine replacement therapy (NRT) and bupropion (a prescription smoking cessation aid), and other miscellaneous antitobacco advertising.

Table 11.1 shows that from 1999 to 2003, pharmaceutical companies were the largest individual sponsor of antitobacco advertising for households (10.37 advertisements per month) and provided significant potential exposure among adolescents (2.61 advertisements per month). Combined tobacco company youth/parent advertising potential exposures were close to those for combined state/Legacy campaigns—respectively, 4.56 versus 4.97 advertisements per month among households and 3.05 versus 3.38 advertisements per month among adolescents. This study demonstrates that both youth and adults in the United States may be exposed to public-health-sponsored antitobacco campaigns as frequently as tobacco-industry-produced campaigns (see chapters 6 and 12).

A more detailed investigation of potential exposure to state-sponsored antitobacco campaigns showed that in 37 states studied, average exposure for television households increased from 1.30 ads per month in 1999 to 3.63 ads per month in 2002. For adolescents aged 12–17 years, such exposure increased from 0.84 ads per month in 1999 to 1.43 ads per month in 2002. In 2003, although a few more states ran paid media campaigns, average population

exposure to antitobacco advertising campaigns declined to 3.20 ads per month among television households and 1.13 ads per month among adolescents aged 12–17 years, reflecting an overall reduction of campaign funding that states attributed to budget crises.^{18,19} Tables 11.2 and 11.3 show the average household exposure and adolescent exposure, respectively, to state-sponsored antitobacco advertising by state. After 2003, additional cuts in antitobacco funding may further reduce the number of states with antitobacco media campaigns.

Nontelevised Mass Media Antitobacco Interventions

Many different mass media channels have been used for tobacco control messages. Table 11.4 lists, by sponsor, mass media antitobacco campaigns conducted since 1990 by individual state health departments, state foundations established with funds from the MSA, and, in one case, a city (New York). This table was adapted from information provided by the CDC's Media Campaign Resource Center (MCRC). A service of OSH, the MCRC has licensed many of the advertisements that state health departments and other groups have produced. The MCRC facilitates access to those advertisements and provides technical assistance for states and nonprofit organizations wishing to implement tobacco control mass media campaigns. The MCRC maintains a searchable online database of available advertisements that may be used by health departments and health-related organizations that are developing tobacco countermarketing campaigns.²⁰ Data in table 11.4 on media channels, audiences targeted, and themes of advertisements are based on records of advertisements the MCRC received as well as advertisements ordered by various

Table 11.1 Mean Monthly Exposures per Year to Tobacco-Related Television Advertising for Television Households and Adolescents Aged 12–17 Years, Based on the Top 75 Designated Market Areas in the United States

Exposure Type	1999			2000			2001			2002			2003			1999–2003	
	M	SE	Range ^a	M	SE	Range	M	SE	Range	M	SE	Range	M	SE	Range	M	M
Household exposures, by sponsor																	
American Legacy Foundation	—	—	—	4.24	.10	0.0–15.1	1.83	.05	0.0–8.6	3.67	.09	0.5–14.5	2.83	.06	0.4–12.4	2.51	
State tobacco control programs	1.30	.10	0.0–27.8	1.14	.09	0.0–22.7	3.03	.18	0.0–38.2	3.63	.15	0.0–29.8	3.20	.17	0.0–46.4	2.46	
Tobacco parent	1.74	.09	0.0–10.6	1.69	.04	0.0–5.2	1.96	.05	0.0–7.6	3.34	.03	0.8–8.5	3.17	.01	0.3–15.3	2.38	
Tobacco youth	4.32	.06	0.6–11.7	3.70	.06	0.9–11.0	2.23	.03	0.5–5.6	0.31	.01	0.0–2.1	0.32	.01	0.0–1.4	2.18	
Tobacco corporate ^b	1.57	.10	0.0–18.8	9.03	.19	0.2–34.8	3.81	.06	0.2–10.9	0.00	0.00	0.00	1.83	.09	0.0–14.3	3.25	
Pharmaceutical	14.34	.29	1.4–51.8	9.70	.21	0.0–29.9	7.92	.13	1.5–19.8	7.83	.17	2.6–27.2	12.07	.23	1.3–34.6	10.37	
Other	0.10	.01	0.0–2.6	0.07	.02	0.0–8.8	0.03	.01	0.0–6.8	0.14	.01	0.0–1.6	0.06	.01	0.0–3.0	0.08	
Total public health-sponsored ^c	1.30			5.38			4.86			7.30			6.03			4.97	
Total tobacco youth + parent	6.06			5.39			4.19			3.65			3.49			4.56	
Total tobacco-sponsored ^d	7.63			14.42			8.00			3.65			5.32			7.81	
Teen exposures, by sponsor																	
American Legacy Foundation	—	—	—	4.20	.10	0.0–17.5	1.73	.05	0.0–7.3	3.05	.06	0.5–10.3	2.52	.05	0.3–8.3	2.30	
State	0.84	.07	0.0–16.1	0.65	.05	0.1–13.8	1.32	.07	0.0–14.7	1.44	.06	0.0–13.9	1.13	.06	0.0–18.3	1.08	
Tobacco parent	0.73	.04	0.0–4.5	0.66	.02	0.0–2.7	0.73	.02	0.0–6.5	1.26	.02	0.3–4.8	0.76	.02	0.1–2.9	0.83	
Tobacco youth	4.43	.07	0.5–12.5	3.69	.06	0.6–13.8	2.37	.04	0.6–8.7	0.32	.02	0.0–3.1	0.29	.01	0.0–1.3	2.22	
Tobacco corporate	0.45	.03	0.0–5.7	2.08	.04	0.1–7.0	0.87	.01	0.1–1.9	0.00	0.00	0.00	0.26	.01	0.0–2.4	0.73	
Pharmaceutical	3.88	.08	0.4–13.5	2.44	.05	0.0–8.3	2.17	.03	0.6–4.8	2.00	.04	0.7–7.2	2.58	.05	0.2–8.6	2.61	
Other	0.02	.00	0.0–1.0	0.04	.02	0.0–4.2	0.01	.00	0.0–2.8	0.04	.00	0.0–0.5	0.02	.00	0.0–0.4	0.03	
Total public health-sponsored	0.84			4.85			3.05			4.49			3.65			3.38	
Total tobacco youth + parent	5.16			4.35			3.10			1.58			1.05			3.05	
Total tobacco-sponsored	5.61			6.43			3.97			1.58			1.31			3.78	

Note. M = mean; SE = standard error. From Wakefield, M., G. Szczyplka, Y. Terry-McElrath, S. Emery, B. Flay, F. Chaloupka, and H. Saffer. 2005. Mixed messages on tobacco: Comparative exposure to public health, and tobacco company- and pharmaceutical company-sponsored tobacco-related television campaigns in the United States, 1999–2003. *Addiction* 100 (12): 1875–83.

^aRange of actual monthly means for 75 markets. ^bIncludes advertisements publicizing the company Web site (www.quitassist.com), which began in 2003. ^cIncludes all state and American Legacy Foundation advertising. ^dIncludes all tobacco company advertising.

11. Overview of Media Interventions in Tobacco Control

Table 11.2 States Ranked for Mean Monthly Exposures to State Antitobacco Television Advertising (Households, Gross Rating Points [GRPs])

Rank	1999		2000		2001		2002		2003	
	State	Mean	State	Mean	State	Mean	State	Mean	State	Mean
1	AZ	14.75	UT	6.67	UT	19.32	UT	15.22	UT	24.03
2	CA	5.87	AZ	6.38	NY	10.96	GA	7.66	WA	10.10
3	MA	5.81	MA	6.00	MN	8.45	NY	7.46	MN	7.67
4	FL	4.04	OR	4.38	WI	7.68	OR	7.10	IN	7.64
5	IN	3.20	CA	3.97	MA	7.33	OH	7.01	CA	6.25
6	OR	2.51	IN	2.57	WA	7.31	IN	6.83	OH	6.09
7	OK	1.67	FL	2.37	CA	5.95	CA	6.58	AZ	5.98
8	HI	1.28	MN	2.00	NM	5.82	WI	5.75	AR	5.52
9	UT	1.09	WA	1.60	AZ	5.60	WA	5.66	WI	4.99
10	MI	0.68	HI	1.50	GA	5.07	FL	5.37	NY	4.81
11	NM	0.42	NY	1.33	OR	4.40	MN	5.35	HI	4.46
12	NY	0.19	MI	0.83	IA	3.97	HI	5.22	NM	4.29
13	MO	0.15	KS	0.69	FL	3.96	NE	4.84	NE	3.68
14	WI	0.13	TX	0.51	NE	3.60	AZ	4.78	CO	3.15
15	GA	0.13	IA	0.41	HI	2.84	MD	4.69	OR	2.94
16	IA	0.10	WI	0.07	OK	2.75	PA	3.82	VA	2.88
17	WA	0.09	MO	0.02	IN	1.65	VA	3.28	WV	2.69
18	AR	0.09	NC	0.01	CT	1.00	AL	2.91	GA	2.67
19	IL	0.07	IL	0.01	AL	0.57	CO	2.52	OK	2.20
20	KS	0.07	NE	0.01	CO	0.51	MA	2.25	IA	2.18
21	NV	0.05	OH	0.01	TX	0.50	DC	1.96	PA	2.17
22	TN	0.05	TN	0.01	MI	0.45	IL	1.84	CT	2.15
23	CO	0.04	CT	0.01	MO	0.40	IA	1.41	DC	2.01
24	TX	0.04	OK	0.00	PA	0.32	WV	1.15	MA	1.87
25	NC	0.04	NV	0.00	MD	0.25	MI	1.00	FL	1.51
26	OH	0.04	VA	0.00	DC	0.14	OK	0.94	MI	1.31
27	VA	0.04	KY	0.00	OH	0.08	TX	0.61	AL	0.70
28	LA	0.03	NM	0.00	VA	0.04	NV	0.43	TX	0.53
29	CT	0.03	AR	0.00	SC	0.01	NM	0.40	NV	0.52
30	MN	0.03	GA	0.00	KY	0.01	MO	0.21	TN	0.22
31	KY	0.03	LA	0.00	WV	0.01	NC	0.09	IL	0.06
32	PA	0.02	CO	0.00	NC	0.00	KS	0.09	MO	0.06
33	MD	0.02	PA	0.00	TN	0.00	TN	0.01	KS	0.05
34	NE	0.02	SC	0.00	AR	0.00	KY	0.01	NC	0.04
35	SC	0.01	WV	0.00	IL	0.00	SC	0.00	KY	0.04
36	WV	0.01	DC	0.00	KS	0.00	AR	0.00	MD	0.01
37	DC	0.01	AL	0.00	LA	0.00	CT	0.00	LA	0.00
38	AL	0.00	MD	0.00	NV	0.00	LA	0.00	SC	0.00
Mean		1.30		1.14		3.03		3.63		3.20

Note. GRP ratings data reported for top 75 designated market areas (DMAs); states not covered in the top 75 DMAs are not included in rankings (AK, DE, ID, ME, MS, MT, NH, NJ, ND, RI, SD, VT, WY). For states with multiple DMAs, the mean for each market was averaged. From Szczyпка, G., M. Wakefield, S. Emery, B. Flay, F. Chaloupka, S. Slater, Y. Terry-McElrath, and H. Saffer. 2005. *Population exposure to state funded televised anti-tobacco advertising in the United States—37 States and the District of Columbia, 1999–2003*. ImpacTeen Research Paper series 31. Chicago: Univ. of Illinois at Chicago. http://www.impactteen.org/ab_rpn031_2005.htm. Reprinted with permission.

Table 11.3 States Ranked for Mean Monthly Exposures to State Antitobacco Television Advertising (Adolescents Aged 12–17 Years, Target Rating Points [TRPs])

Rank	1999		2000		2001		2002		2003	
	State	Mean	State	Mean	State	Mean	State	Mean	State	Mean
1	AZ	10.25	AZ	4.36	UT	8.73	UT	6.98	UT	10.01
2	FL	4.88	UT	3.48	MN	4.62	FL	3.72	WA	3.12
3	IN	2.70	FL	2.87	FL	4.19	OH	3.17	OH	2.99
4	MA	2.55	MA	2.11	AZ	3.76	MN	2.99	MN	2.70
5	CA	1.79	MN	1.91	NY	3.19	IN	2.79	IN	2.70
6	OR	1.00	IN	1.74	WA	3.16	VA	2.66	VA	2.31
7	HI	0.54	OR	1.20	WI	2.83	DC	2.44	DC	1.93
8	MI	0.51	CA	1.15	NE	2.19	GA	2.41	AR	1.67
9	OK	0.43	WA	1.09	IA	2.10	HI	2.37	AZ	1.42
10	UT	0.39	TX	0.55	MA	1.83	OR	2.12	WI	1.32
11	WI	0.13	NY	0.42	CA	1.57	NY	1.95	CA	1.32
12	NM	0.10	MI	0.38	HI	1.51	WI	1.94	NY	1.27
13	GA	0.07	HI	0.37	IN	1.33	NE	1.93	CO	1.11
14	MO	0.06	IA	0.29	NM	1.31	MD	1.66	FL	1.07
15	KS	0.06	KS	0.24	GA	1.31	WA	1.54	WV	1.00
16	NY	0.06	WI	0.03	OK	0.99	CA	1.51	IA	0.96
17	IL	0.05	MO	0.01	OR	0.81	IA	0.98	HI	0.91
18	NC	0.04	TN	0.01	TX	0.55	AZ	0.94	NE	0.81
19	VA	0.04	NE	0.01	MO	0.43	CO	0.81	GA	0.65
20	WA	0.04	IL	0.01	CT	0.37	AL	0.78	NM	0.60
21	OH	0.04	VA	0.01	CO	0.22	PA	0.71	OR	0.59
22	TN	0.03	OH	0.00	MD	0.21	IL	0.69	CT	0.58
23	TX	0.03	NV	0.00	AL	0.13	TX	0.58	OK	0.57
24	MD	0.03	NC	0.00	MI	0.11	MA	0.40	TX	0.49
25	CO	0.03	KY	0.00	PA	0.11	OK	0.38	PA	0.47
26	IA	0.03	OK	0.00	VA	0.04	WV	0.31	MA	0.30
27	PA	0.03	CT	0.00	OH	0.02	MI	0.24	MI	0.25
28	KY	0.03	AR	0.00	DC	0.01	MO	0.22	AL	0.09
29	AR	0.03	LA	0.00	SC	0.01	KS	0.08	TN	0.09
30	SC	0.03	CO	0.00	WV	0.00	NM	0.06	NV	0.07
31	MN	0.02	PA	0.00	KY	0.00	NV	0.04	IL	0.07
32	NV	0.02	WV	0.00	NC	0.00	NC	0.02	MO	0.04
33	CT	0.02	SC	0.00	AR	0.00	TN	0.00	KS	0.04
34	LA	0.02	NM	0.00	IL	0.00	AR	0.00	KY	0.01
35	NE	0.02	AL	0.00	KS	0.00	CT	0.00	NC	0.01
36	WV	0.01	DC	0.00	LA	0.00	KY	0.00	MD	0.00
37	DC	0.01	GA	0.00	NV	0.00	LA	0.00	LA	0.00
38	AL	0.00	MD	0.00	TN	0.00	SC	0.00	SC	0.00
Mean		0.84		0.65		1.32		1.43		1.13

Note. TRP ratings data reported for top 75 designated market areas (DMAs); states not covered in the top 75 DMAs are not included in rankings (AK, DE, ID, ME, MS, MT, NH, NJ, ND, RI, SD, VT, WY). For states with multiple DMAs, the mean for each market was averaged. From Szczypka, G., M. Wakefield, S. Emery, B. Flay, F. Chaloupka, S. Slater, Y. Terry-McElrath, and H. Saffer. 2005. *Population exposure to state funded televised anti-tobacco advertising in the United States—37 States and the District of Columbia, 1999–2003*. ImpacTeen Research Paper series 31. Chicago: Univ. of Illinois at Chicago. http://www.impactteen.org/ab_rpno31_2005.htm. Reprinted with permission.

11. Overview of Media Interventions in Tobacco Control

Table 11.4 Mass Media Antitobacco Campaigns in the United States, 1990–2004

Organization	Campaign history				Media types				Audience				Themes				Ad sources		
	State	Start of campaign	End of campaign	Years of campaign (as of 2004)	TV	Radio	Print	Bill-board	State	Adults only	Youth only	Adults and youth	Other	Youth prevention	Cessation	Secondhand smoke	Smokless tobacco	Produce their own ads?	Use other states' ads?
California Department of Health Services	CA	1990	—	14	✓	✓	✓	✓	CA	•	•	✓	GLBT Asian Americans Pregnant women Hispanics African Americans	•	✓	✓	✓	✓	•
Massachusetts Department of Public Health	MA	1993	2002	9	✓	✓	✓	✓	MA	•	•	✓	No	✓	•	•	✓	✓	•
Arizona Department of Health Services	AZ	1996	—	8	✓	✓	✓	✓	AZ	•	•	✓	Hispanics Pregnant women	✓	✓	✓	✓	✓	✓
Kansas Health Foundation	KS	1997	2000	3	✓	✓	✓	✓	KS	✓	•	•	No	•	✓	•	✓	✓	•
Florida Department of Health	FL	1998	—	6	✓	✓	✓	✓	FL	•	✓	•	No	✓	•	•	✓	✓	•
Partnership for a Healthy Mississippi (MSDH is part)	MS	1998	—	6	✓	✓	✓	✓	MS	•	•	✓	No	✓	✓	•	✓	✓	✓
Utah Department of Health	UT	1998	—	6	✓	✓	✓	✓	UT	•	•	✓	No	✓	✓	•	✓	✓	✓
Minnesota Department of Health	MN	1999	2003	4	✓	✓	✓	✓	MN	•	✓	•	No	✓	•	•	✓	✓	•
Minnesota Partnership for Action Against Tobacco	MN	1999	—	5	✓	✓	✓	✓	MN	✓	•	•	No	✓	✓	•	✓	✓	•
Oregon Department of Human Services	OR	1999	—	5	✓	✓	✓	✓	OR	•	•	✓	No	✓	✓	•	✓	✓	✓
Colorado Department of Public Health and Environment	CO	2000	—	4	✓	✓	✓	✓	CO	•	•	✓	Hispanics	✓	✓	•	✓	✓	✓
Georgia Department of Human Resources	GA	2000	—	4	✓	✓	✓	✓	GA	✓	•	•	No	✓	✓	•	•	✓	✓
Iowa Department of Public Health	IA	2000	—	4	✓	✓	✓	✓	IA	•	•	✓	No	✓	•	•	✓	✓	✓
Illinois Department of Public Health	IL	2000	—	4	✓	✓	✓	✓	IL	•	✓	•	No	✓	•	•	✓	✓	•
Partnership for a Tobacco Free Maine (MBH is part)	ME	2000	—	4	✓	✓	✓	✓	ME	•	•	✓	Pregnant women	✓	✓	•	✓	✓	•
Michigan Department of Community Health	MI	2000	—	4	✓	✓	✓	✓	MI	•	•	✓	No	✓	✓	•	•	✓	✓

Organization	Campaign history				Media types				Audience				Themes			Ad sources			
	State	Start of campaign	End of campaign	Years of campaign (as of 2004)	TV	Radio	Print	Bill-board	State	Adults only	Youth only	Adults and youth	Other	Youth prevention	Cessation	Secondhand smoke	Smokeless tobacco	Produce their own ads?	Use other states' ads?
Montana Tobacco Use Prevention Program (MDPHHS works with)	MT	2000	—	4	✓	✓	✓	✓	MT	•	•	✓	Native Americans	✓	✓	•	✓	✓	✓
Nebraska Health and Human Services	NE	2000	—	4	✓	✓	✓	✓	NE	•	•	✓	No	✓	✓	✓	✓	✓	✓
Texas Department of Health	TX	2000	—	4	✓	✓	✓	✓	TX	•	•	✓	Hispanics	✓	✓	•	✓	✓	✓
Vermont Department of Health	VT	2000	—	4	✓	✓	✓	✓	VT	•	•	✓	No	✓	✓	•	✓	✓	✓
American Lung Association of Alaska	AK	2001	—	3	✓	✓	✓	✓	AK	•	•	✓	Pregnant women Native Americans	✓	✓	•	✓	✓	✓
Alabama Department of Public Health	AL	2001	2001	0	✓	•	•	•	AL	✓	•	•	No	•	✓	•	•	•	✓
Delaware Division of Public Health	DE	2001	—	3	✓	✓	✓	✓	DE	✓	•	•	No	•	✓	•	✓	✓	✓
Hawaii Department of Health	HI	2001	—	3	✓	✓	✓	✓	HI	•	•	✓	Asian Americans African Americans	✓	✓	•	✓	•	•
Idaho Department of Health and Welfare	ID	2001	—	3	✓	✓	✓	✓	ID	•	•	✓	No	•	✓	•	✓	✓	✓
Indiana Tobacco Prevention and Cessation Agency	IN	2001	—	3	✓	✓	✓	✓	IN	•	✓	•	No	✓	•	•	✓	✓	✓
Kansas Department of Health and Environment	KS	2001	—	3	✓	✓	✓	✓	KS	•	•	✓	No	✓	✓	•	•	•	✓
New Jersey Department of Health and Senior Services	NJ	2001	—	3	✓	✓	✓	✓	NJ	✓	•	•	No	•	✓	•	✓	•	•
New Mexico Department of Health	NM	2001	—	3	✓	✓	✓	✓	NM	•	•	✓	Native Americans	✓	✓	•	✓	✓	✓
New York City Department of Health and Mental Hygiene	NY	2001	—	3	✓	•	✓	✓	NY	✓	•	•	Hispanics African Americans	•	✓	•	✓	✓	✓
New York State Department of Health	NY	2001	—	3	✓	✓	✓	✓	NY	•	•	✓	No	✓	✓	•	✓	✓	✓
Ohio Department of Health	OH	2001	—	3	✓	✓	✓	✓	OH	•	•	✓	No	✓	✓	•	•	•	✓
Rhode Island Department of Health	RI	2001	—	3	✓	✓	✓	✓	RI	✓	•	•	No	•	✓	•	✓	✓	✓
Washington State Department of Health	WA	2001	—	3	✓	✓	✓	✓	WA	•	•	✓	No	✓	✓	•	✓	✓	✓
Arkansas Department of Health	AR	2002	2002	0	✓	✓	•	•	AR	✓	•	•	African Americans	•	✓	•	•	•	✓

— = ongoing through 2004; • = no; ✓ = yes

11. Overview of Media Interventions in Tobacco Control

Table 11.4 Mass Media Antitobacco Campaigns in the United States, 1990–2004 (continued)

Organization	Campaign history			Media types					Audience				Themes			Ad sources			
	State	Start of campaign	End of campaign	Years of campaign (as of 2004)	TV	Radio	Print	Bill-board	State	Adults only	Youth only	Adults and youth	Other	Youth prevention	Cessation	Secondhand smoke	Smokeless tobacco	Produce their own ads?	Use other states' ads?
Connecticut Department of Public Health	CT	2002	—	2	✓	•	•	•	CT	•	•	✓	No	✓	✓	•	•	•	✓
Maryland Department of Health and Mental Hygiene	MD	2002	—	2	✓	✓	✓	✓	MD	•	•	✓	No	✓	•	•	•	✓	•
New Hampshire Department of Health and Human Services	NH	2002	2003	1	✓	✓	•	•	NH	✓	•	•	No	•	✓	•	•	✓	✓
Ohio Tobacco Use Prevention and Control Foundation	OH	2002	—	2	✓	✓	✓	✓	OH	•	•	✓	No	✓	✓	•	•	✓	✓
Oklahoma State Department of Health	OK	2002	—	2	✓	✓	✓	✓	OK	•	•	✓	No	✓	✓	•	•	✓	✓
South Dakota Department of Health	SD	2002	—	2	✓	✓	✓	✓	SD	•	•	✓	No	✓	✓	✓	•	•	✓
Virginia Tobacco Settlement Foundation	VA	2002	—	2	✓	✓	✓	✓	VA	•	✓	•	Pregnant women	✓	✓	•	•	✓	•
West Virginia Department of Health and Human Services	WV	2002	—	2	✓	✓	✓	✓	WV	•	✓	•	No	✓	•	✓	•	✓	•
Louisiana Department of Health and Hospitals	LA	2003	—	1	•	✓	✓	•	LA	✓	•	•	No	•	✓	•	•	✓	✓
Pennsylvania Department of Health	PA	2003	—	1	✓	✓	✓	✓	PA	•	•	✓	No	✓	✓	•	•	✓	✓
Wisconsin Department of Health and Family Services	WI	2003	—	1	✓	✓	✓	✓	WI	•	✓	•	No	✓	•	•	•	✓	•
Wyoming Department of Health	WY	2003	—	1	✓	✓	•	•	WY	✓	•	•	No	•	✓	•	•	•	✓
Total (out of 47 campaigns)					46	44	42	41		13	7	27		33	37	36	5	38	33
Percentage					98	94	89	87		28	15	57		70	79	77	11	81	70

Note. — = ongoing through 2004; • = no; ✓ = yes. Not all themes of advertisements are listed here. Information compiled by the Centers for Disease Control and Prevention/Office on Smoking and Health's Media Campaign Resource Center, June 10, 2004. To date, the following states did not have campaigns in the years between 1990 and 2004: KY, MO, NC, ND, NV, SC, TN, and DC. GLBT = gay, lesbian, bisexual, transgendered; MSDH = Mississippi State Department of Health; MBH = Maine Bureau of Health; MDPHHS = Montana Department of Public Health and Human Services.

programs. Information about campaign start and end dates was collected from program Web sites and, in some cases, telephone interviews with state health department staff. Other audience targets and themes may have been addressed using materials not shared with the MCRC.

Table 11.4 shows that 98% of 47 campaigns tracked by CDC's MCRC used television advertisements, 94% used radio, 89% used print (including paid newspaper advertisements and transit advertisements), and 87% used billboards. The choice of channel has an important impact on cost as well as on the campaign's reach (i.e., the proportion of the population exposed to the message), the specificity of the audience reached, and the extent of involvement with the message that will result from exposure.²¹

Population surveys of youth in California²² and youth and adults in Massachusetts^{23,24} compared the proportion of the population who recalled antitobacco advertisements on television, radio, and billboards. Mass media campaigns in California and Massachusetts had used these three channels. These studies demonstrate that antitobacco advertisements on television were recalled by about twice as many respondents as those on the radio. Youth in both states were more likely to recall antitobacco advertisements on billboards compared with those on the radio.

Among adults, Nelson and colleagues²⁵ demonstrated, using a national adult population survey of media usage in 2002–03, that smokers tend to be heavier users of television and radio than nonsmokers but are less likely to be magazine or newspaper readers. In this study, nearly one-third of smokers were regular daytime or late-night television viewers. Television is the medium for achieving the greatest exposure among smokers or potential smokers (youth).

Although the cost per thousand people reached (in terms of size of intended target audience that could be exposed) via television generally is lower than that in other media, its cost, in absolute terms, is the highest.²⁶ When sufficient funds are not available for television advertisements, other channels can be used.

Most of the literature on antitobacco media campaigns has focused on television advertisements. Therefore, much of the following discussion addresses this particular channel. Despite the relatively good population reach to smokers offered by radio²⁵ and the low cost of producing and airing radio ads, there has been little published research on the impact of advertising using this medium. However, tobacco control efforts have used other forms of media to involve individuals in tobacco control activities in their communities, through short-term cessation events, media-based cessation contests, and media advocacy.

Media-Based, Short-Term Cessation Events

Around the globe, several major media events of varying duration promote tobacco control and prevention. These events encourage tobacco users, especially those who already are interested in quitting, to discontinue or decrease their use for a short time. The events' objectives are to (1) increase smokers' confidence about their ability to quit their tobacco use permanently after a short-term success, (2) heighten awareness about the dangers of tobacco use among all audiences, and (3) promote policies that encourage a tobacco-free lifestyle.

One of the longest-running media events of this type is ACS's Great American Smokeout, held annually on the third Thursday in November. The inspiration came from a

1971 event that Arthur P. Mullaney had organized in Randolph, Massachusetts. Mullaney asked people to give up smoking for one day and donate the money they would have spent on tobacco to a high school scholarship fund. After statewide smokeout days proved successful in Minnesota (1974) and California (1976), the event became national in 1977.²⁷

The smokeout initiative continued to expand over the years. In 1996, ACS increased its visibility considerably by including paid advertisements on television and in magazines and newspapers. Population survey results show that the number of respondents participating in the event (trying either to quit or to reduce smoking) increased from 18% the previous year to 26%. Also, sales of over-the-counter nicotine medications increased 11% between a four-week baseline period and the four-week promotion period surrounding the event.²⁸

Over the years, the smokeout initiative has focused on a variety of issues and audiences—for example, teenagers, blue-collar populations, and minorities^{29,30} Local organizers—who also coordinate media coverage and distribute smokeout kits throughout their communities—often create specific themes. Participation remains reasonably high, with an estimated 19% of the nation's smokers taking part in the 2002 smokeout and 6% of those smokers still refraining from smoking 1 to 5 days after the event.³¹

The United Kingdom has reported success with a similar event called No Smoking Day, held by a charity of the same name based in London. The event began in 1984 and is held annually in March.³² Organizers redesign the campaign and its slogans each year. However, the objective remains constant: help smokers who already have decided to quit to reach their goal. The group reports that almost 1.5 million

smokers have participated in the event each year and the campaign has helped 1.4 million smokers to quit smoking completely.³³

A third daylong antitobacco event is World No Tobacco Day, held each year on May 31. The World Health Organization (WHO) sponsors the event and invites all countries to recruit smokers who will give up tobacco for the day. Local organizers often develop activities that focus on promoting support of tobacco cessation services and specific themes chosen each year,³⁴ such as “Second-Hand Smoke Kills—Let’s Clear the Air” in 2001, “Tobacco Free Sports—Play it Clean” in 2002, and “Tobacco Free Film, Tobacco Free Fashion” in 2003.^{35–37} The campaign appears to have been relatively successful in recruiting smokers to participate. In 1999, the Coalition for World No Tobacco Day reported, “30 percent of tobacco users who were aware of World No Tobacco Day tried to reduce their habit, including 9 percent who tried to quit smoking.”^{38(p.15)}

Media-Based Cessation Contests

Stop-smoking days offer tobacco users a supportive atmosphere in which they are surrounded by others with the shared goal of quitting tobacco use. Stop-smoking contests offer a similar support structure along with additional incentives, such as cash prizes or free travel packages. These “quit and win” contests typically span several weeks. They were pioneered in the United States in the 1980s and later were incorporated into broader cardiovascular health programs, such as the Minnesota Heart Health Program and the North Karelia Project in Finland.^{39,40}

North Karelia's first contest was held in 1985. It blossomed into a national contest in 1986, and Estonia joined in for a second

national contest in 1989.⁴⁰ WHO coordinated the first International Quit and Win Campaign in 1994 within its Countrywide Integrated Noncommunicable Disease Intervention framework. The event has since been held nearly every other year. A total of 63,000 smokers from 13 countries participated in 1994.⁴¹ The number of participants has continued to rise, reaching 700,000 in 2002. Organizers expected up to 1 million tobacco users from 100 countries to participate in the 2004 contest.⁴²

Any adults who have used tobacco products for at least one year are eligible to take part in the International Quit and Win Campaign. Participants attempt to quit smoking (and/or quit using other forms of tobacco) for four weeks (May 2 to May 29) leading up to World No Tobacco Day. Some of the contests also have included supporters' contests, in which nonusers continue to abstain from tobacco use and work to promote the cause and spread information.⁴⁰ National and local organizers are responsible for implementing the contest and its activities and for seeking media coverage.⁴² Winners are drawn after one month has passed, and two witnesses and laboratory tests verify their abstinence.⁴¹ Chapter 12 in this monograph discusses attempts to evaluate the effectiveness of these events.

Media Activism

Media activism includes strategies that directly oppose tobacco industry messages and advertisements, often through humor and parody. Many of these activities can be considered a form of media literacy, which is discussed in chapter 10.

In 1977, Alan Blum founded Doctors Ought to Care (DOC). This group was a pioneer in developing counteradvertisements that parody tobacco industry advertising and its products, images, brand names, and corporate messages.⁴³⁻⁴⁵

Another form of media activism is demonstrating against a live event sponsored by tobacco companies or tobacco products. Well-known examples include the many demonstrations sponsored by DOC and other groups at Virginia Slims tennis tournaments and other cigarette-sponsored events.⁴⁶⁻⁴⁸ A particularly noteworthy example was the use of the "Statue of Nicotina" by the Washington State chapter of DOC to oppose the Philip Morris "Bill of Rights" tour throughout the fall of 1989.⁴⁹ These activities have often earned free media coverage through news stories (chapter 9 in this monograph discusses "earned media").

Groups such as DOC have demonstrated the use of nontraditional media in their campaigns. For example, in the late 1970s, DOC purchased \$3,000 worth of bus-bench advertisements in Miami, Florida (less than \$25 per month per bench). The benches often were located alongside billboards promoting cigarettes. One bus-bench advertisement welcomed passersby to the taste of "country fresh arsenic." Others featured slogans such as "full bodied cyanide" and "ten year supply only \$7,000." In a 1988 regatta off the coast of Corpus Christi, Texas, DOC sponsored a sailboat "flying the largest no smoking symbol known to exist."⁵⁰

Children and adolescents, often as part of school competitions, also can create



DOC-sponsored bus bench advertisement for Country-Fresh Arsenic

Media Activism: Taking Aim at Tobacco Advertising

Artist Bonny Vierthaler at the BADvertising Institute^a has produced more than 70 advertisements by, according to her Web site, “doctoring-up tobacco ads to make them honest.” The Web site continues, “By juxtaposing silly, gross and disgusting images on top of deceitful ads, we jolt people into realizing how tobacco ads are concealing the truth about smoking.” For example, her version of an advertisement for a “new crush-proof box” for Merit cigarettes features a large wooden casket.^b

Some advocacy groups and individual activists have taken this form of advertising further by using civil disobedience. The Australian group Billboard Utilising Graffitiists Against Unhealthy Promotions (BUGA UP) spray-painted graffiti on tobacco billboards, often attempting to change advertising slogans to antitobacco messages. Thus, “Marlboro” became “it’s a bore,” and “Gold [cigarettes] is the perfect mixer” became “Cancer is the perfect fixer.” Similar graffiti activities followed in the United Kingdom, the United States, and Canada.^c

^aBADvertising Web site. <http://www.badvertising.org>.

^b*American Medical News*. 1986. Spoofing the “Joy of Smoking.” December 5, pp 1, 29.

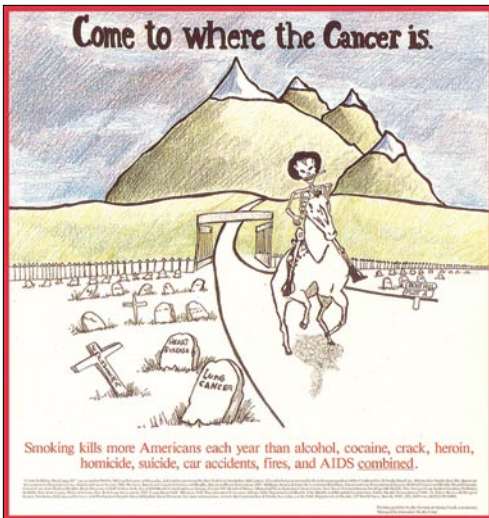
^cChapman, S. 1996. Civil disobedience and tobacco control: The case of BUGA UP. *Tobacco Control* 5(3): 179–85. <http://tc.bmjournals.com/cgi/reprint/5/3/179.pdf>.

antitobacco advertisements.^{51,52} An early example is the winning entry in a DOC competition among schoolchildren in Iowa that was published in the *Medical Journal of Australia* in 1983.⁵³ Booklets containing artwork from these types of competitions have been published by Smokefree Educational Services in 1991,⁵⁴ the Washington State chapter of DOC in 1995,⁵⁵ and the Wayne County (Michigan) Medical Society Foundation in 2003.⁵⁶ The American Academy of Family Physicians Tar Wars program⁵⁷ combines a national antitobacco advertising poster contest with a school educational program targeting students in grades 4 and 5.⁵⁸

Occasionally, media outlets have donated free space for counteradvertisements, particularly those developed by youth. Viacom Outdoor donated space on 60 small billboards (30-sheet panels) for the display of award-winning artwork from the Wayne County Medical Society Foundation’s counteradvertising contest held in 2002 among several schools in the Detroit, Michigan, area.⁵²

Smokefree Educational Services sponsored “ad-spoof” contests and attempted to purchase space on New York City’s subway trains for its award-winning artwork. A 12-year-old girl designed the winning poster in the 1989 contest. The poster showed a skeletal cowboy riding through a graveyard beneath the heading, “Come to where the Cancer is,” as a parody of a well-known Marlboro advertisement (“Come to Where the Flavor Is”). Gannett Transit initially rejected the advertisement on the grounds that the line drawing style used in the “Come to where the Cancer is” poster was “graffiti prone.” After the New York City commissioner of consumer affairs urged the Metropolitan Transportation Authority to reverse Gannett’s decision, Gannett agreed to run the advertisement on all 6,000 subway cars during November of 1990.^{59–61}

In April 1990, R.J. Reynolds test-marketed the Dakota cigarette brand, aimed at young blue-collar women.⁴⁹ An advertisement for Dakota appeared in newspapers in Houston (one of the test-market sites), asking readers to choose between Dakota and



Smokefree Educational Services contest-winning poster displayed on New York City subway cars

Philip Morris's Marlboro cigarettes. DOC produced a parody offering a choice between Dakota tumors and "Barfboro" radiation treatments, underlined by the slogan, "Dakota, DaCough, DaCancer, DaCoffin." Major daily newspapers in Houston rejected the DOC counteradvertisement. However, an alternative newspaper accepted it and lost its R.J. Reynolds advertising as a result.⁶²

The Smoke Free Movies⁶³ project at the University of California at San Francisco has placed more than 20 advertisements in the *New York Times* and *Variety* (a movie industry trade publication), attacking smoking in the movies. The sixth and seventh advertisements in the series criticized the movie *In the Bedroom* and its lead actress, Sissy Spacek, for "gratuitously promoting Marlboro brand cigarettes on screen and in dialogue." The *New York Times* published the paid advertisements in January and February of 2002, but *Variety* and the *Hollywood Reporter* rejected them,^{64,65} possibly related to nominations of *In the Bedroom* for five Academy Awards (including Best Picture) and the upcoming 74th Annual Academy Awards ceremony, scheduled for March 24, 2002.

One study assessed the comparative effect on smoking-related attitudes of a workshop for junior high school students involving discussion and analysis of cigarette and antitobacco ads and a production workshop in which students discussed, analyzed, and then created their own antitobacco advertisements. Results showed overall support for the production workshop in eliciting more attention and positive perceptions of antitobacco messages as well as a reduction in positive attitudes about smoking, compared with the analysis workshop.⁶⁶ Aside from this study, there have been no empirical studies on the impact of this kind of media activism and related informal advertising on individual attitudes and behavior, tobacco industry activity, and media coverage. Chapter 12 provides more details about the impact of this style of advertising, as used in formal televised antitobacco advertising for some state tobacco control programs and Legacy.

Televised Antitobacco Advertisements

Broadcast antitobacco campaigns have been a central component of many government- and foundation-sponsored tobacco control efforts. Mass media have the power to educate and inform the public and influence policymakers,^{49,67,68} and the CDC recommends that states and communities spend between \$1 and \$3 per capita on antitobacco advertising campaigns that include paid television advertising.¹⁴ Although the intensity of televised campaigns has varied, most major tobacco control programs have included them.

Public-Health-Sponsored Campaigns

Campaigns sponsored by public health agencies have varied in their target

audiences as well as their predominant themes and messages. This section provides examples that highlight these variations.

California—Changing Social Norms about Smoking

The California Tobacco Control Program, funded in 1989 by Proposition 99, was the first ongoing, comprehensive statewide tobacco control program in the United States. In California, the allocation of funding to antismoking advertising was approximately 59¢ per capita (for the population age 18 years or older), or 17% of total program expenditure, in the period 1989 to 1992–93.⁶⁹ The allocation was 41¢ per capita, or 20% of program expenditure, in the period 1993–94 to 1995–96.

The California Tobacco Control Program's overarching goal is to change social norms about tobacco use so that smoking no longer is viewed as a normal, acceptable practice.⁷⁰ Rather than focusing on changing individual smokers, the mass media campaign is designed to engage the entire population, smokers and nonsmokers alike, and to change the environment. Messages focusing on secondhand smoke accounted for 44% of media spending in 1997–98, anti-industry messages accounted for 34%, and cessation/prevention messages accounted for 20%.⁷¹

Reducing youth smoking initiation is another program goal. The designers believe the most effective way to achieve this goal is by targeting the older generation's norms to change the social environment. The California media campaign is seen as an essential component of the statewide tobacco control program, lending support to local tobacco control interventions. The media campaign is designed to frame the issues and attract and sustain public attention.

Australia—Showing the Physical Damage of Smoking

In Australia, a national antismoking media campaign targeted toward adults aged 18–39 years used fear-based messages graphically depicting the potential short-term consequences of smoking. The campaign, which began in 1997, presented these negative outcomes as certain, as opposed to probable, consequences of smoking.^{72,73} With the tag line, “Every cigarette is doing you damage,” the campaign was specifically designed to increase a smoker's sense of urgency about giving up cigarettes. It tried to connect the mundane rituals of lighting a cigarette and inhaling the smoke to images of damage to the smoker's internal organs.

Six of the seven advertisements produced since 1997 graphically portray health damage to evoke a strong visceral response of disgust in the viewer. For example, the advertisement *Stroke* depicts a smoker's brain being cut in half to reveal blood oozing from a clot, and *Eye* shows a smoker's retina with bursting blood vessels leading to blindness.⁷⁴ In the first three years of the campaign, four of these types of advertisements were created, portraying the incremental development of emphysema, atherosclerosis, genetic damage leading to cancer, and stroke. Two advertisements depicting smoking as causing incremental damage leading to blindness in one case and chronic lung disease in another were added in the fourth year of the campaign. One of the advertisements used a different approach. *Call* showed a smoker picking up a telephone, calling a quitline, and a counselor responding to the call. Evaluation studies from this campaign are discussed in chapter 12.

Kansas—Making Smokers into “Heroes”

Between 1997 and 2000, the Kansas Health Foundation sponsored a media

campaign titled, “Take it Outside.” It featured television, radio, and print advertisements that focused on the harm to children from exposure to secondhand smoke. The program designers’ formative research suggested smokers’ homes and cars were their last refuges for smoking and challenging their right to smoke in those places would be met with hostility. The research also convinced program designers that smokers rejected the “more hard-line ‘scare’ tactics of existing media campaigns.”^{75(p.36)} Their approach was to depict people who smoked outside and away from children as “heroes.”⁷⁵ The stark black-and-white advertisements were intended to evoke a sense of family obligation for smokers to protect their children.²⁰ In one, an older adolescent with his baby brother on his lap speaks to the camera while telling his parents that as a child he was unable to avoid their secondhand smoke and that while he now can leave to escape it, his baby brother cannot. He asks them, “Please, if you have to smoke, take it outside.”

Florida and the American Legacy Foundation—Questioning Tobacco Industry Positions

A settlement between the state of Florida and tobacco companies provided funding for the Florida Tobacco Pilot Program.⁷⁶ Targeting youth aged 12–17 years, the program used an anti-industry approach in attempting to reduce tobacco use. This campaign’s strategy was to market a youth brand called “Truth” as the counterpoint to the “lies” marketed by tobacco companies. The campaign designers rejected the heavy “life or death” tone of other antitobacco campaigns. They claimed that social marketing approaches used in other states were having little impact, and the campaign needed to provide a brand that would give youth a way to identify themselves.⁷⁷

Campaign designers’ research with youth led them to believe that the deadly nature of cigarettes made them appealing to youth as a tool of rebellion. The designers decided that the best way to counter that appeal was to make the tobacco industry’s duplicity and manipulation a target for adolescent rebellion. Television advertisements created for this campaign portray industry executives as unconcerned in response to information about the negative health effects of cigarettes. Other advertisements use youth actors to convey the notion that cigarettes are addictive. Evaluation findings from the Florida campaign are discussed in chapter 12.

Legacy’s “truth” campaign was modeled after the Florida campaign. Launched in 2000 with more than \$100 million per year for media, the Legacy “truth” campaign was a national landmark event in the history of tobacco counteradvertising.⁷⁸ It focused specifically on youth aged 12–17 years who were susceptible to smoking.⁷⁹ Legacy has run a variety of advertising themes, most focusing on the tobacco industry’s misleading and cynical practices.

The “Body Bags” series began with an advertisement showing young people jumping out of a truck and piling body bags on the sidewalk outside of what was labeled a “major tobacco company.” Using a megaphone to reach the workers in the building, a youth says, “This is what 1,200 dead people looks like.” Another series (“1 out of 3”) used fantasized scenes such as an exploding soda can to convey the message that tobacco is the only product that results in the premature death of one out of three people who use it. Shifting to a testimonial approach, a later series (“Follow the Dots”) featured young people speaking in emotional segments about loved ones they have lost purportedly because of smoking. Evaluation studies from the Legacy media campaign are presented in chapter 12.

Virginia—Making Smoking Look “Stupid”

In 2002, Virginia launched a youth-focused campaign designed to empower the youth of the state to “choose not to use tobacco products.” The campaign included television, radio, and print advertisements as well as a Web site.⁸⁰ The campaign used a core tag line, “Can anybody tell us why smoking isn’t stupid?” Many of the advertisements featured the humorous character “Buttman,” described as “America’s most pathetic superhero.”⁸¹ The character was shown to be incompetent in social situations because of his smoking. Another series showed young actors engaged in gross or dangerous behavior, such as licking garbage cans or climbing a pole in a thunderstorm, the stupidity of which was equated with smoking.

Advertisements for Commercial Products

Advertisements for NRT products and other pharmaceutical aids to tobacco use cessation have been a feature on television since 1992.⁸² The intensity of this marketing increased exponentially, from \$13 million to \$220 million in 1996, when the U.S. Food and Drug Administration (FDA) approved nicotine replacement products for over-the-counter sale.⁸³ The following year, the FDA relaxed rules governing direct-to-consumer advertising of prescription drugs, prompting a major increase in television advertising for bupropion. These advertisements tended to describe the benefits of one medication in contrast to another and suggested that the product can be a great help in achieving cessation. Unlike most government-sponsored advertisements, these advertisements have so far narrowly targeted smokers who are ready to take action to quit smoking. Analyses have shown that advertising for NRT patches increases sales of those products, but advertising for nicotine gum does not.⁸⁴

Pharmaceutical advertisements on television may be designed to encourage uptake of pharmaceutical smoking cessation products among adult smokers who are ready to quit. However, televised advertisements can reach all television viewers (table 11.1), including nonsmokers and smokers not ready to quit. Bolton and colleagues⁸⁵ demonstrated experimentally that compared with participants exposed to information on techniques of unaided quitting, participants exposed to information about the features and benefits of NRT indicated that they considered smoking significantly less risky and reported lower intentions to quit. They concluded that among adult smokers who are not ready to quit, implying that these products offer an “escape from danger” may lead smokers to defer quit attempts and lower their perceptions of smoking risks.⁸⁵

Others have suggested that these types of advertisements could encourage smoking among adolescents by inadvertently conveying the message that quitting can be easy if these products are used.⁸² This is a concern because optimism about quitting is a predictor of smoking experimentation and progression to heavier smoking among youth.⁸⁶ However, two experimental studies exposing youth to combinations of NRT, bupropion, quitline, and tobacco control advertisements have found limited support for adverse effects of the advertisements.^{82,87} Population-based research on this little-explored subject seems important for adults and youth, especially because advertising for pharmaceutical smoking cessation products is the leading source of tobacco-related advertising exposures on television (table 11.1).

Tobacco-Industry-Sponsored Antitobacco Advertisements

Tobacco companies in the United States have launched their own antismoking mass media campaigns in response to increasing

documentary evidence and consequent growing liability that tobacco companies marketed their products to youth and misled consumers and the general public about the health risks of tobacco use.⁸⁸ One of Philip Morris's campaigns had an annual budget of \$100 million before it was withdrawn in the United States in January 2003. Its slogan was, "Think. Don't Smoke." These advertisements were targeted to youth between 10 and 14 years of age.⁸⁹ The first group of these advertisements featured an off-camera adult asking teenagers in various locations whether they smoked cigarettes. All of the adolescents interviewed were nonsmokers who responded that they did not need to smoke to be cool. Later executions showed young actors involved in popular activities such as karate and skateboarding, demonstrating that they were better off for not smoking.

In July 1999, Philip Morris launched a campaign emphasizing parental responsibility for talking to children about smoking, with the slogan, "Talk. They'll Listen."⁹⁰ In one of these advertisements, a teenager was shown being reminded by her father not to smoke before she went out for the evening and then refusing an offer of cigarettes during the course of her evening out. In October 1999, Lorillard also launched a youth smoking prevention campaign with the slogan "Tobacco Is Whacko if You're a Teen."⁹¹ Its budget was around \$13 million.¹⁶

Research pertaining to the effectiveness of these campaigns is presented and discussed in chapters 6 and 12.

Relative Performance of Televised Antitobacco Advertising Approaches

Paid television advertisements tend to be the most costly component of comprehensive tobacco control programs. Therefore, it is

imperative for program designers to make evidence-based and cost-effectiveness decisions about the design of advertisements for particular audiences (i.e., what themes and execution styles are likely to be most effective for which target groups). A first step toward answering these questions is to examine some useful parameters on which advertisements can differ. The marketing literature conceptualizes the characteristics of advertisements in terms of the message strategy (i.e., what is said) and the execution strategy (i.e., how it is said)²⁶ or, similarly, the informational content, emotional content, and format.⁹² Table 11.5 presents a relatively simplified scheme for characterizing message and execution strategies incorporating the major factors seen in the research.

Establishing an empirical basis for choosing among these characteristics is difficult. It is challenging to establish how one specific audience (e.g., young teenagers susceptible to smoking) responds to variations in advertisement parameters, let alone to determine how these parameters might interact with each other and with audience characteristics to affect individual responses. Controlled experiments could investigate these questions, and some of this work is reported below. However, when individuals are asked to view an advertisement to rate its characteristics, the manner in which they respond to the advertisement is likely to be different than if they were to view the advertisement in a natural setting.⁹³ Perhaps the ideal is to search for consistencies in findings across multiple studies. This section reviews research that compares audience response to antitobacco advertisements that vary along one or more of the characteristics listed in table 11.5. Table 11.6 summarizes these audience response studies.

Studies Using Controlled Exposure

Several studies have evaluated responses of youthful audiences to antitobacco

Table 11.5 Characterizations of Antitobacco Advertisements' Content and Style

Informational Content

Consequences of smoking and quitting: negative health, psychological, and social consequences to smoker of smoking; negative health consequences to others of secondhand tobacco smoke; benefits to smoker of quitting smoking; benefits to others of quitting smoking

Advice and tips for quitting: coping techniques; motivational techniques; sources of help (quitlines, health care providers); support and encouragement; pharmaceutical aids

Anti-industry information: chemical content of cigarettes; deceptive marketing (light cigarettes); predatory marketing (targeting youth, women, minorities, the poor)

Emotional Content

Level of emotion evoked: high to low

Valence of emotion evoked: positive emotions: pride, joy, happiness, hope, amusement/humor, love, devotion; negative emotions: fear, sadness, loss, anger, disgust

Format or Style^a

Testimonial or endorsement: real people discussing their experiences with smoking

Scientific evidence: statistics or research results sometimes presented by experts

Graphic image: a visual graphic depiction of the health consequences of smoking

Fantasy: use of unrealistic characters or situations

Slice of life or lifestyle: staged scenes with actors portraying consequences of smoking or benefits of not smoking or quitting

^aAdapted from Kotler, P., N. Roberto, and N. Lee. 2002. *Social marketing: Improving the quality of life*. 2nd ed. Thousand Oaks, CA: Sage.

advertisements in forced-exposure situations. In the first published study of this type, Goldman and Glantz⁹⁴ reviewed reports of 186 focus groups, containing more than 1,500 youth and adults, that had been conducted by advertising agencies as part of pretesting of some 118 broadcast antitobacco advertisements or advertising concepts. The authors concluded that advertisements portraying tobacco industry manipulation or featuring the health effects of secondhand smoke were the “most effective,” ads featuring addiction and cessation messages were “average,” and ads concerned with limiting youth access to tobacco, short- or long-term health effects of smoking, and teens rejecting tobacco were “not effective.” This study was criticized for failing to provide transparent criteria for what was described as “effectiveness.”^{95,96}

In later studies, groups first viewed individual advertisements and then rated

them on a variety of scales that measure some aspect of response thought to bring the target audience closer to not smoking. A well-cited, but unpublished, study involved 20 focus groups of 7th to 10th graders in Arizona, California, and Massachusetts in early 1999. The study sought to assess the extent to which a series of 10 antismoking advertisements made them “stop and think” about smoking.⁹⁷ Advertisements were shown, and group members made individual ratings of the advertisements and discussed them as a group.

Findings from the three states in this study were quite consistent. Advertisements that graphically, dramatically, and emotionally portrayed serious negative consequences of smoking received the highest ratings by respondents. These types of advertisements, which tell stories about real people, were very compelling to respondents. Advertisements using industry manipulation

Table 11.6 Studies Examining the Relative Performance of Different Advertising Messages

Study	Advertisement comparisons	Target group	Study design	Main outcomes
Goldman and Glantz 1998 ⁸⁴	18 antitobacco ads aired in the United States and additional ad concepts that were not progressed to advertisements	Youth who did and did not smoke and adult smokers	Review of 186 focus groups of over 1,500 youth and adults conducted by advertising agencies as part of concept testing and qualitative advertising evaluation	Ads featuring anti-industry and secondhand smoke messages were deemed "the most effective." Ads concerned with limiting youth access to tobacco, short- or long-term health effects, and romantic rejection of smoking by youth were concluded to be not "effective."
Teenage Research Unlimited 1999 ⁸⁷	10 state-funded antitobacco advertisements	7th to 10th graders in AZ, CA, and MA who were "at risk" of using tobacco because they indicated an intention to try smoking in the next year, had some to most of their family or close friends who were smokers, or held particular beliefs indicating a likely disposition to use tobacco	Controlled exposure: participants in 20 focus groups viewed each of 10 antitobacco advertisements in early 1999, made ratings of each, and discussed them as a group.	Advertisements that graphically, dramatically, and emotionally portrayed the serious negative consequences of smoking were rated highest. Advertisements using an industry manipulation theme were only rated high in terms of "stop and think" value by respondents in groups in CA. Advertisements with a theme emphasizing that teens need to make a choice about whether or not to smoke had the lowest ratings.
Murphy 2000 ⁸⁸	10 state-funded antitobacco advertisements and 1 CDC advertisement	11–18-year-olds in Utah, with a mix of smokers and nonsmokers	8 focus groups viewed each of 11 ads, made ratings of each, and discussed them as a group.	Both smokers and nonsmokers indicated that the ads communicating real-life experiences about the harm of tobacco were more thought provoking and more likely to change their smoking intentions. An ad featuring a cartoon character talking about quitting was perceived as least effective.

Table 11.6 Studies Examining the Relative Performance of Different Advertising Messages (*continued*)

Study	Advertisement comparisons	Target group	Study design	Main outcomes
Pechmann et al. 2003 ¹⁰²	The 7 antitobacco advertisement themes were disease and death, endangers others, cosmetic effects, smokers' negative life circumstances, refusal skills role model, marketing tactics, and selling disease and death. 8 advertisements had each of these themes, 56 advertisements in total.	1,667 7th and 10th graders	Controlled exposure: youths were randomly assigned to view 1 message type, after which they were asked about feelings and thoughts in relation to the advertisements, attitudes toward smoking, and intention to smoke.	Advertisements featuring 3 themes (endangers others [smoke and smoking hurts family members], smokers' negative life circumstance [smokers are "uncool," unwise, and misguided], and refusal skills role model [nonsmokers are popular and respected]) reduced intentions to smoke.
Youth Smoking and the Media – U.S. study— Terry-McElrath et al. 2005; ⁸⁹ Wakefield et al. 2003; ¹⁰⁰ Wakefield et al. 2005 ¹⁰¹	Pharmaceutical advertisements, tobacco company youth smoking prevention advertisements, tobacco control advertisements, and within tobacco control advertisements: 8 message themes, 2 executional styles, and target group of advertisements (youth vs. general audience)	268 8th-, 10th-, and 12th-grade susceptible nonsmokers or experimenters in Boston, MA, and Chicago, IL; the study was replicated in Australia and Britain for a total of 615 8th-, 10th-, and 12th-grade susceptible nonsmokers or experimenters in U.S., Australia, and Britain.	Controlled exposure: youth completed immediate ratings after viewing each of 10 advertisements in late 2000/early 2001, selected highest "stop and think" advertisement at end of session; 1-week telephone follow-up to establish recall and discussion about advertisements.	Compared with tobacco control advertisements, tobacco company advertisements are more likely to elicit positive emotions and be of less interest to youth. Pharmaceutical advertisements were less likely to cognitively engage youth in the session or be thought about or discussed at follow-up. Tobacco control advertisements with personal testimonial or visceral negative characteristics achieved greater appraisal, recall, and discussion at follow-up. After accounting for executional characteristics, advertisement target audience and theme were unrelated to outcome measures. Youth in the 3 countries responded in similar ways to the same advertisements.

Study	Advertisement comparisons	Target group	Study design	Main outcomes
Biener et al. 2000 ¹⁰³	9 MA advertisements that featured negative consequences of smoking, positive consequences of quitting, or advice about quitting. Advertisements also varied in level of emotional arousal and whether the tone was negative (sad or frightening), positive (funny and entertaining), or neutral.	1,544 MA adults who completed a telephone survey in 1993 and 1996	Naturalistic exposure: in the 1996 survey, interviewers briefly described each advertisement and asked if respondents recalled seeing it; if so, respondents rated each one on a scale of 0–10 indicating how good an antitobacco advertisement it was perceived to be.	Sad/frightening advertisements, which were highly emotional and dealt with the serious health consequences of tobacco use, scored significantly higher on perceived effectiveness than did funny or neutral advertisements for all respondents.
Biener 2002 ¹⁰⁴	The most prominent antitobacco advertisements broadcast by the Massachusetts Tobacco Control Program and those produced by Philip Morris. 4 categories: illness, outrage, other MA, and Philip Morris	733 youth 14–17 years of age	Naturalistic exposure: youth were asked in telephone survey whether they had seen any antitobacco advertisements on television in the previous month. If so, they were asked to describe one in detail and to rate its effectiveness on a 10-point scale.	Advertisements featuring serious consequences of smoking were seen as significantly more effective by youth than MA advertisements that did not discuss illness and Philip Morris “Think. Don’t Smoke.” advertisements.
Farrelly et al. 2002 ⁷⁹	American Legacy Foundation “truth” advertisements featuring industry manipulation messages compared with Philip Morris youth smoking prevention advertisements asking youth to “Think. Don’t Smoke.”	6,897 12–17-year-olds in baseline survey and 6,233 in postlaunch survey	Naturalistic exposure: nationally representative cross-sectional telephone surveys prior to campaign launch and 10 months after launch; measures were confirmed of recall, smoking attitudes and beliefs, and intention to smoke in the next year.	Exposure to “truth” advertisements was associated with an increase in antitobacco attitudes and beliefs; those exposed to Philip Morris advertisements were not. Those exposed to Philip Morris advertisements were more likely to be open to smoking.
Donovan et al. 2003 ⁷⁴	5 advertisements graphically featured the serious health effects of smoking; 1 advertisement encouraged smokers to call a quitline.	9,033 18–40-year-old smokers and recent quitters in Australia	Naturalistic exposure: repeated cross-sectional telephone surveys over a total of 43 weeks of 3 phases of a campaign in 1997–99. Respondents were asked about confirmed advertisement recall and recognition.	Advertisements with clear figure-ground executional formats were more memorable than those without. Advertisements illustrating the serious health effects of smoking had higher memorability than those encouraging calls to a quitline.

Table 11.6 Studies Examining the Relative Performance of Different Advertising Messages (continued)

Study	Advertisement comparisons	Target group	Study design	Main outcomes
Biener et al. 2004 ¹⁰⁵	MA advertisements broadcast over the period leading up to 1997: 4 advertisements featured serious illness. 2 advertisements used humor. 2 advertisements were about normative behavior.	618 MA youth aged 12–15 years	Naturalistic exposure: cohort study surveyed youth by telephone in 1993 and 1997, which determined confirmed advertisement recall and perceived effectiveness using a scale from 0 to 10.	Youth were more likely to recall and perceive as effective advertisements featuring messages about serious health consequences that had been independently rated as high in negative emotion, compared with advertisements featuring messages about normative behavior or advertisements relying on humor.
Pechmann and Reibling 2006 ¹⁰⁶	8 types of advertisements including serious health effects of smoking (disease and suffering, dying parent, secondhand smoke); tobacco industry manipulation (activism and marketing tactics); and social themes (acceptance, cosmetic)	1,725 9th graders in CA	Controlled exposure: youths were randomly assigned to view a television program in which particular themed advertisements or control advertisements were embedded in 2002. At baseline, personality traits were measured, and after exposure, students were asked about smoking intentions, feelings and beliefs, and advertisement appraisal.	Advertisements focusing on young victims suffering from serious smoking-related disease elicited disgust, enhanced anti-industry motivation, and reduced intentions to smoke, but counterindustry and tobacco company youth smoking prevention advertisements did not. Youth with conduct disorders were not influenced by any advertisements' themes.

as a theme were rated high in terms of “stop and think” value only by groups in California, where this approach was a familiar one. Respondents in the other states often misunderstood the anti-industry message that the advertisements attempted to communicate. Finally, advertisements with a theme emphasizing that teenagers need to make a choice about whether or not to smoke had the lowest ratings. These results imply that advertising campaigns that use teenager-choice approaches exclusively, such as Philip Morris’s youth smoking prevention campaign and the Virginia “Ydouthink.com” campaign, are likely to be relatively ineffective in motivating youth to stop and think about smoking. This may be because these advertisements fail to change broader population-wide social norms relating to tobacco use.¹⁰⁷

Murphy⁹⁸ reported on eight focus groups of 11- to 18-year-olds in Utah, where participants viewed and discussed ads made by other state tobacco control programs. Both smoking and nonsmoking youth indicated that ads about real life experiences were more thought provoking and more likely to change their smoking intentions. The advertisements *Janet Sackman* (former Lucky Strike model shares her throat cancer story), *Cowboy* (Marlboro Man’s lung cancer story told by his brother), *Pam Laffin* (26-year-old discusses her experience with emphysema), and *Voicebox* (Pam Laffin smokes through her stoma) were rated the highest on these attributes by youth in these groups.

Terry-McElrath and colleagues⁹⁹ asked 268 8th-, 10th-, and 12th-grade susceptible nonsmokers or experimental smokers (those who have experimented with smoking cigarettes) in Boston, Massachusetts, and Chicago, Illinois, to view a set of 10 advertisements selected as representative of all advertisements produced between 1997 and 2001 by tobacco control programs, tobacco companies, and pharmaceutical

companies. Five different sets of advertisements were tested, totaling 50 advertisements in all. After viewing each advertisement twice, the youths completed a rating form. The outcome measures included comprehension (open-ended responses to a query about the main point of the advertisement) and appraisal (an index of the perceived effectiveness of items).

A follow-up telephone call one week later was used to obtain the following additional outcome measures: recall (whether the advertisement was correctly described) and engagement (whether the youth reported having thought about and discussed the advertisement during the intervening week). Unlike immediate ratings of attributes of the ad, later ruminations about, or discussion of, an advertising message are evidence of further cognitive processing of the advertisement.¹⁰⁸⁻¹¹¹ The predictor variables included target audience (whether the advertisement was designed for a youth or an adult audience); theme (health effects, cessation, secondhand smoke, health benefits, industry manipulation, or smoking being “uncool”); format (use of either the testimonial technique or visceral negative imagery); and sponsor.

The pharmaceutical industry advertisements were rated as the least engaging, and at follow-up, were the least likely of the three sponsors to generate ad-related thoughts or discussion. The use of the personal testimonial and visceral negative formats had the strongest and most consistent relationships with high appraisal, and at follow-up, with greater recall and ad-related additional thoughts and discussion. When format was controlled in multivariate analyses, the message had no consistent effect on outcome. This was due to the correlation between format and message. Testimonial executions were used in advertisements addressing health effects, secondhand smoke, and industry activities, but not with the other themes.

Pechmann and colleagues¹⁰² reached a different conclusion. Their two-part study to categorize and rate different antismoking advertisements included almost 3,000 7th and 10th graders. Less than one-half of the youths ($n = 1,129$) grouped 194 antismoking advertisements into seven distinct message themes. The remainder ($n = 1,667$) were involved in a copy test of the advertisement types. The copy test used 8 randomly selected advertisements to represent each of the seven message themes—56 advertisements in total. Participants were randomly assigned to view just one message theme. They then were immediately asked about their feelings and thoughts in relation to the advertisements, attitudes toward smoking, and intention to smoke. The seven message themes were disease and death, endangers others, cosmetic effects, smokers' negative life circumstances, refusal skills role model, marketing tactics, and selling disease and death.

LISREL analyses demonstrated that three of the seven message themes reduced reported intention to smoke: endangers others (smoke and smoking hurts family members); smokers' negative life circumstances (smokers are "uncool," unwise, and misguided); and refusal skills role model (nonsmokers are popular and respected). (LISREL is a structural equation modeling method for empirical assessment of scientific theories.) These message themes resonated with the participants by increasing perceptions that smoking entailed an increased risk of social rejection. On the basis of these findings, the investigators found antismoking advertisements that focus on negative social consequences of smoking more effective than those focusing on health effects. Even though health messages increased youths' perception of the health risks of smoking, the messages did not increase their perceptions of vulnerability to those risks as protection motivation theory would require.¹¹²

A study by Pechmann and Reibling¹⁰⁶ randomly exposed 1,725 9th-grade students in California schools to one of nine videotapes containing a television show embedded with antismoking or control advertisements. Advertisements focusing on young victims suffering from serious diseases caused by tobacco elicited disgust, enhanced anti-industry attitudes, and reduced intentions to smoke among all participating adolescents except those with conduct disorders. However, advertisements portraying tobacco company conduct and tobacco company youth smoking prevention advertisements did not significantly lower participants' smoking intentions.

Studies Using Naturalistic Exposure

Several other studies have examined the relative performance of different types of antitobacco advertising by using data from segments of the target audience of the various campaigns. Farrelly and colleagues⁷⁹ used telephone tracking surveys to examine the responses of youth and young adults to Legacy's "truth" and Philip Morris's "Think. Don't Smoke" campaigns. The researchers associated confirmed recall of each campaign with antitobacco attitudes and openness to smoking. Recall of Legacy's "truth" advertisements was more strongly associated with endorsement of antitobacco attitudes than was recall of "Think. Don't Smoke" advertisements. Furthermore, respondents who recalled the "Think. Don't Smoke" advertisements were more likely to be open to smoking than those who recalled the "truth" advertisements.

The Massachusetts Tobacco Control Program conducted a well-funded media campaign between 1993 and 2001. Over the course of eight years, the campaign addressed a variety of audiences (youth, adult smokers, and a general audience) and focused on different goals: increasing

cessation, discouraging uptake, and promoting tobacco control policies.^{113–115} Population surveys conducted each year were designed to evaluate various aspects of response to the media campaign. In 1996, more than 1,500 adults who had previously been interviewed for the 1993 baseline study of smoking in Massachusetts were recontacted. They were surveyed about their reactions to nine Massachusetts advertisements that had been selected to vary in terms of the following messages: negative consequences of smoking, positive consequences of quitting, and advice about quitting. The advertisements also varied in the level of emotional arousal and whether the tone was negative (sad or frightening), positive (funny and entertaining), or neutral. Interviewers briefly described each advertisement to respondents and asked if they recalled seeing it. If respondents had recalled viewing advertisements, interviewers asked them to rate each one on a scale of 0 to 10 indicating how good an antitobacco advertisement it was perceived to be.

The sad/frightening advertisements, which were highly emotional and addressed serious health consequences of tobacco use, scored significantly higher on perceived effectiveness than did both the humorous and neutral advertisements. Other analyses examined perceptions of the advertisements according to respondents' smoking status category. Sad/frightening advertisements were rated as significantly more effective than either the humorous or neutral advertisements by all groups: smokers who quit during the campaign, smokers who continued smoking, and individuals who were nonsmokers at both baseline and follow-up.¹⁰³

Other researchers¹⁰⁵ conducted a similar study with a cohort of Massachusetts youth interviewed first in 1993 and again in 1997, with similar results. Respondents were more likely to recall and perceive as effective the advertisements featuring messages about

serious health consequences that had been independently rated as high in emotional arousal and in negative emotion, compared with advertisements featuring messages about normative behavior for teenagers or advertisements relying on humor.

Another youth study used a slightly different approach. More than 700 teenagers between ages 14 and 17 years were asked in a telephone survey whether they had seen any antitobacco advertisements on television in the previous month. If they had, they were asked to describe one advertisement in detail and then to rate its effectiveness. The Massachusetts Tobacco Control Program and Philip Morris produced the most widely broadcast antitobacco advertisements in Massachusetts during the time covered by the survey. The advertisements described by respondents were grouped into four categories based on their sponsor and approach: illness, outrage, other Massachusetts-produced ads, and all Philip Morris ads. The illness and outrage categories included advertisements that both aroused negative emotion (fear, sadness, or anger) and presented serious health consequences of smoking. The "other Massachusetts" ads and Philip Morris categories included advertisements that did not discuss consequences in a serious manner. Instead, they focused on normative issues, such as smoking is not "cool," smoking makes it hard to do well at sports, smoking sets a bad example for siblings, and such. In this study, youth saw advertisements featuring the serious consequences of smoking as significantly more effective than both the Massachusetts advertisements that did not discuss illness and the Philip Morris "Think. Don't Smoke" advertisements.¹⁰⁴

A limitation of the foregoing Massachusetts research is that the outcome measure was "perceived effectiveness." It is unclear whether advertisements perceived to be effective also led to longer term changes in behavior and attitudes.

One study used a somewhat different approach but found similar results.¹¹⁶ A population-based sample of more than 700 Massachusetts adults who had quit smoking in the prior two years was asked whether “any television commercial about tobacco contributed to [their] quitting smoking.”^{116(p.219)} Those who responded affirmatively were asked to describe one such commercial. Their open-ended descriptions were coded into a number of generic themes. The rate of mentions of each theme was compared to its media weight.

Of those who had quit smoking in the prior two years, 32% reported being influenced by a television commercial. Of those who reported having been helped by a television commercial, 70% described an advertisement featuring an emotional or a graphic depiction of the harm done to the protagonist or a loved one by smoking. Only 20% of the media weight of all mentioned advertisements was in this category. A mere 7% described an emotional advertisement depicting a smoker’s resolve to quit for the sake of his or her child. Only 2% of the media weight was in this category. As few as 5% described one of Legacy’s “Body Bags” advertisements, which earned only 2% of the total media weight. Only 1% of the individuals described a pharmaceutical advertisement although 58% of the total media weight was due to pharmaceutical advertisements. Although people are only partially aware of factors that influence their behavior, this study provides evidence that emotional advertisements about negative health consequences may be effective in promoting smoking cessation.

Summary of Studies of Relative Performance

Of 11 known studies that assessed responses of research participants to different types of advertisements, 9 yielded similar results. Among those 9, advertisements

addressing serious harm resulting from tobacco use in an emotionally evocative way performed well. Advertisements that used humor—whether to make fun of teenagers who smoked, make fun of tobacco companies, or portray the health benefits of nonsmoking in an exaggerated way (e.g., a Massachusetts advertisement showing an infant performing gymnastics because of the healthy air in his home)—performed relatively poorly. Philip Morris’s “Think. Don’t Smoke” advertisements also performed relatively poorly.

In looking at table 11.5, what can be said to media campaign designers about the optimal themes, emotional content, and formats for antitobacco advertisements? In practice, informational content, level of emotion, valence of emotion, and format tend to correlate. With regard to theme and valence of emotion, advertisements that portray negative health consequences of smoking—to smokers or to those around them—tend also to evoke negative emotions of fear, sadness, anger, disgust, or loss. Advertisements focusing on the benefits of quitting and those providing information or support for quitting tend to evoke positive emotions such as humor, pride, and hope. Advertisements that focus on the social consequences of smoking—both negative (e.g., peer disapproval, cosmetic effects) and positive (e.g., athletic achievement, peer acceptance)—also tend to evoke positive emotions. Advertisements that focus on anti-industry messages are more difficult to summarize. Some attempt to evoke anger and outrage by showing that tobacco companies are aware of the harms of tobacco, whereas others use parody to evoke humor.^{99,103,105}

The valence of emotion evoked in advertisements tends to be correlated with the amount of emotion inspired, such that advertisements evoking negative emotions are rated as more “moving” or “powerful” than those inspiring positive emotions.^{103,105}

Furthermore, format and content tend to be related. Personal testimonials from “real people” (nonactors) are most often used to illustrate negative health consequences of smoking. Visceral imagery also is associated with health consequences. Humorous advertisements usually are staged with actors or use a fantasy approach. Consequently, it is unclear whether the relatively successful performance of advertisements focusing on negative health consequences of smoking through testimonials or visceral negative imagery is due to the theme, format, negative emotion, or level of emotion, or some combination of these factors.

Arousal, Negative Emotion, and Advertising Impact

In advertising theory, for an advertisement to be effective it must first be attended to, then decoded and understood, and ultimately acted upon.^{93,117} Following the work of Miller,¹¹⁸ Lang and colleagues¹¹⁹ maintain that viewers have a finite mental capacity for these activities. Those cognitive resources are distributed to a number of potential sources of incoming information in the environment. The viewer’s interests, motivations, and needs play a role in how those resources are allocated. However, Lang and other colleagues^{120,121} have demonstrated that automatic responses to the content and structural features of what is broadcast control these processes to some extent. These researchers conducted a series of experiments on the role of level of arousal and valence of emotion on attention to and memory for media messages. This research helps account for the consistent finding that antitobacco advertisements that perform well in immediate ratings and indicators of message processing evoke high levels of negative emotion using personal testimonials of loss and pain; include graphic shots of diseased bodily organs;

or use other strategies that arouse anger, disgust, fear, or sadness.

By using physiological measures of attending to and processing information (i.e., reduced heart rate and slowed reaction time on a competing task), experimental studies have demonstrated that broadcast messages with negative emotional content elicit greater attention than those without such content.^{119,122} The researchers reiterate that negative messages usually are more arousing than positive ones and that arousing messages are remembered better than less arousing ones.^{119,121} When the arousal level of a message with positive emotional content could be raised to equal that of a message with negative emotional content, the positive messages were remembered better than the negative ones.¹²¹ If an antitobacco advertisement with positive emotional appeal could be constructed so that the level of emotion evoked was very high, it could perform as well as one with negative emotional appeal. The studies reviewed here, however, suggest that this is difficult to accomplish with antitobacco messages.

Some structural features of advertisements that tend to increase the extent to which they are perceived as arousing are independent of the informational or emotional content. These include pacing, use of loud music, and cuts or edits,¹²⁰ which are linked to increased message sensation value.¹²³ One study demonstrated that antitobacco advertisements with more features that enhance perceived message sensation value evoke higher levels of message processing.¹²⁴ Future research should investigate whether these message characteristics can improve the impact of advertisements that use positive emotional appeals. Many organizations that resist sponsoring advertisements that arouse high levels of negative emotion would welcome this type of outcome. Administrators prefer to associate their agencies with positive

uplifting messages rather than with those that emphasize the darker consequences of health-damaging behaviors. This is true even though the latter messages demonstrate a more successful performance.

Corrective Advertising for “Light” or “Low-Yield” Cigarettes

Tobacco manufacturers have long marketed low-tar or “light” cigarettes to smokers who are concerned about the health effects of their smoking^{125,126} (see chapter 5). However, authoritative reviews have concluded that low-yield cigarettes are designed to allow compensatory smoking behaviors that enable a smoker to derive a wide range of tar and nicotine yields from the same brand, offsetting much of the theoretical benefit of a cigarette with reduced tar.¹²⁷ Consequently, there is little evidence of reduced risk of disease from use of low-yield cigarettes.¹²⁷

Despite this, studies have shown that a substantial proportion of American smokers believe that using “light” cigarettes is less risky than using regular cigarettes.^{128–130} This has led some tobacco control programs to attempt to correct smokers’ misperceptions through advertising.

For example, in 1994, the Massachusetts Department of Public Health aired two 30-second television advertisements about “light” cigarettes. One advertisement focused on vent blocking; that is, the small vent holes around the filters of most “light” cigarettes can dilute the inhaled smoke, but in practice smokers may block these filter holes with their fingers when inhaling, thus delivering a higher dose of smoke constituents. In the other advertisement, an animated “skull and crossbones” speaks, saying it should be—but is not—warning smokers about light cigarettes. An evaluation survey showed that within Massachusetts, compared with a nationwide sample, smokers who saw the anti-light-cigarette advertisements were

less likely to think light cigarettes decreased the risk of health problems (26% versus 44%) and more likely to know of filter vents (64% versus 47%).¹³¹ However, compared with other states, Massachusetts had other antitobacco advertising and stronger tobacco control policies that may have influenced smoking beliefs and behavior in the state. Thus, this quasi-experimental, posttest-only study provides weak evidence that the advertising may have influenced some participants’ smoking beliefs and behavior.

A study by Koslowski and colleagues randomized smokers of light cigarettes who participated in a telephone survey to hear ($n = 293$) or not hear ($n = 275$) a 60-second radio advertisement cautioning that light cigarettes are no safer than regular cigarettes and that listeners should think about quitting.¹³¹ Those who heard the advertisement were more likely to report that one light cigarette could give a smoker the same amount of tar as one regular cigarette, and 55% said the message made them feel more like quitting. Koslowski and colleagues followed up about one-half of the respondents in each group who could be contacted seven months later to determine whether there were any persistent effects from hearing the radio advertisement.¹³² The message group respondents were more likely than the control group to report that one light cigarette equaled one regular cigarette in tar yield to smokers, light cigarettes did not decrease health risks, and they wanted to quit smoking. However, they did not report greater intention to quit or more knowledge of filter ventilation. These results suggest that smokers found the information in the radio advertisement important and remembered it, especially given that the information was played only once seven months beforehand.

Shiffman and colleagues also experimentally assessed responses to differently framed persuasive messages about light cigarettes. In randomized studies of radio messages¹³³

and 30-second television advertising concepts,¹³⁴ smokers were most likely to change their beliefs about light cigarettes and be more interested in quitting when exposed to a message emphasizing that the sensory effect of light cigarettes can be deceptive.

Taken together, these experimental studies suggest that advertising to dispel misperceptions about light or low-yield cigarettes can improve smokers' awareness of and knowledge about these cigarettes and may move smokers toward quitting. However, studies have not yet examined quit rates among those exposed or not exposed to this type of advertising.

Tobacco manufacturers have introduced a variety of nontraditional tobacco and nicotine products that claim to reduce the risk of smoking (potential reduced-exposure products [PREPs]). As discussed in chapter 5, PREPs include Eclipse and Advance. Several studies have shown that advertising promoting these products leads smokers to consider them to have lower health risks and fewer carcinogens than do light cigarettes¹³⁵ and reduces smokers' interest in quitting.¹³⁶ Depending on the extent to which PREPs become more widely promoted and used, a future communications challenge in tobacco control will be to enable consumers to have access to risk assessments aligned with scientific evidence about the risks these products pose.

Targeting and Tailoring of Antitobacco Advertisements

Commercial advertisers spend a great deal of effort on audience segmentation (see chapter 3). This involves identifying population subgroups whose members are similar to each other and distinct from other groups along dimensions that are meaningful in the context of the product being marketed or the behavior to be changed.¹³⁷ In the realm of antitobacco

advertising, major segments have been defined by age, race/ethnicity, or nationality. It is important to know whether tailoring antitobacco advertisements yields a substantial improvement in effectiveness because tailoring increases the cost of producing media campaigns.

Targeting Age Groups

Most campaigns create different types of advertisements for youth and for adults. Beaudoin¹³⁸ performed a content analysis of 197 antitobacco advertisements produced between 1991 and 1999. Among the dimensions coded were (1) the type of consequence presented (health, social, or both); (2) whether the consequences were short term, long term, or both; and (3) whether the appeal used humor, fear, sociability, or several other strategies. Beaudoin found that advertisements targeting youth commonly used sociability and humor appeals and presented short-term consequences. Advertisements targeting adults commonly used fear appeals and addressed the long-term health consequences.

At first glance, these differences seem logical and appropriate. Some common objectives for youth and adult advertisements exist (e.g., presenting cigarettes in a negative light and having the audience reject them). However, issues relevant for adult smokers (e.g., overcoming the addiction, coping with withdrawal, giving up one's "best friend")¹³⁹ are quite different from those relevant for youthful nonsmokers (e.g., appearing to be grown up, conforming to group norms, establishing an identity). However, the empirical findings presented in this section indicate that, like adults, youth tend to respond more favorably to advertisements warning of serious long-term health consequences of smoking presented in an emotionally evocative way. Several studies that explicitly compared teenagers' responses to youth-targeted versus adult-targeted advertisements

found that youth respond favorably to adult-targeted advertisements.

Wakefield and colleagues¹⁴⁰ showed that the adult cessation focus of the Australian campaign (“Every Cigarette Is Doing You Damage”) was as likely as a teen-focused campaign to make teenagers in South Australia feel they should not smoke. This was true despite the teen campaign’s favorable pretesting with a youth audience. By using national and state survey data in Victoria, Australia, White and colleagues¹⁴¹ found that youth perceived the adult campaign as relevant to them and effective in promoting antismoking attitudes.

Schar and Gutierrez¹⁴² describe an evaluation of the English testimonial campaign that targeted adults and featured a 34-year-old man with lung cancer and a teenage girl speaking about her father who has lung cancer. Surveys of youth (11–15 years old) and adults indicated comparable levels of campaign awareness and perceived effectiveness among the two groups.

Considerable debate has occurred about whether tobacco control campaigns should focus primarily on youth (because most people initiate smoking before age 18) or on adults.^{107,143} The findings reported here suggest that an adult-targeted campaign appears to be as effective in communicating with youth as with adults. This may be due to such adult-targeted campaigns changing broader social norms about smoking.¹⁰⁷

Targeting by Race/Ethnicity or Nationality

Antitobacco media campaigns are believed to be more effective if they are tailored to the cultural values of various targeted racial and ethnic groups.¹⁴⁴ Members of different ethnic groups have different beliefs and attitudes about the social appropriateness of smoking, associated risks, and acceptability of using professional help.^{145,146} Therefore, tailoring messages in a manner that takes

those differences into account would appear to increase an advertisement’s effectiveness. There is a surprising dearth of empirical support for this hypothesis, however. Very few campaign evaluations pit a general-audience message against a tailored message to compare audience reactions.

Several studies of youth have demonstrated that advertisement characteristics are more important than either ethnicity or nationality in determining participants’ reactions to antitobacco advertising. Farrelly and colleagues¹⁴⁷ conducted a content analysis of 51 advertisements broadcast by Legacy (“truth” campaign), Philip Morris (“Think. Don’t Smoke”), and Lorillard (“Tobacco Is Whacko if You’re a Teen”). Advertisements were coded as to message sensation value, an index of features believed to elicit arousal reactions: number of cuts, use of loud music, surprise endings, intense visual images, and theme (e.g., long-term versus short-term health effects, industry manipulation, smoking as a personal choice). Repeated cross-sectional telephone surveys of white, African American, Hispanic, and Asian youth assessed recall and appraisal of varying groups of advertisements. Multivariate analyses demonstrated that advertisement characteristics were more important than audience race/ethnicity as a determinant of appraisal.

Wakefield and colleagues¹⁰⁰ repeated in Australia and Great Britain the study in the United States described earlier.⁹⁹ In that study, groups of young people viewed and rated a series of counteradvertisements and were reinterviewed by telephone one week later to determine which of the advertisements were recalled and had stimulated further thoughts. The purpose of this study was to determine whether youth of different nationalities responded similarly or differently to antitobacco advertisements. The researchers found that participants in these three English-speaking countries responded in very similar ways

to the advertisements. As was true in Chicago and Boston, youth in Australia and Great Britain responded not to the theme or target audience but to the arousal characteristics of the advertisements.

These findings suggest that advertisements that perform well on immediate ratings and indicators of message processing tend to do so among many population subgroups. This implies that the added expense of designing tailored executions for small subgroups may not need to be incurred. The findings also suggest that advertisements can be shared, at least among more-developed countries, provided language requirements can be met. This could reduce costs in areas where funding for tobacco control advertising is scarce. At this point, research is inadequate to generalize to less-developed nations.

New-Media Interactive Health Communications for Smoking Cessation

Interactive health communications (IHC), also called “consumer health informatics” and “eHealth,” can include the Internet, personal digital assistants, computer-tailored print materials, interactive voice response, computer-driven kiosks, and CD-ROMs. This section, however, focuses on the Internet as the leading instantiation of IHC, given its ready accessibility to smokers.

The proportion of adults (18 years and older) in the United States with Internet access in 2007 exceeded 72%.¹⁴⁸ The proportion of adults with home Internet access increased from 56% in 2001 to 65% in 2007.¹⁴⁸ Moreover, the number of hours spent online by adult Internet users increased from 9.7 hours per week in 2001 to 15.9 hours per week in 2007.¹⁴⁸ In a Pew survey¹⁴⁹ of U.S. adults with access to the

Internet, 63% reported using the Web to obtain information on a specific disease or medical problem and 6% had used the Web for information about how to quit smoking. A study by Biener and colleagues of 787 Massachusetts adults surveyed in 2001–02 who had quit smoking in the past two years found that 3.9% had accessed a Web site for help to quit compared with 0.8% who had accessed telephone quitlines.¹¹⁶ Although more than four times as many former smokers had accessed the Internet than had used telephone quitlines, almost all of those who accessed these sources of help reported them to be helpful.

Those who are less likely to access the Internet tend to be less educated, African American, and 65 years or older.¹⁵⁰ In addition, population survey data from the Health Information National Trends Survey indicate that smokers who use the Internet are more likely to have higher income and be employed, despite being younger, compared to smokers who do not use the Internet.¹⁵¹ This study also found that Internet-connected smokers reported less psychological distress, fewer barriers to health care, and a greater interest in quitting smoking.

Why do people use the Internet as opposed to other sources of assistance and information? An earlier Pew report¹⁵² found that of those using the Internet for health information, 93% thought it was important to obtain the information at any convenient hour and 80% liked the ability to obtain health information anonymously without having to talk to anyone. In addition, cigarette smokers who use the Internet have expressed a desire for anonymity and noted discomfort in speaking with human counselors.¹⁵³

While the reach of public Internet sites for smoking cessation appears to be high relative to alternative treatment modalities, the quality of these sites remains largely

untested. In a systematic analysis of the content, quality, and usability of smoking cessation treatments on the Internet, Bock and colleagues¹⁵⁴ found that 80% of such sites failed to address one or more key components of recommended smoking cessation treatment guidelines, with the interactive nature of the Internet generally ignored. In reviews of computer-generated health behavior change interventions, the application of theoretically informed approaches for health behavior change and/or decision making has been found to be poor or nonexistent.¹⁵⁵ A key concern is that individuals with limited understanding of smoking cessation theory and practice generate most of the information on the Internet. Thus, digital “pamphlet racks” persist as the most common type of smoking cessation Internet sites because they are easy to build. Unfortunately, research on Internet-based health programming continues to focus on these simple information transfer models.¹⁵⁶ The Internet and IHC in general, providing they are informed by smoking cessation theory and research, offer greater potential than a simple clearinghouse of smoking cessation pamphlets.

Bock and colleagues¹⁵⁴ provide an excellent review of, and criteria for, Internet-based smoking cessation programming. This section focuses instead on: (1) ideas for advancing smoking cessation programming using IHC’s interactive capabilities, (2) the dissemination of these programs, and (3) the future of such programs.

Types of Interactivity

A key advantage of IHC is its interactivity within a mass audience, reflecting how individuals normally seek help and advice. Four types of interactivity relevant to smoking cessation programming are (1) user navigation, (2) expert systems, (3) collaborative filtering, and (4) human-to-human interaction.

User Navigation: A Vast Library at Users’ Fingertips

The interactive strategy most commonly used on the Internet requires users to search through the Internet, identifying what they consider as the most relevant sites and information within those sites. Once in a site, users search for the information relevant to their needs and interests. Similar to a library, the Internet has methods of searching for the large amount of available health information. Also like a library, however, the Internet does not automatically make available the best information or advice that an individual needs at a particular time.

A number of studies in the general non-Internet-specific educational literature have found that, when compared with fixed sequencing of instructional material, user control results in deviations from important information or methods of instruction and subsequent lower performance.^{157–161} Users who begin a program with low levels of knowledge or ability about the subject matter appear to perform even more poorly in user-navigated environments.^{157,159,162}

Applying these findings to the area of IHC, it seems plausible that users with little prior knowledge, experience, or perceived competence might be less successful with user-navigated IHC programming. As discussed in the next section, IHC programming that provides guidance tailored to an assessment of needs and interests may help users become more effective and efficient in their search process.

Expert Systems: When a Counselor Is Needed

A second interactive approach, closely approximating a counseling experience, is termed an *expert system*. These systems, which have undergone more experimental research than any other IHC system,

attempt to apply an expert's assessment, decision rules, and feedback strategies to software. The expert systems tested in the health behavior area typically require (1) a collection of characteristics, at an individual level, relevant to the targeted behavior change; (2) an algorithm that uses these data to generate messages tailored to the specific needs of the user; and (3) a feedback protocol that combines these messages in a clear, vivid manner. The inferences made from the data are an attempt to reflect standards of a human expert.^{163,164}

Over the past 10 years, expert-tailored print interventions for smoking cessation have been developed and evaluated in diverse settings. Some of these tailored programs have been migrated to the Internet after testing in non-Internet-based settings, such as by telephone or print-mediated delivery systems.¹⁶⁵⁻¹⁶⁷ A generally positive body of evidence demonstrates the efficacy of print-based, computer-tailored smoking cessation interventions in adults.¹⁶⁸ In a Cochrane Collaboration meta-analysis of smoking cessation materials developed by expert systems, Lancaster and Stead¹⁶⁸ found an average odds ratio (OR) of 1.42 (95% confidence interval [CI], 1.26-1.61) for such materials compared with untailored or stage-matched materials in 17 trials. The evidence was strongest for tailored materials compared with no intervention but also supported tailored materials as more helpful than standard materials. The review concluded that part of this effect could be due to the additional contact or assessment required to obtain individual data.

Results of two randomized clinical trials of Internet-based expert systems for smoking cessation have been positive and consistent with the results of computer-tailored print materials. In a randomized clinical trial of visitors to a smoking cessation Web site, Etter¹⁶⁵ found an OR (7-day point-prevalence abstinence) of 1.24 (95% CI, 1.08-1.43)

10 weeks after program entry. The study compared an Internet-based program tailored to coping strategies, health risks, nicotine dependence, and use of NRT with an Internet-based program focusing largely on nicotine dependence and use of NRT.

In a study of nicotine patch users, Strecher and colleagues¹⁶⁶ found an OR (10-week continuous abstinence) of 1.33 (95% CI, 1.13-1.57) 12 weeks after program entry. This study compared an Internet-based program tailored to the individual's self-efficacy deficits, cessation motives, smoking history, social support, and health risks against an Internet-based program with a very similar graphic design but untailored smoking cessation information. The results of this study were very similar to those found in two previous trials of tailored print materials tested among NRT users.^{169,170}

Will underserved individuals, particularly those with low literacy skills, respond to tailored materials? A noteworthy study by Lipkus and colleagues¹⁷¹ found a significantly higher cessation rate among low-income and indigent African-American smokers receiving tailored smoking cessation materials plus provider advice than among those who received provider advice alone. Supporting these results, McDaniel and colleagues¹⁷² found high satisfaction among 100 low-income inner-city female smokers who participated in a usability study of an interactive, computer-mediated smoking cessation program in Indianapolis, Indiana. At a one-week follow-up, there was a significant decrease in favorable attitudes to smoking and an increase in cognitive change processes related to smoking. However, a challenge for the reach of these kinds of programs is that low-income populations have less access to the Internet.¹⁷³

With increasing reach and greater potential for interactivity and lower cost, expert systems delivered via the Internet offer significant potential for smoking cessation.

Further published controlled trials of Internet-based expert systems in this area are greatly needed. One barrier to conducting these studies is the complexity of building expert system interventions on the Internet. This situation is likely to improve as content management systems and tailoring of application frameworks are further developed and implemented.

Collaborative Filtering: What Other Smokers Like You Are Doing to Quit

It is common to use the actions and subsequent outcomes of peers to inform one's own decisions. A local bookseller may say, "I know six other customers like you who enjoy John le Carré mysteries.... They're now really reading this new Tom Clancy novel." Using a similar approach, a collaborative filtering system on the Internet is able to convey that, "We have six hundred thousand other customers who, like you, enjoy John le Carré mysteries.... Many of them are now reading this new Tom Clancy novel."

Larger numbers of individuals allow greater discrimination in filtering, with the potential for creating more useful advice. Collaborative filtering on the Internet could match coping strategies and preferences of similar smokers with specific needs and interests. For example, a female smoker in her late 20s who is trying to quit but worried about gaining weight could be linked to coping strategies of other women of similar age, diet, and physical activity levels who have successfully maintained their weight while quitting smoking. At present, however, in the field of health-related behavior, the application of this concept has yet to be subjected to formal research inquiry.

Human-to-Human Interaction: A Channel for Social Support

Evidence for integrating social support, or "buddy systems," into smoking cessation

programming is decidedly mixed.¹⁷⁴ Notable examples of improved short-term outcomes from buddy systems exist.¹⁷⁵ However, a review of 10 studies examining social support and buddy systems found only 2 that demonstrated even short-term positive effects. Nonetheless, it is possible that such systems work well for a small proportion of smokers who need this type of assistance.

Online support groups give users a convenient way to provide and receive informational and emotional support.^{176,177} The 24/7 accessibility of online support may be a significant advantage to smokers. Again, anonymity is a frequently cited benefit of computer-mediated groups. As one participant stated in the study by Shaw and colleagues, "It's a gift to be able to tell people as much or as little as you want about yourself."^{177(p.141)} No study could be found that examined the reach or effectiveness of online discussion groups for smoking cessation. Although some have questioned the reach of face-to-face group cessation programs,¹⁷⁸ the anonymity and convenience of online groups might encourage participation among many people who would not normally use a face-to-face group.

Another human-to-human interaction relevant to IHC involves online therapists. This approach is similar to the model for telephone hotlines that involve counselors or information specialists and could be proactive or reactive, although this has not yet been reported in the literature. Outside the field of tobacco control, however, Tate and colleagues¹⁷⁹ found that using an online counselor with an Internet-based weight loss program significantly contributed to 12-month weight loss compared to the Internet program alone. Online Internet interactions with smoking cessation counselors offer significant convenience to both the user and counselor. They also may offer an added degree of anonymity and therefore the possibility

of more honest expressions of behaviors, attitudes, and emotions. As is the case with telecounseling services, however, proactive online therapy could be difficult and expensive to disseminate with high quality to large populations of smokers.

Dissemination of Interactive Health Communications

Adoption, implementation, and maintenance of high-quality IHC for smoking cessation through clinical practices, health maintenance organizations, voluntary health organizations, state and federal agencies, and employers will evolve only when such programming has been demonstrated to have several capabilities. These include (1) high reach to the population in need, (2) high efficacy in achieving desired outcomes, and (3) low cost. Decision makers will require a greater understanding of the importance of theoretically and empirically informed programming in achieving desired outcomes.

Many larger health organizations typically prefer to create their own smoking cessation materials. However, they are beginning to understand that developing Internet sites that extend beyond the digitization of their pamphlets involves significant expertise, effort, and expense. IHC development for smoking cessation is most likely to be accomplished by for-profit companies and large nongovernment organizations. These organizations would need to devote significant resources to development but offer the final programming to millions of smokers at a very low per-person fee.

Innovative financial models for Internet dissemination may move from per-user fees to fee scales based on the size of the population. This approach encourages the organization licensing the software to promote the cessation programming to the largest number of smokers, lowering the per-user fee with every new participant.

To maximize its acceptability to funders and potential users, IHC programming would need to run without significant problems, work for a variety of user interfaces (e.g., operating systems and connection speeds), and work well under extreme loads. Crossing the chasm from research prototype to real-world product is a huge endeavor, and partnerships with the IHC industry are considered advisable.

Future Directions for Interactive Health Communications

The IHC field continues to change rapidly with respect to information technologies, access to these technologies, and consumer attitudes toward the technologies and associated interventions. Many studies published even a few years ago used information technologies that now are dated among subjects with different attitudes toward the technology. For example, early research on even crudely tailored print materials for smoking cessation may have found positive outcomes due to the central processing of information considered novel and interesting to the user.¹⁸⁰ However, it is likely that most people have tired of receiving countless “Hello <your name>!” materials through the Internet and conventional mail.

Scientists and others have not fully explored the potential factors relevant to tailored IHC. The idea of tailoring interactive programming to the learning style of the user is not new,¹⁸¹ but it has yet to elicit research interest. Other individual characteristics that may be considered relevant for tailored communications include previous experience with smoking cessation, perceived competence, cultural factors, self-efficacy, need for cognition, motivation, and locus of control, among many others.

An interesting area of research within this field moves beyond the Internet to

technologies that allow more-immediate methods of data collection and feedback.¹⁸² Collection of data in real time from a real-world environment may offer the possibility of instantaneously providing tailored feedback within that environment through call phones, pagers, and other devices. Additional ideas for enhancing interactivity and studying effects on users have been discussed elsewhere.^{183–187}

More difficult to predict are the emergent interactions among consumer health informatics systems discussed in this section and medical informatics (e.g., electronic medical records), bioinformatics (e.g., genomics), and public health informatics (e.g., surveillance, epidemiological). These interactions should provide greater efficiencies and effectiveness at both clinical and population levels.

Summary

Media interventions have become a key component of tobacco cessation efforts over the past four decades. A wide variety of antitobacco media campaigns have been broadcast in the United States and other countries, with television advertising being the most commonly selected medium. Advertisements have used a range of different themes and executional formats and have targeted different population subgroups, such as adults or youth, and various racial/ethnic groups.

The U.S. population is exposed to a wide range of antismoking messages in the media. These include television advertisements from state and national tobacco control campaigns, commercial advertising for smoking cessation products, and advertisements advocating youth smoking prevention from tobacco companies.

A strong evidence base is emerging for antitobacco advertising, with a consensus

that advertisements that arouse strong negative emotions perform better than those that do not. These advertisements tend to depict serious harm done by smoking or secondhand smoke in an authentic way and sometimes include depictions of tobacco industry awareness of the dangers of smoking. Experimental research on information processing supports the hypothesis that advertisements that evoke high arousal will receive greater viewer attention and will be remembered more readily than those that do not. Further, negative content tends to produce higher levels of arousal than does positive content. Targeting these types of advertisements to specific demographic groups remains an area for future study. However, there is evidence that the content of these advertisements is more important than such targeting. In particular, youth notice, understand, and are positively influenced by adult-oriented antitobacco advertisements.

With the increasing reach, interactivity, media richness, and speed of the Internet, greater research attention could be focused on its efficacy and “active ingredients” to promote and maintain smoking cessation. More than four times the number of smokers appear to use the Internet for help in quitting than to seek help through quitlines.¹¹⁶ Yet, the quality of publicly available cessation services on the Internet generally is poor and lacks evidence-based content. Looking toward the future, new-media channels for IHC include tailored print materials and tailored Web-based programs. Although not directly compared, reviews of each independently suggest that the effectiveness of tailored print materials for smoking cessation may be nearly equivalent to other high-reach but more expensive smoking cessation programming (e.g., quitlines). Further research is needed to examine expert systems and other interactive approaches among smokers requiring the greatest assistance in quitting.

Conclusions

1. From their beginnings with the successful 1967–70 application of the Fairness Doctrine to cigarette advertising in the broadcast media, media interventions for tobacco control have evolved to become a key component of tobacco control efforts. These interventions have been aided by funding from the 1998 Master Settlement Agreement.
2. Media channels commonly used for tobacco control advertising include television, radio, print, and billboards. Much research on tobacco control media interventions revolves around television, regarded as the most powerful medium.
3. Public-health-sponsored antitobacco advertising has included themes such as the health risks of smoking, exposure to secondhand smoke, questioning the accuracy of tobacco industry communications, and the declining social acceptability of smoking. Other forms of smoking-relevant advertising include advertisements for commercial smoking cessation products as well as the tobacco industry's youth smoking prevention and adult cessation programs.
4. Numerous studies have shown consistently that advertising carrying strong negative messages about health consequences performs better in affecting target audience appraisals and indicators of message processing (such as recall of the advertisement, thinking more about it, discussing it) compared with other forms of advertising, such as humorous or emotionally neutral advertisements. Some of these negative advertisements also portray deception on the part of the tobacco industry. Advertisements for smoking cessation products and tobacco-industry-sponsored smoking prevention advertising have been shown to elicit significantly poorer target audience appraisals than do advertisements based on negative health consequences.
5. Studies have shown that particular characteristics of advertisements (such as those eliciting negative emotion) are more important than demographic factors (such as race/ethnicity, nationality, and age group) in driving immediate advertising-related appraisals and indicators of message processing.
6. Because many smokers search the Internet for help to quit, interactive Web-based health communications may have potential for assisting smoking cessation. However, these services need to be informed by smoking cessation theory and research and structured to expose users to appropriate information.

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Assessing the Effectiveness of the Mass Media in Discouraging Smoking Behavior

Mass media have been used as a population-level strategy to reduce tobacco use for several decades. However, studies of media interventions pose numerous methodological challenges. This chapter studies the use of mass media in tobacco control and health promotion, on the basis of a literature review, and examines research results relative to changing smoking behavior in light of the methodological issues. The following specific areas are covered:

- *Controlled field experiments involving antismoking media campaigns aimed at youth and adults. These include longitudinal community-based studies promoting cardiovascular health, such as the North Karelia Project in Finland and the Stanford Three Community Study. In addition, controlled field experiments are addressed that included mass media as only one part of a multicomponent community- or school-based intervention.*
- *Population-level studies, including longitudinal and cross-sectional studies of national and state media campaigns. Some of these are part of multicomponent tobacco control programs. Examples include the Fairness Doctrine campaign, Australia's "Quit for Life" and National Tobacco Campaign efforts, the national "truth" campaign in the United States, the tobacco industry's own youth tobacco use prevention efforts, and the California Tobacco Control Program.*

The methodological challenges of evaluating these studies include quasi-experimental designs without randomization, lack of accounting for homogeneity within intervention or control conditions, baseline differences, contamination of control groups, the presence of secular trends, and problems inherent in both cross-sectional and longitudinal studies. Many of the studies reviewed show a relationship between mass media interventions and positive outcomes for reduced tobacco use. Although methodological limitations present problems in interpretation, the preponderance of evidence suggests that mass media can be effective in reducing tobacco use.

Introduction

This chapter reviews the evidence mainly from two types of studies on the effects of mass media campaigns on tobacco use behaviors: controlled field experiments and population-based studies. Controlled field experiments, often called quasi-experimental designs, generally were feasibility or demonstration projects funded through research grants. In these studies, mass media interventions were delivered alone or in combination with other interventions (e.g., school or community programs) to subsets of a defined population, usually at the community level. The goal was to assess whether the intervention(s) could alter health behavior, including smoking, in the targeted communities. Comparison or control groups (in a few cases randomly selected) not receiving the intervention(s), and consisting of subsets of communities that are more or less comparable, were used as the basis for determining intervention efficacy. As will be seen below, these studies, although not definitive, were promising enough to warrant investigators' continued efforts in this area.

On the basis of the results of these controlled field experiments, mass media and other interventions subsequently were delivered to entire populations via specially funded government programs, generally at the state or national level. To justify continued program funding, evaluations of program effectiveness were conducted. In some of these population studies, preprogram measures were obtained for comparison with postprogram measures to determine whether changes in smoking behavior had occurred. In other cases, trends in behavior over time for the population (e.g., state) receiving the intervention were compared to trends in other populations not receiving it (e.g., all other or selected groups of states).

Some studies do not fit neatly into either of the groups described above and are discussed below under the broad heading that is most appropriate. The analytical challenges facing the evaluation of both controlled field experiments and population studies are outlined at the beginning of each of the main sections below.

Research Methodology

For this chapter, a comprehensive and systematic review of the literature was conducted using standard search tools and the databases PubMed, PsycINFO, Web of Science, Scopus, and EMBASE. Search terms included (*tv* OR *television* OR *radio* OR *broadcast** OR *mass media* OR *advertis** OR *marketing* OR *countermarketing*) AND (*prevent** OR *cessation* OR *initiat**) AND (*tobacco* OR *smoking*). Articles published in languages other than English and editorials and letters were excluded. The review extended from 1970 through May 2007. The focus was on studies that assessed the influence of mass media interventions (e.g., television, radio, print, and outdoor advertising) alone or in combination with other interventions (e.g., school, community, policy). The goal was to review how these interventions influenced tobacco use outcomes among youth and adults in the United States and elsewhere. Studies selected for formal review fit either the definition of controlled field experiments or of population studies as described above. Existing review articles also were obtained and are mentioned below.

Prior Reviews

The use of mass media to influence health behavior has been studied extensively. Some previous reviews specifically focused on media efforts to change smoking behavior.¹⁻⁸ With few exceptions,^{1,5,7} these dealt only with the effects of mass media on youth. The scope of other reviews included

studies of a number of health behaviors, such as drug or alcohol use, cancer screening, AIDS prevention, and seat belt use; smoking was just one of the behaviors considered.⁹⁻¹² Despite the presence in all these reviews of studies that did not find significant intervention behavioral effects, the authors concluded, in general, that mass media campaigns, alone or in conjunction with other interventions, have brought about changes in health behavior.

The introduction to a book edited by Hornik¹³ reviews the reasons for the mixed results of studies in this area. In some cases, controlled field experiments were not well enough funded to deliver enough media messages so that exposure was sufficiently different in the intervention and control communities. In other cases, media from other sources, or effects of other ongoing programs, generated changes in population norms that made the studies difficult to evaluate. At times, favorable secular trends were present in the control communities, diminishing the chances of showing a difference. Furthermore, the design and evaluation of such trials are not as straightforward as they are for controlled clinical trials of new medications or therapies. Hornik notes that studies (generally adequately funded population studies) that have demonstrated a behavioral outcome effect tend to achieve high levels of media exposure in the target group or population. This media exposure apparently fostered a process that led to a change in social norms and in turn affected behavior.

The design and context of the controlled field experiments and population studies aimed at addressing the impact of antismoking media messages on smoking behavior have varied widely. The types, extent, and length of media campaigns have differed. Some studies used purchased broadcast time, and others relied on donated time or public service announcements (PSAs). There were differences in the

outcomes measured, the types of assessment surveys (cross-sectional or longitudinal), the timing of outcome assessment, the theoretical foundations, and the advertising style and messages. A number of articles have aimed to synthesize the lessons learned from these previous studies and provide guidelines for the design of future controlled field experiments and population-based media programs, both alone and in conjunction with other communitywide interventions.^{7,9,13-19} All of the differences among the studies mentioned above complicate efforts to synthesize study findings, but it is agreed that sufficient resources to assure adequate campaign exposure are essential. Much remains to be learned regarding the intensity, timing, duration, and targeting of mass media campaigns to achieve and optimize reductions in smoking. Chapter 15 further discusses this point.

Chapter Focus

This chapter serves as part of a broader framework within this monograph for examining the role of media in influencing tobacco use. Chapter 2 discusses how media work to influence behavior in general. Chapter 9 discusses the role of news media (as opposed to paid advertising or PSAs) in influencing behavior. News media coverage of communitywide, statewide, and national health promotion campaigns and their associated activities help raise public awareness. Finally, Chapter 11 reviews the variety of campaign messages that have been broadcast, as well as the characteristics of antitobacco media messages that appear to perform well, in terms of target audience appraisal and indicators of message processing.

This chapter examines previous media interventions to reduce tobacco use within the context of the methodological challenges associated with both controlled field experiments and population studies.

It outlines the statistical methodological principles that enable a meaningful evaluation to be conducted and the resulting limitations of the conclusions that can be drawn. Other resources that address these issues include a book edited by Hornik¹⁰ and a series of articles concerning the evaluation of the National Youth Anti-Drug Media Campaign published in an edition of *Social Marketing Quarterly*.²⁰

Controlled Field Experiments

Overview

Early community-based studies of cardiovascular disease prevention evaluated communitywide education activities aimed at modifying a broad array of behavioral risk factors, including smoking. These mostly quasi-experimental efficacy studies included the North Karelia Project in Finland^{21–24} and the Stanford Three Community Study.²⁵ In particular, the youth component of the North Karelia Project (described in more detail below) placed a strong emphasis on smoking prevention by using peer- and teacher-led social influence programs in schools, in addition to an adult-focused antismoking mass media campaign, and community activities. Results from these studies for both youth and adults provide initial indications that community-based interventions can effectively reduce aggregate levels of cardiovascular disease risk factors.

Later studies concerning cardiovascular disease prevention, with smoking as an associated risk factor, used approaches similar to the North Karelia Project and the Stanford Three Community Study. Like the earlier studies, this second wave of studies (e.g., the Stanford Five-City Project, the Minnesota Heart Health Program) documented declines in cardiovascular

disease risk factors.^{26,27} However, some of these studies also observed that favorable secular trends occurred simultaneously with the interventions, so researchers were unable to differentiate the intervention from the control communities after secular trends were taken into account.¹⁰ Some of the studies that focused on prevention of smoking among youth or smoking cessation in adults also had to contend with secular trends.

Methodological Issues

Besides the presence of secular trends, a number of methodological problems may explain in part why some controlled field experiments conducted to determine intervention efficacy have failed to show overall significant intervention effects. These studies are outlined below.

Although some controlled field experiments described in this section used a randomized controlled trial,^{25,28–30} others did not. A sufficient number of primary sampling units randomly assigned generally produce comparable study groups. However, in most cases, logistic constraints ruled out a randomized design. In the absence of randomization, most studies attempted to control for baseline differences by matching communities according to demographic characteristics and known or hypothesized correlates of smoking behavior. However, matching communities on the basis of variables that may be only moderately (or weakly) associated with smoking behavior can reduce the statistical power and make it difficult to find a difference that exists, which would constitute a type II error. In addition, precision would not necessarily increase, and the degrees of freedom to estimate the model are also reduced in a matched-pair design.³¹ Adjusting for factors that are not comparable between the communities in a statistical analysis also reduces the degrees of freedom that would be available to test for the interaction effect.

Further complicating the issue of statistical power is that appropriate analyses of field experiments should base the analysis on the primary study units receiving the intervention (e.g., communities, schools). In most experimental studies, cost considerations dictate that the number of such study units is not large.

A related issue is the practice of analyzing individuals rather than the primary study unit. If all individuals in the primary sampling units receiving the intervention simply are compared to all those in the primary sampling units not receiving the intervention, the study sample size is artificially inflated, increasing the chance of inferring that a small difference is significant (inflating the type I error).³² The underlying principle of experimental design is that the units of randomization (or assignment) to the experimental condition and the units of analysis should be the same.

To better understand the necessity to consider variability within primary study units, consider a set of communities assigned randomly to receive, or not receive, a media intervention. Within each community, a random survey of residents is conducted to measure outcomes. By nature of their shared experience within the community, there will be a shared component to their response. Thus, differences in average response between a control community and an intervention community will in part be due to community-level differences unrelated to the study. The randomization of many communities to each study condition will average out these community-level differences. If the community-level source of variation is not included in the analysis, differences between communities may be mistakenly ascribed to an intervention-control difference, inflating the chance of a type I error. Of course, if the variation of average response from community to

community is small, the effect on the type I error also will be small. Studies that use only one community per intervention condition cannot estimate this effect at all; any difference found may simply be due to differences between the two communities.

To further understand the need to account for community-level effects, suppose it were possible to randomize individuals within communities to receive, or not receive, the intervention. In this case, individuals from both the intervention and control groups would be living in each community, and community-level differences would affect both groups similarly, effectively subtracting out the community-level effect.

Although some experimental studies of the use of media to change health behavior have used analytical techniques that account for the hierarchical nature of the design and take into account the variability between the sampling units at each level, others have not. Most analytical techniques to handle these designs are based on mixed-effect models, with careful attention paid to specification of the model terms so that these effects can be properly estimated. Such models, including those now termed hierarchical linear models, can also handle multiple covariates, as is often necessary, for the reasons given above. Describing the specifications of these models is beyond the scope of this section, but these analytical techniques are well presented elsewhere.^{32,33} It should be noted that these analytic methods did not become fully developed with available software until the early 1990s. Many researchers understood this problem and dealt with it to the extent possible by considering the intraclass correlation or other measures of nonhomogeneity within and between their primary sampling units. Designs that account for variability between the primary sampling units will be more precise but at the cost of a reduction in statistical power.^{32,34}

When there are a sufficient number of primary sampling units, true matching, appropriate and multiple measures obtained pre- and postintervention, and analyses that account for the nesting of individuals within the primary sampling units, the quasi-experimental design is considered ideal for the evaluation of field experiments such as the ones described below.³² In reality, the design and conduct of such ideal studies are not possible. As Hornik¹⁰ acknowledged, designs and analyses appropriate to the laboratory are not necessarily applicable to the field, and new approaches to reflect the realities of such research are needed.

Generally, the controlled field experiments used surveys (cross-sectional, longitudinal, or both) to measure outcomes. Multiple cross-sectional surveys often were used to measure trends over time, at preintervention to establish previous secular trends, and during and after intervention, to assess differential change over time. Such a study design can strengthen the basis for causal inference when matching is deficient because each community serves as its own historical control. As long as the samples obtained are representative, and the primary sampling units are not changing their demographics or other characteristics differentially over time, repeated cross-sectional evaluations are appropriate evaluation tools. Even if the population composition changes, standardized estimates can be computed.

Longitudinal or cohort samples of individuals surveyed repeatedly are also appropriate and can establish that the extent of change over time for individuals differs within the type of intervention. However, many longitudinal studies suffer from sample attrition, and the individuals lost may be atypical of the group as a whole. If loss to follow-up differs among the primary sampling units or intervention groups, and is not accounted for in the analysis, interpretation of the results can be complicated. Thus, if the rates of

follow-up differ among groups, such as smokers and nonsmokers, an intervention may appear more or less effective than it really was, depending on which group showed the greatest attrition. For example, if the intervention group experienced less attrition, it would likely contain more smokers at follow-up, making it less probable to detect a difference. Even if the attrition rates are comparable, there may be differences in characteristics among those lost and those successfully followed within their intervention groups. Many of the longitudinal studies reviewed below attempted to establish whether differential attrition might be a problem.

To avoid repetition in the sections below that describe the controlled field experiments involving youth and adults, the studies did not specifically account for individual-level variability within primary sampling units, unless otherwise indicated. All studies that used longitudinal assessment of outcomes suffered attrition to a lesser or greater degree. No comment is given unless there was evidence of differential attrition or if no attrition analysis was reported. Furthermore, the analyses performed generally adjusted for at least demographic or other characteristics that were related to baseline inequalities or differential attrition. Only if studies did not use such methods is it noted. Studies using cross-sectional assessment generally used population-based random household surveys. These are simply referred to as population surveys in the tables and text. The text comments mainly on other important features of the study design, intervention, analysis, and results.

Effects on Youth

Table 12.1 summarizes the controlled field experiments involving youth. The columns of table 12.1 highlight the intervention and methodological characteristics of the various studies discussed below (see last paragraph of previous section). The two

studies that did not allow for assessment of a media effect, either separate from or in addition to other intervention components, are discussed first (North Karelia, Minnesota Heart Health). The remaining studies are presented in more or less chronological order. Three of the youth studies were embedded within efforts primarily aimed at adults to improve cardiovascular health; these include the North Karelia Project, the Minnesota Heart Health Program, and the Stanford Five-City Project. Of the controlled field experiments assessing a media effect on youth, seven found evidence for an effect, and three found no evidence.

The two-year-long North Karelia Project in Finland began in 1978 and included interventions aimed at both adults and youth.²²⁻²⁴ The youth prevention components were school based, and the two intervention arms differed in the nature of the school social influence program: either peer or teacher led. North Karelia received both an adult mass media intervention (see “Effects on Adults” for more information on media intervention) and other community-based activities aimed at adult smoking cessation. The control province received no interventions.

Three groups of students (peer-led, teacher-led, and control) in the North Karelia Youth Project were assessed longitudinally multiple times up to four years after the program began; at least 80% of those surveyed at baseline participated again at each point. Some differences in attrition rates occurred among intervention groups, but differential attrition was not analyzed. The results of this study provided some of the earliest evidence that a combined school and communitywide campaign with a significant media component can reduce youth smoking. Both immediately after the intervention and at four years after the program began, smoking rates were lower in the intervention schools.²² At the four-year follow-up, when students were about

17 years of age, 34% (peer-led) and 27% (teacher-led) of the boys in the intervention schools reported smoking at least once or twice a month, compared with 42% of those in the control schools. For girls, these percentages were 21% (peer-led) and 25% (teacher-led) in the intervention schools and 33% in the control schools. Lower smoking rates in the intervention communities persisted at 8-year follow-up and 15-year follow-up, but only for baseline nonsmokers. At the 15-year follow-up, there was no evidence that youth smokers quit at higher rates in the intervention communities than in the control communities.^{23,24}

The Minnesota Heart Health Program was another study that evaluated youth outcomes in a study aimed at reducing cardiovascular risk factors, including smoking, among adults.³⁵ School-based health and smoking prevention programs to influence social and psychological factors were instituted in schools in one intervention community with its matched community serving as the control. The intervention community received the mass media campaign and the community-based, adult-focused activities. The control community received neither. Thus, only the combined intervention could be compared to no intervention. All students in all schools in the two youth study communities were surveyed in 1983 when they were 6th graders and then annually until they were seniors in high school. Results from both longitudinal and cross-sectional surveys showed a marked reduction (about 40% for cross-sectional surveys) in weekly smoking prevalence for high school seniors in the intervention community compared with the control community.

Like the North Karelia Project and the Minnesota Heart Health Program, the Stanford Five-City Project also aimed its mass media primarily at adults (see “Effects on Adults”). However, no intervention was specifically for youth; the study

Table 12.1 Summary of Reviewed Controlled Field Experiments: Youth

Study	Intervention description	Target group	Study design	Assessment mode/outcomes/analysis	Main results
North Karelia (Youth) Vartiainen et al. 1986, ²² Vartiainen et al. 1990, ²³ Vartiainen et al. 1998 ²⁴ Started in 1978. Finland	C = no intervention. I = peer-led social influence school program plus adult-focused mass media campaign plus community activities aimed at promoting cessation among adults. P = teacher-led social influence school program plus adult-focused mass media campaign plus community activities aimed at promoting cessation among adults. Lasted 2 years.	7th graders (12- to 13-year-olds) received school program for 2 years.	Quasi-experimental: 4 schools in North Karelia (intervention province) received school program and were compared with 2 schools in a control province that did not receive it, starting in 1978. Schools selected to match for various characteristics.	Smoking at least once or twice a month was assessed in the same cohort pre- and postintervention, with additional follow-ups later. Some differences in follow-up rates, not analyzed. Analysis of simple proportions smoking at each follow-up.	At 4-year follow-up, smoking prevalence was significantly lower in both intervention groups, relative to the comparison group. At 8- and 15-year follow-ups, smoking initiation rates were still lower for baseline nonsmokers in the intervention groups, with no difference in quit rates for baseline smokers.
Minnesota Heart Health Program (MHHP) (Youth) Perry et al. 1992 ³⁵ Started in 1983.	C = no intervention. I = health behavior and smoking prevention school program plus mass media focused on heart health, including smoking cessation. Lasted 6 years.	6th graders in all 13 grade schools in MHHP study; community and matched control community.	Quasi-experimental: 1 community participating in the MHHP with its 1 matched control community in South Dakota.	Weekly smoking prevalence and smoking intensity among students in all schools in each community assessed annually (longitudinally and cross-sectionally) until their senior year in high school. Intraclass correlation considered in analyses. Attrition analysis showed bias in favor of finding no effect.	Both longitudinal and cross-sectional results showed significantly less weekly smoking and lower smoking intensity for the students in the intervention community compared with the control community. Results were present early and maintained through the senior year.
Stanford Five-City Project (Youth) Fortmann et al. 1995, ⁴³ Winkleby et al. 1993 ³⁶ Started in 1979.	C = no intervention. I = media advocacy and (primarily) adult-focused antismoking advertising. Lasted 6 years.	12- to 24-year-olds	Quasi-experimental: 2 pairs of matched communities in each condition.	Cross-sectional population surveys assessed daily smoking prevalence before, during, and following the intervention.	At no time (1979-90) was there a difference in daily smoking prevalence between intervention and control communities. Strong secular trend present.

Study	Intervention description	Target group	Study design	Assessment mode/outcomes/analysis	Main results
Flynn et al. 1992, ³⁸ Flynn et al. 1994, ³⁹ Flynn et al. 1995 ⁴⁰ Flynn et al. 1997, ⁴² Worden et al. 1988, ³⁷ Worden et al. 1996 ⁴¹ Started in 1985.	C = school-only antismoking educational program. I = school-based education (same as C) plus television and radio antismoking media campaign. Lasted 4 years.	4th, 5th, and 6th graders	Quasi-experimental: 2 pairs of matched study communities assigned to intervention on the basis of available media markets.	Smoking behavior index, which can be interpreted as the number of cigarettes smoked per week, any smoking in the past week, or smoking yesterday. Longitudinal cohort of youth randomly selected from metropolitan statistical areas (MSAs) was surveyed at baseline and annually until 2 years postintervention. Analyzed both on an individual and community basis. Unclear whether community-level analysis accounted for individual-level variability.	At 2 years postintervention, students receiving the full intervention were significantly lower on the smoking index (41%), smoking last week (35%), or smoking yesterday (34%) reports than those receiving only the school curriculum. The combined program appeared particularly effective in high-risk youth.
Bauman et al. 1988, ⁴⁴ Bauman et al. 1991 ²⁸ Started in 1985.	C = no intervention. I ¹ = radio antismoking messages. I ² = same as I ¹ plus radio advertisement of a nonsmoking sweepstakes (encouraging communication with peers to discourage smoking). I ³ = same as I ² plus television advertisement of the sweepstakes. Lasted 15 months.	12- to 14-year-olds	Prescreened standard MSAs were randomly allocated (2 each) to intervention and control conditions.	Longitudinal sample of adolescents in probability sample of households in MSAs assessed for a number of attitudinal and smoking behavior variables at baseline and 11 and 17 months postintervention. Individual-level variation taken into account in analysis of MSAs.	No differences in smoking behavior detected at 11 and 17 months postintervention. Moderate effect of the radio campaign (I ¹ and I ²) on expected consequences of smoking.

Table 12.1 Summary of Reviewed Controlled Field Experiments: Youth (*continued*)

Study	Intervention description	Target group	Study design	Assessment mode/outcomes/analysis	Main results
Television, School, and Family Smoking Prevention and Cessation Project Brannon et al. 1989, ⁴⁷ Flay et al. 1988, ⁴⁵ Flay et al. 1995, ²⁹ Sussman et al. 1989 ⁴⁶ Started in 1986.	Los Angeles: C ¹ = no treatment. C ² = basic health information curriculum only. I ¹ = school-based (social-resistance) education. I ² = television media intervention. I ³ = school-based education plus television media intervention. San Diego: C = no treatment. I = school-based (social-resistance) education only (no television). Lasted 4 years.	12- to 14-year-olds	Schools in Los Angeles (35; 7 per condition) and San Diego (12; 6 per condition) randomly assigned to treatment conditions.	Students assessed longitudinally twice in the 7th grade and once in each of grades 8 and 9. Smoking in the past week and ever smoking analyzed. Analysis accounted for individual variability within classrooms within schools.	No significant effects on smoking behavior (at 2-year follow-up). Strong, significant effects on knowledge of smoking consequences, perceived smoking prevalence, and efforts to resist trying cigarettes.
Project Sixteen Biglan et al. 2000 ³⁰ Started in 1990.	C = school intervention only. I = school intervention plus community intervention with paid antismoking media on radio. Lasted 3 years.	7th and 9th graders	8 matched pairs of small Oregon communities were randomly assigned to 1 of the 2 conditions.	All 7th and 9th graders in all schools in each community surveyed annually and cross-sectionally (before, 3 during, after). A composite measure of weekly smoking was evaluated. Analyses nested students within communities.	At both project completion and 1-year follow-up, students in the school plus community intervention had significantly lower rates of past-week smoking.
Hafstad and Aaro 1997, ⁴⁸ Hafstad et al. 1996, ⁴⁸ Hafstad et al. 1997, ³⁰ Hafstad et al. 1997 ⁵¹ Started in 1992. Norway	C = no intervention. I = three consecutive waves of mass media campaigns designed to prevent adolescent smoking (newspaper advertisements, poster, television spot, and cinema spot). Each of 3 waves of media had a different message focus and was broadcast for 3 weeks once a year. Lasted 3 years.	14- to 15-year-old students. Both males and females, but females were targeted.	Quasi-experimental: 1 pair matched counties. Unknown basis for assignment to I or C.	Daily, weekly, less than weekly, occasional, or nonsmoker status analyzed with longitudinal assessment at 6–12 months and at 3 years (1 year after 3rd campaign). Main analyses examined any current smoking with interaction effects of baseline status and gender. Attrition slightly higher in C, but differential attrition not analyzed.	3-year follow-up: significant reduction in overall odds of being a smoker for I group compared with C group for males and females. Reduction in odds of smoking for baseline male and female smokers. Reduction in odds of smoking for baseline nonsmokers evident only for the females.

Study	Intervention description	Target group	Study design	Assessment mode/outcomes/analysis	Main results
<p>Texas Tobacco Prevention Pilot Initiative Meshack et al. 2004⁵² Started in 2000.</p>	<p>C = no intervention. I¹ = no program/no media. I² = no program/low media. I³ = no program/intensive media. I⁴ = enhanced school/no media. I⁵ = enhanced school/low media. I⁶ = enhanced school/intensive media. I⁷ = multicomponent/low media. I⁸ = multicomponent/intensive media. I⁹ = multicomponent/low intensive media. Lasted 6 months.</p>	<p>6th graders</p>	<p>8 sites selected for maximum ethnic diversity. Random assignment of intervention level to communities contingent on having a unique media market. The largest and most ethnically diverse school in each community was selected for evaluation. In some cases, 2 schools were selected; 11 schools evaluated altogether.</p>	<p>Before-and-after cross-sectional school surveys evaluated student attitudes and tobacco use (any in the last 30 days), and susceptibility to smoking.* Preintervention survey conducted in spring 2000. Various interventions took place during the summer and fall of 2000, with the postintervention survey of a new 6th-grade cohort taking place in late fall 2000. Analyses considered intraclass correlation within schools.</p>	<p>Combining the intensive or low-media campaign with the multicomponent community program (I⁷ or I⁸) was most effective in suppressing positive attitudes toward smoking. Combining the intensive media campaign with the multicomponent community program (condition I⁹) consistently reduced tobacco use, susceptibility to smoking, and prosmoking attitudes. Smoking was reduced more in I² than in I³, but neither tested against C.</p>
<p>Slater et al. 2006⁵³ Started in 1999.</p>	<p>I¹ = no intervention. I² = no community media, no in-school curricula, in-school media only. I³ = community media, no in-school media, curricula. I⁴ = community media, in-school media, curricula. Communities selected from all regions of the U.S. 2-year media period staggered for communities. Study ended in 2003.</p>	<p>Middle and junior high school students, mean age 12.2 years.</p>	<p>2 schools in 8 no-media communities randomly assigned to I¹ and I², and 2 schools in 8 media communities randomly assigned to I³ and I⁴. Randomization constrained.</p>	<p>Longitudinal sample measured at preprogram, following curriculum, and twice thereafter. Four-level model included time, student, school, and community.</p>	<p>Study evaluated marijuana, alcohol, and smoking uptake. The community-media interventions (I³ and I⁴) significantly reduced uptake rates for all substances. Lowest uptake rates by 4th survey observed for condition I⁴.</p>

*Never smokers who do not rule out trying a cigarette or taking one from a friend, if offered, are susceptible to smoking. See chapter 7 for further discussion.

measured youth (aged 12–24 years) smoking prevalence in addition to adult health outcomes.³⁶ In this study, two sets of matched communities received the media intervention and the others did not, making a direct assessment of mass media effects possible. The program began in 1977 and lasted for six years. Cross-sectional surveys before, during, and after the intervention did not detect a difference in youths' daily smoking prevalence between the control and intervention communities.

Students in two matched pairs of communities in Vermont and Montana received either a combination of media (television and radio) and school interventions, or the school intervention alone, over a four-year period. The school intervention, based on social influence theories, conveyed refusal skills, accurate social norms, positive views of nonsmoking, and negative views of smoking.^{37–42} The paid media intervention consisted of 15 television and 8 radio spots broadcast at intervals over the intervention period. Within each matched pair of communities, one was assigned to receive each condition. Thus, the media effect above and beyond the school intervention could be evaluated. Students who completed the baseline assessment were assessed annually over the four-year campaign period, with an additional follow-up occurring two years after completion of the campaign. This sustained campaign was associated with a reduction in youth smoking. Smoking rates after campaign completion were 34% to 41% lower among students exposed to both the antitobacco advertising campaign and the school programs compared with those exposed to the school programs alone.³⁸ These effects persisted at the two-year postcampaign follow-up.³⁹ Notably, these results were even more pronounced for high-risk students, particularly high-risk girls.⁴¹

Overall, this study provides strong evidence that a program using both mass media and

school-based programming is more effective than one using school-based programming alone.⁴² The added value of the media campaign may be most pronounced for high-risk youth in the study; they were found to watch more television and listen to more radio.

In a study conducted in the southeastern United States, Bauman and colleagues²⁸ compared three different strategies of mass media with a control group who did not receive any intervention. This study was designed to evaluate the effectiveness of a radio campaign about the expected negative consequences of smoking, along with television and print-media messages delivered by mail. These campaign messages were designed to provide personal encouragement not to smoke. The study occurred over a 15-month period beginning in 1985, with follow-up conducted two years after baseline, 11–17 months after the broadcast, and two to eight months after the mailed intervention.²⁸ The media messages used in this campaign were rigorously developed on the basis of a number of behavioral theories and were tested during an extensive formative period.⁴⁴

Bauman and colleagues²⁸ used a cluster sampling procedure to identify a probability sample of households within standard metropolitan statistical areas (MSAs). They selected regionally matched communities. Nonetheless, baseline smoking rates varied substantially among the standardized MSAs. Analyses accounted for interindividual variability within MSAs. No significant difference in the change in smoking prevalence over time between the groups was detected. However, there was some evidence of a positive effect on expected consequences of smoking and peer approval of smoking. The media campaign was of short duration and may not have been sufficient to produce changes in smoking behavior. A further analysis⁵⁴ indicated that the differences between

communities that persisted, even after controlling for a wide range of demographic and personality covariates, limited the power of the study to detect change.

The Television, School, and Family Smoking Prevention and Cessation Project^{29,45-47} randomly assigned schools in Los Angeles and San Diego, California, to intervention groups. The design for Los Angeles was more complex than for San Diego, which was restricted to a school program versus a no-intervention group. In Los Angeles, there were two control groups (no intervention and an attention placebo) and three intervention groups: school program, television, and both. Both the school program and the television spots were designed to foster social resistance to smoking. A cohort of students in 340 classes in 35 Los Angeles and 12 San Diego schools were assessed at baseline (January 1986), immediately postintervention (April 1986), and at one and two years later. The program lasted four years. Changes in scores at each assessment were analyzed separately in a hierarchical linear model that accounted for students within classrooms within schools. Randomization produced very comparable groups at baseline. No treatment condition was associated with smoking in the past week at any follow-up. However, both intervention types had some favorable effects on knowledge and on students' estimates of smoking prevalence among youth and among adults. The authors attribute the lack of any intervention effect on smoking behavior to poorly executed television programming and significant variability in the integrity of classroom program delivery. Also, the program was of relatively short duration.

Biglan and colleagues³⁰ matched 16 small Oregon communities (8 pairs) and randomly assigned them to receive either (1) a school-based prevention program, or (2) the school-based program in addition to

a community program that included media advocacy, youth antitobacco activities, family communication about tobacco use, and policies aimed at reducing youth access to tobacco. The media advocacy involved paid advertisements and radio PSAs, newspaper articles, presentations to local civic groups, and posters. The program lasted three years at each site. The school curriculum used a social influences approach and was designed for students in grades 6-12. Cross-sectional surveys of students from 7th grade and 9th grade were conducted five times from baseline until one year after the end of the intervention. The combined school and community intervention was associated with a significant reduction in prevalence one year after the intervention was completed, compared with the school-only condition.³⁰ This study supports the findings of Flynn and colleagues⁴⁰ and provides additional evidence that a mass media campaign (when combined with other components) can reduce smoking rates.

A three-wave mass media campaign from Norway was designed to assess the effect of mass media alone.⁴⁸⁻⁵¹ Three distinct media campaigns of three weeks' duration were directed at adolescents in one county over a three-year period (1992-95). The campaign, designed to be provocative, was intended to elicit negative affective reactions and to stimulate communication among peers. It used newspaper advertisements, posters, and television and cinema spots. Two campaigns were specifically designed to engage girls, while the third was directed toward both girls and boys. A baseline survey of all eligible youth aged 14 and 15 years (longitudinal cohort) was conducted in both the intervention county and the control county before the first of three media campaigns. Attrition was slightly higher for the no-intervention group, but possible effects were not analyzed. At the completion of the final media campaign, nonsmoking youth at baseline were less likely to smoke at follow-up in the intervention county

compared with youth in the control county. The overall increase in the percentage of daily smokers was significantly lower among girls in the intervention county than in the control county. Findings were not significant for boys, although the results appeared to be in the same direction. The campaign was primarily aimed at girls, so this finding was expected.

A relatively short-term (six months) intervention study in Texas evaluated the effect of antitobacco media, enhanced school programs, and community-based programs on middle-school students' smoking.⁵² Sites were identified on the basis of ethnic diversity and then randomly assigned to the various levels of intervention: media (none, low, and intensive); programs (none, enhanced school program based on social influence theory); and multicomponent (both school- and community-based programs). Two schools were selected for some intervention levels. Surveys were administered to 6th graders in spring 2000 before the intervention at 11 schools—selected to be the most ethnically diverse schools possible—and repeated on a new sample of 6th graders in the fall. Schools were the primary unit of analysis, and intraclass correlation within schools was considered in the analysis. Smoking and positive beliefs about smoking declined the most between the pre- and postintervention evaluations among the students at the sites with the highest levels of intervention. These schools also had the highest baseline smoking rates. The media-alone results were not consistent: the low-media condition showed a greater reduction in smoking than did intensive or no media exposure.

Another study aimed to discern the effect of a communitywide media campaign on the initiation of marijuana, alcohol, and cigarette use among middle and junior high school students in all regions of the United States.⁵³ Eight communities received the media program (brochures,

press releases, advertised special events, posters, and radio PSAs), and eight did not. Within the set of eight communities that received media, schools were randomly assigned either to receive or not to receive an in-school media campaign consisting of posters, book covers, tray liners, T-shirts, water bottles, rulers, and lanyards. Schools in the no-media communities were randomly assigned either to no treatment or to the in-school media condition. Schools in each set of communities also were randomly assigned either to receive or not to receive an anti-substance-use curriculum based on social influence theory. The randomization process was constrained by using a group-matching strategy to reduce the potential for confounding from community differences. The media interventions lasted for two years but were staggered over a four-year period among communities. A hierarchical model was used to assess the uptake endpoints: measurement time within student, student within school, school within community, and community within media condition. The results showed reduced (at least 50% less) substance uptake over time for students exposed to both community and in-school media compared with those not exposed to any media. Marijuana and alcohol uptake appeared more reduced than was cigarette initiation, but the media emphasized the other substances more than cigarettes. The media effect was similar regardless of whether or not students participated in the anti-substance-use curriculum. The study did not examine the community media effect separately from the in-school media effect but concluded that these types of media together could reduce substance uptake.

Effects on Adults

Many of the controlled field experiments described below were aimed at improving cardiovascular health, and these projects included intervention components to promote healthy eating and to increase

exercise as well as to reduce smoking. Other projects were specifically designed to reduce smoking. As in the youth studies, some studies of adults allowed for the evaluation of media alone in influencing smoking behavior and others for evaluating only media in combination with other intervention components. Of the 10 studies reviewed concerning the promotion of cardiovascular health, only two allowed for the media component to be evaluated separately from all other components: the Stanford Three Community Study²⁵ and the Coronary Risk Factor Study (CORIS).⁵⁵ However, six of the eight studies specifically concerned with smoking cessation allowed for a separate evaluation of the media component. Table 12.2 summarizes the details of these studies and is organized into sections for general cardiovascular health promotion and smoking cessation, with results described more or less chronologically. Of the ten controlled field experiments concerning cardiovascular health, seven showed at least some evidence for an effect on reducing smoking behavior; of the nine field experiments promoting reduced smoking, eight showed some reduction.

Cardiovascular Health

The Stanford Three Community Study,²⁵ the Australian North Coast's "Quit for Life" program,⁵⁶ and the CORIS⁵⁵ used very similar study designs that allowed a media component to be evaluated separately. These studies are described first, followed by studies for which a media component could not be evaluated separately.

The Stanford Three Community Study²⁵ began in 1972 and was one of the earliest community-based field experiments. It used a quasi-experimental design in which three communities were randomly assigned to receive (1) a mass media campaign (radio and television programming and spots, weekly newspaper columns,

newspaper advertisements, and printed material), (2) a mass media campaign and intensive face-to-face intervention, (3) or no intervention (control). With the use of a population-based longitudinal sample, reductions in self-reported cigarette consumption were examined, presumably among all cohort participants, with nonsmokers defined as smoking zero cigarettes per day. Thus, this measure does not distinguish between smokers quitting by follow-up or simply decreasing their daily consumption. Change in smoking prevalence within the cohort would have provided stronger evidence. The analyses were based on comparisons of unadjusted mean changes in consumption, and differential attrition was not examined. After two years, lower self-reported cigarette consumption occurred in the mass media and intensive face-to-face intervention than in the control condition (a net reduction of 24.1% and 2.5%, respectively). The group that received the mass media intervention alone also experienced a significant reduction in cigarette consumption, but the difference was not as large (7.3%). The high-risk cohort showed even greater reductions at two years: 13.8% for the media-only intervention and 42.3% for the media and intensive face-to-face program versus 17.2% in the control community. It is likely that a portion of these reductions is from smokers' quitting.

The Australian North Coast Healthy Lifestyle Programme included a strong component directed at smoking cessation: "Quit for Life."⁵⁶ This program was also patterned after the Stanford Three Community Study and was instituted in three small communities in New South Wales, Australia. The "Quit for Life" campaign began in 1978 and used a social marketing approach with an aim of reducing the prevalence of smoking. The quasi-experimental design was used to evaluate the effects of a mass media campaign alone (TV, radio, newspapers, posters, etc.) in one community compared

Table 12.2 Summary of Reviewed Controlled Field Experiments: Adults

Study	Intervention description	Target group	Study design	Assessment mode/outcomes/analysis	Main results
Stanford Three Community Study Maccoby et al. 1977 ²⁵ Started in 1972.	C = no intervention (Tracy). I ¹ = extensive mass media campaign (Gilroy). I ² = same as above plus individual risk-reduction counseling for high-risk subjects (Watsonville). Lasted 2 years.	35- to 59-year-olds. Individuals at high risk for cardiovascular disease were identified and analyzed separately.	Cardiovascular Health Promotion Trials Quasi-experimental: 2 cities as intervention sites and 1 city as the comparison.	Longitudinal assessment with baseline data collected in 1972, immediately preceding the intervention and at follow-up at 1 and 2 years after the intervention began. Subjects reported the number of cigarettes smoked per day; presumably, nonsmokers were analyzed as smoking zero cigarettes per day. Unadjusted analysis of change. Differential attrition not analyzed.	After 2 years, the I ² city (Watsonville) had a significantly lower self-reported cigarette consumption than the C city (Tracy). The reduction was not as great, but still significant for the I ¹ city (Gilroy). Results were similar for high-risk subjects, but with even higher net reductions in consumption, suggesting substantial quitting.
North Coast "Quit for Life" Programme Egger et al. 1983 ⁵⁶ Started in 1978. Australia	C = no intervention (Tamworth). I ¹ = mass media program (Coffs Harbour). I ² = mass media program and community program (Lismore). Media and other programs aimed to alter coronary risk factors. Lasted 2 years.	18 years and older	Quasi-experimental: 2 intervention towns and a comparison town. Intervention applied to 2 towns that shared common media market. Towns not well matched.	Cross-sectional random population surveys at baseline and year 1 and year 2 were used to assess current smoking status, knowledge, and attitudinal factors.	After 2 years, compared with C, there was a greater reduction in smoking prevalence among both men and women in I ¹ and I ² . The reduction was better sustained (year 2) in Lismore (I ²). There were no significant changes in knowledge or attitudes.

Study	Intervention description	Target group	Study design	Assessment mode/outcomes/analysis	Main results
<p>Coronary Risk Factor Study (CORIS)</p> <p>Rosouw et al. 1993,⁵⁵</p> <p>Steenkamp et al. 1993,⁵⁷ Steyn et al. 1997⁵⁸</p> <p>Started in 1979.</p> <p>South Africa</p>	<p>C = no intervention (Riversdale). I¹ = mass media (Swellenden). I² = mass media and community based (Robertson). Lasted 4 years.</p>	<p>White persons 15–64 years of age.</p>	<p>Quasi-experimental: 3 matched communities assigned to intervention groups. Intervention areas shared common boundary; control community was remote.</p>	<p>Cross-sectional surveys of entire white population conducted at baseline (1979) and follow-up (end of intervention and 12 years). Those surveyed both times were used in a cohort analysis. Surveys assessed self-reported risk factors, including current regular smoking and consumption level.</p>	<p>At the 4-year follow-up, the cohort analysis showed the overall change in smoking prevalence and cigarette consumption were similar in I¹ and I² and greater than in C. Effect greater for women. At the 12-year follow-up, smoking prevalence and cigarette consumption were lower in I¹ but not in I², compared to C.</p>
<p>North Karelia Project (Adults)</p> <p>Jousilahti et al. 1994,⁶²</p> <p>Puska et al. 1983,²¹</p> <p>Puska et al. 1985,⁶³</p> <p>Puska et al. 1985,⁶⁴</p> <p>Puska et al. 1989,⁶⁵</p> <p>Vartiainen et al. 1991,⁵⁹</p> <p>Vartiainen et al. 1994,⁶⁰</p> <p>1998^{24,61}</p> <p>Started in 1972.</p>	<p>C = no intervention. I = changes in community organizations, involvement of many sectors of the community, the use of mass media, screening, appropriate practical skills training, provision of social support for behavior change, environmental modifications, special training of public health nurses to provide smoking cessation advice and counseling. Lasted 5 years.</p>	<p>25- to 64-year-olds</p>	<p>Quasi-experimental: 2 matched communities. Compared cardiovascular risk factor changes in North Karelia (I) and Kuopio (C).</p>	<p>Cross-sectional population surveys assessed daily smoking prevalence at baseline, before the intervention, and at the end of the intervention. Changes in prevalence of regular smoking.</p>	<p>After 5 years, compared with Kuopio, smoking prevalence had declined significantly more among men in North Karelia, but not among women. The difference was even greater for men at 10 years, but changes thereafter were small.</p>

Table 12.2 Summary of Reviewed Controlled Field Experiments: Adults (*continued*)

Study	Intervention description	Target group	Study design	Assessment mode/outcomes/analysis	Main results
Stanford Five-City Project (Adults) Farquhar et al. 1990; ⁶⁸ Fortmann et al. 1993; ²⁶ Fortmann et al. 1995; ⁴³ Fortmann & Varady 2000; ⁶⁶ Winkleby et al. 1996 ⁹⁷ Started in 1980.	C = no intervention. I = multicomponent community media campaign aimed at improving cardiovascular disease risk factors. Lasted 6 years.	25- to 74-year-olds	Quasi-experimental: 2 pairs of matched communities, assigned to intervention on the basis of shared mass media market. Another city was observed for cardiovascular morbidity and mortality.	Cross-sectional population surveys assessed smoking status, knowledge, and quitting behavior at baseline 2 years before the intervention, at alternate year intervals during the intervention, and at 2 years after the intervention. A cohort sample was embedded within the multiple cross-sectional surveys.	Cross-sectional analysis: smoking prevalence fell to a comparable extent in both intervention and comparison cities. Cohort follow-up analysis: the 2 intervention cities showed greater declines in smoking prevalence than the 2 comparison cities. There were no differences in knowledge of the risks of smoking, "confident could quit," or negative attitudes to smoking. "Intent to quit" was significantly higher in the intervention cities.
Minnesota Heart Health Program (Adults) Lando et al. 1995; ³⁴ Luepker et al. 1994 ²⁷ Started in 1980.	C = no intervention. I = multicomponent community program (including mass media). Lasted 5 years.	25- to 74-year-olds	Quasi-experimental: 3 sets of matched cities, assigned to intervention on the basis of shared media market.	Cross-sectional and cohort population surveys were conducted for 4 years before the interventions, annually during the intervention, and 2 years after to gain health information, including current smoking status.	Cross-sectional analysis: compared with control, women in the intervention cities showed a greater decline in smoking prevalence, while men showed no difference. Cohort follow-up analysis: neither men nor women showed any differences between intervention cities and comparison cities.

Study	Intervention description	Target group	Study design	Assessment mode/outcomes/analysis	Main results
Heartbeat Wales Tudor-Smith et al. 1998 ⁶⁶ Started in 1985. Wales	C = no planned activities to promote cardiovascular health. I = planned activities related to smoking, including TV series on BBC, quit and win program, promotion of nonsmoking areas in restaurants, and worksite programs. Lasted 5 years.	18- to 64-year-olds	Quasi-experimental: 9 districts in Wales (I) compared with 4 districts in Northern England (C), chosen for similar health profiles.	Cross-sectional population surveys pre- and postintervention (stratified by age), obtained smoking status and cigarette consumption. Individual- and community-level analyses conducted of net changes between intervention and reference communities.	Smoking prevalence and consumption declined in both intervention and control communities, and the declines were not significantly different.
Kilkenny Health Project Shelley et al. 1995 ⁷⁰ Started in 1986. Ireland	C = no intervention. I = variety of health promotion projects and events, "supported by coverage in local media" (apparently the local newspapers and a radio station). Lasted 7 years.	35- to 64-year-olds	Quasi-experimental: Kilkenny (willing to cooperate) matched to remote control community (County Offaly).	Independent cross-sectional selections of persons from voter roles, stratified by age and sex. Visits conducted by nurses (pre- and postintervention) to obtain measures and administer questionnaire that included questions on smoking (at least 1 cigarette per day). Samples small. Net change compared between communities within gender.	Males apparently reduced their smoking more in the reference community and females more in the intervention community, but neither of these differences was significant.
Hoffmeister et al. 1996 ⁷¹ Started in 1987. Germany	C = no intervention. I = special programs targeted to each cardiovascular risk factor. For smoking, these included cessation courses, local media campaigns including an intensive poster campaign, and designation of nonsmoking areas in public places. Lasted 4 years.	25- to 69-year-olds	Quasi-experimental: 6 intervention regions were compared with a national sample (excluding the intervention regions) of areas, chosen to be representative of the former West Germany.	Representative cross-sectional samples pre- and postintervention. Persons invited for a physical exam and filled out a questionnaire about smoking and other health behaviors. Samples in C and I weighted to make them comparable. Analyses accounted for intraregion variability.	From 1985 to 1991, the prevalence of smoking declined significantly more in the intervention regions than in the rest of the country.

Table 12.2 Summary of Reviewed Controlled Field Experiments: Adults (continued)

Study	Intervention description	Target group	Study design	Assessment mode/outcomes/analysis	Main results
O'Loughlin et al. 1999 ⁷² Started in 1992. Canada	C = no intervention (St. Henri). I = multicomponent intervention, including videos broadcast on local TV and distributed to community groups (Centre-Sud). Lasted 4 years.	18- to 65-year-olds	Quasi-experimental: 1 pair of matched communities of low socioeconomic status, selected and assigned to condition for logistical considerations. Communities adjacent.	Cross-sectional (before and 3 years after beginning of intervention), and longitudinal surveys (baseline and 5 years).	No difference in change in smoking prevalence detected pre- and postintervention with either cross-sectional or longitudinal data. However, the percent of heavy smokers (≥ 25 cigarettes/day) showed a marginally greater decline in the intervention community.
Smoking Cessation or Reduction Trials					
Sydney "Quit for Life" Program Dwyer et al. 1986; ⁷⁴ Pierce et al. 1986; ⁷³ Pierce et al. 1990; ⁷⁵ Started in 1983. Australia	C = no intervention. I = antismoking media campaign (mostly TV, but radio and newspapers as well) with some of the ads promoting a quiltline and quit centre at Sydney Hospital. Lasted 7 years, but evaluated at 1 year, before program implementation in Melbourne.	16 years and older	Sydney (I) compared with Melbourne (C).	Early results for smoking status, cigarette consumption and quitting behavior assessed longitudinally in a panel identified from a random household survey. Persons moving between cities excluded from analysis of proportions. Long-term results assessed with repeated cross-sectional surveys and a model of trends.	Before the intervention was implemented in Melbourne, significantly more smokers in Sydney either quit or cut their cigarette consumption compared with Melbourne. Relapse and initiation rates were similar. After implementation in Melbourne, this city as well as Sydney showed declines in smoking.
Community Intervention Trial for Smoking Cessation (COMMIT) The COMMIT Research Group 1995; ⁷⁶ The COMMIT Research Group 1995; ⁷⁷ Started in 1989.	C = no intervention. I = 4 components: (1) public education through media and communitywide events, (2) health care providers, (3) workites and other organizations, (4) cessation resources. Lasted 4 years.	25- to 64-year-olds	Quasi-experimental: 11 matched pairs of communities, randomly assigned to C and I.	Cross-sectional population surveys pre- and postintervention, with embedded longitudinal cohort of heavy smokers (≥ 25 cigarettes/day). Cohort sample weighted for attrition.	Cohort analysis: no significant difference in quit rate observed by study end among heavy smokers in C and I communities. Effect was observed in light-to-moderate smokers. Cross-sectional analysis: no significant difference in changes in smoking prevalence, heavy smoking prevalence, daily cigarette consumption, or quit rates.

Study	Intervention description	Target group	Study design	Assessment mode/outcomes/analysis	Main results
American Stop Smoking Intervention Study (ASSIST) NCI 2005; ⁷⁸ NCI 2006; ⁷⁹ Stillman et al. 2003 ⁸⁰ Started in 1993.	C = no seed money. I = seed money to build tobacco control capacity, some of which likely was spent on promoting media advocacy. Intervention phase lasted 6 years, prior to evaluation.	18 years and older	17 states selected by application to receive seed money. Others did not receive money.	Population surveys (1992–93, before intervention) and (1998–99) and cigarette sales data. State was the unit of analysis, with individual variability accounted for in a 2-stage analysis.	Smoking prevalence declined nationwide by 2.4% over evaluation period, but significantly greater in ASSIST states (3.0% vs. 2.1%). The decline in per capita cigarette consumption was not statistically different.
A Su Salud McAlister et al. 1992 ⁸¹ Started in 1986.	C = no intervention (Del Rio). I ¹ = mass media and volunteer network (Eagle Pass). I ² = mass media and intensive contact smoking cessation program (Eagle Pass). I ³ = mass media and brief contact (Piedras Negras). Lasted 4 years.	16- to 60-year-olds	Quasi-experimental: 3 matched Texas border communities. Division of intervention in Eagle Pass randomly determined. Otherwise, communities assigned to intervention conditions for logistical reasons.	Population surveys identified smokers (>9 cigarettes/day) who formed a cohort followed 1 and 2 years postintervention to assess smoking status. Data from I ¹ and I ² pooled for analysis. Sample sizes relatively small (<200). Simple proportions of quit rates at follow-up compared.	At 2 years, cessation rates were higher in Eagle Pass (I ¹ and I ²) than in Del Rio, but Piedras Negras (I ³) was similar to C.
Mudde et al. 1995 ⁸² Started in 1990. Netherlands	C = no intervention. I = local television and posters; and health providers promoted a quitline and other community-based cessation efforts. Lasted 1 year.	25- to 65-year-olds	Quasi-experimental: 1 pair of matched communities randomly assigned to C and I.	Longitudinal panel of smokers identified from population survey, followed up during and after the intervention.	Midpoint results showed a trend for more cessation for I, but final results showed no difference.
Breathe Easy Secker-Walker et al. 2000 ⁸³ Started in 1989.	C = no intervention. I = community efforts, cessation assistance, videotape distributed widely through health provider offices. Lasted 4 years.	Women 18 to 64 years old	Quasi-experimental: 2 pairs of matched counties in Vermont and New Hampshire. Adjacent state border counties received interventions, and remote ones did not.	Cross-sectional population surveys conducted pre- and postintervention assessed smoking status and cigarette consumption. No differences at baseline. Simple change analyzed.	Change in smoking prevalence at postevaluation was not different between C and I; however, smokers in I reduced their consumption significantly more than those in C.

Table 12.2 Summary of Reviewed Controlled Field Experiments: Adults (continued)

Study	Intervention description	Target group	Study design	Assessment mode/outcomes/analysis	Main results
<p>Vietnamese-American Men Jenkins et al. 1997,⁸⁵ McPhee et al. 1995⁸⁴ Started in 1990.</p>	<p>C = no intervention (Houston, Texas). I¹ = multimedia and community interventions (San Francisco/Alameda Counties) 39 months. I² = similar but not identical intervention (Santa Clara County) 24 months.</p>	<p>Vietnamese-American men, aged 18 years and older</p>	<p>Two studies: Houston vs. San Francisco/Alameda and Houston vs. Santa Clara.</p>	<p>Cross-sectional population surveys assessed smoking prevalence and recent quitting.</p>	<p>Prevalence remained the same in C and I², but in I¹, it was significantly lower at follow-up. Quitting in the past 2 years also increased in I¹ compared with C.</p>
<p>Health Education Authority for England's Anti-Smoking TV Campaign McVey and Stapleton 2000⁸⁶ Started in 1992. England</p>	<p>C = no intervention. I¹ = television antismoking campaign. I² = television campaign and locally organized antismoking campaign (Long-Term Care Network). Lasted 18 months.</p>	<p>16 years and older</p>	<p>Four TV regions in central and northern England: One assigned to C, two to I¹ and one to I². Assigned on the basis of need for intervention, resulting in marked baseline differences in smoking rates.</p>	<p>Cohort of smokers and former smokers identified from population survey and followed at 6 and 18 months after program initiation.</p>	<p>The odds ratios for I¹ and I², respectively, 1.53 and 1.67, suggest an increase in nonsmokers. However, I¹ and I² are not significantly different from each other.</p>
<p>Texas Regional Study McAlister et al. 2004⁸⁷ Started in 2000.</p>	<p>C = no intervention. I¹ = low-level media, no community-level cessation activities. I² = high-level media, no community-level cessation activities. I³ = I¹ plus community activities. I⁴ = I² plus community activities. Lasted 6 months.</p>	<p>18 years and older</p>	<p>Quasi-experimental: 19 regions in Texas assigned on the basis of media markets and other logistical considerations to interventions classified as described in left column.</p>	<p>Population surveys conducted at pre- and postintervention. Cohort of daily smokers identified from baseline survey and followed for cessation. Cessation of daily smoking was analyzed. Media exposures also measured.</p>	<p>In both cross-sectional and cohort analyses, intensity of intervention was significantly related to cessation of daily smoking. I⁴ showed highest cessation rates. No separate test of media-only group(s) vs. C presented. Higher level of exposures related to increased cessation in cohort sample.</p>

with the same mass media campaign combined with a variety of community-based programs, including programs for smoking cessation, in a second community. The commercial media campaign was oriented toward changing several coronary risk factors. A third community received no intervention and served as the control. Cross-sectional population surveys showed that, after two years of intervention, both intervention communities experienced a reduction in smoking prevalence greater than that in the control community. Similar to results from the Stanford Three Community Study, these reductions were better sustained in the community that received both mass media and community programming.

CORIS, another cardiovascular risk-reduction program patterned after the Stanford Three Community Study, began in South Africa in 1979 and also produced positive results.⁵⁵ Like the Stanford Three Community Study, CORIS included three towns. One town received a media campaign, one received the media campaign and community-based interventions, and a control town received no intervention. The media campaign involved posters, billboards, mailings, and items in the local newspapers. Cross-sectional surveys of the entire White population of all three towns at baseline and at the end of the intervention allowed for both a cross-sectional assessment and a cohort assessment. The cohort assessment indicated that at the end of the four-year intervention, cigarette consumption and smoking prevalence in the two intervention communities were reduced by a similar amount overall with respect to the comparison community, and the effect was greater for women than for men. At a long-term (12 years) cross-sectional evaluation, overall smoking prevalence rates still were lower in the media-only community but not in the media and community-programming town, which had rates similar to the control community.⁵⁸

The North Karelia Project,^{21,24,59-65} like the Stanford Three Community Study, was one of the earliest community-based intervention studies. It began in 1972 and lasted for five years. In this study, the intervention consisted of both community-based interventions and mass media; therefore, these interventions could not be evaluated separately. The media activities involved liaison with local newspapers and radio and production of printed materials to aid other program components and to publicize program activities. Population surveys assessed smoking prevalence (and other risk factors) at five-year intervals. After five years, the prevalence of regular smoking among men, but not women, had declined significantly more in the intervention community (North Karelia) compared with a control community (Kuopio). A second media program dealing specifically with smoking was aired nationally in 1978 and again a year later.⁸⁸ It consisted of seven weekly programs depicting smokers going through the cessation process. At 10 years, the difference for men in North Karelia had become even more marked; prevalence had declined from 52% to 36% in North Karelia and from 50% to 42% in Kuopio. However, very little change occurred between 10 and 15 years.⁵⁹ Women showed increased prevalence over the 15-year period, likely because diffusion of smoking was still occurring among women in Finland in this era. North Karelia had specifically requested the intervention, and some differences between the intervention and control communities were not accounted for in the analyses.

The Stanford Five-City Project^{26,43,67,68,89} began in 1980 and lasted six years. In this quasi-experimental design to reduce cardiovascular risk factors, two communities received the interventions, two served as the controls, and a fifth community was used to monitor trends in cardiovascular disease data. The interventions used both multicomponent community programs

and mass media interventions that included smoking cessation programs on television and radio as well as PSAs on television. Both cross-sectional and cohort analyses of the Stanford Five-City Project were conducted. Individual and community variability were accounted for in the analyses. Two years after the completion of the intervention, a significant decrease of 13% occurred in smoking prevalence in the cohort that received the intervention compared with the control cohort. Although smoking prevalence also decreased in the cross-sectional analyses, the difference between the intervention and control communities was inconsistent. The authors suggest that with the cross-sectional design and a transient California population, people moving into intervention communities may not have experienced the full intervention. Both the cohort and cross-sectional analyses demonstrated a positive effect on quit rates, with intervention communities experiencing greater quit rates than did the control communities.^{26,89}

The Minnesota Heart Health Program^{27,34} began the same year (1980) as the Stanford Five-City Project and used a similar approach. Three matched pairs of cities were selected. One city from each pair received the intervention, while the other served as the control. The sites were not randomly assigned to these conditions. With respect to smoking, intervention efforts included smoking cessation programs, “quit and win” contests, classes, self-help materials, and in-home telephone and correspondence programs. Media messages were created that sought to aid the audience in understanding the importance of each risk factor and prevention strategies with respect to cardiovascular disease. Both cross-sectional and cohort population surveys were used for evaluation. Results of cross-sectional and cohort analyses indicate that while smoking prevalence fell among men, no significant difference was found

between the intervention and control sites. For women, cross-sectional results pointed to a significant intervention effect. However, results from the cohort analyses showed no significant difference in smoking prevalence in women between intervention and control sites.

Several other trials in countries other than the United States have been patterned after the above cardiovascular-health projects and included some form of mass media as part of a multicomponent intervention.^{69–72} Table 12.2 provides details regarding these studies, initiated between 1985 and 1992 and lasting between four and six years. In general, the media components of the interventions were not substantial. Only one study—with perhaps the largest media component—showed a change in smoking prevalence more pronounced for the intervention condition compared to the control.⁷¹

Smoking Cessation

With evidence for an effect on smoking from the earlier studies designed to promote cardiovascular health, a number of projects were launched specifically to alter smoking behavior. Some of these were targeted toward specific populations, such as women⁸³ or minorities.^{81,84}

Because smoking prevalence nationwide in Australia remained constant from the mid-1970s to the mid-1980s, the state health departments in New South Wales and Victoria decided to build on the success of the earlier “Quit for Life” program that was part of the North Coast Healthy Lifestyle Programme.^{73,74} The new “Quit. For Life” program would be much larger and serve as a demonstration project for possible future nationwide interventions. The new campaign, launched in Sydney in 1983 and in Melbourne in 1984, continued throughout the remainder of the 1980s. Television was the primary medium, accounting

Do “Quit and Win” Programs Work?

Chapter 11 describes media-based smoking cessation contests in which smokers abstinent for a required length of time are eligible to win cash or other prizes. Some studies described in this chapter have included “quit and win” contests as part of their community-based intervention efforts (e.g., Minnesota Heart Health Program, Stanford Five-City Project, Community Intervention Trial for Smoking Cessation [COMMIT], Heartbeat Wales). Furthermore, communities have mounted their own contests, either as part of state or national events (e.g., the American Cancer Society’s Great American Smokeout or World No-Tobacco Day sponsored by the World Health Organization) or as stand-alone programs. In some cases, these contests have been targeted to special populations such as adolescents, young adults, college students, pregnant women, mothers of young children, or the economically disadvantaged.

Program evaluations using controlled field studies or comparisons of quit rates to those in the same (previous) or other locales (concurrent) used biochemical and/or third-party verification of quit status at entry, at the time of eligibility, and at subsequent follow-ups. However, in most programs, either the word of the smoker or a sponsor was sufficient, and only the winners undergo biochemical validation. The length of time smokers need to be abstinent to be eligible for prizes has varied, and various lengths of longer-term follow-up have shown considerable relapse following the contest. A review of 10 such programs found a follow-up quit rate ranging from 7% to 45%.^a This review questioned whether the number of quitters from such contests was sufficient to detect an increase in quit rate; the authors used actual contest data from Australia to estimate that only 0.34% of adult smokers in the targeted population quit due to the contest.

A 2005 review^b found that in three^{c,d,e} of four studies^{c,d,e,f} meeting rigorous criteria (followed quitters for at least six months and used biochemical validation at each step), longer-term quit rates for program participants were significantly higher than in the comparison group.

The population effectiveness of “quit and win” programs depends on the participation rate and how many participants quit smoking. Participation rates can vary according to the resources devoted to publicizing and promoting the event. Further, it is possible that smokers more motivated to quit use the opportunity offered by these programs to take action, but they might have taken action soon anyway.^{a,b} On the other hand, some participants might be motivated simply by the prize and be prone to relapse following the contest.^{a,b} Estimates of participation rates vary from <0.01% to 5% of adult smokers.^b With one-year of abstinence at follow-up as a criterion for successful cessation, the pooled quit rate for the three successful “quit and win” contests was 17.2%.^b Multiplying the participation rates above by the quit rate yields an estimate of the percentage of the population of smokers quitting because of the contest. This result ranged from 0.2% to 0.9% of the population of smokers, bracketing the estimate provided earlier.^a Despite these low rates, the cost per successful quit due to “quit and win” programs is probably less or roughly equivalent compared with other cessation programs.^b

^aChapman, S., W. Smith, G. Mowbray, C. Hugo, and G. Egger. 1993. Quit and win smoking cessation contests: How should effectiveness be evaluated? *Preventive Medicine* 2 (3): 423–32.

^bHey, K., and R. Perera. 2005. Quit and Win contests for smoking cessation. *Cochrane Database of Systematic Reviews*. DOI: 10.1002/14651858. (no. 2) CD004986. <http://www.cochrane.org/reviews/en/ab004986.html>.

^cBains, N., W. Pickett, B. Laundry, and D. McCreedy. 2000. Predictors of smoking cessation in an incentive-based community intervention. *Chronic Diseases in Canada* 21 (2): 54–61.

^dLando, H. A., P. L. Pirie, P. G. McGovern, T. F. Pechacek, J. Swim, and B. Loken. 1991. A comparison of self-help approaches to smoking cessation. *Addictive Behaviors* 16 (5): 183–93.

^eMcAlister, A. L., T. Gumina, E.-L. Urjanheimo, T. Laatikainen, M. Uhanov, R. Oganov, and P. Puska. 2000. Promoting smoking cessation in Russian Karelia: A 1-year community-based program with quasi-experimental evaluation. *Health Promotion International* 15 (2): 109–12.

^fHahn, E. J., M. K. Rayens, C. Chirila, C. A. Riker, T. P. Paul, and T. A. Warnick. 2004. Effectiveness of a quit and win contest with a low-income population. *Preventive Medicine* 39 (3): 543–50.

for two-thirds of the media budget. Each advertisement also promoted a telephone quitline. A longitudinal cohort identified from a population cross-sectional survey was used to assess the immediate impact of the campaign.⁷³ Proportions of smokers who quit, who initiated smoking, and who reduced their cigarette consumption (by ≥ 5 cigarettes/day) were compared for Sydney and Melbourne before the initiation of the campaign in each city. In Sydney, 35% of smokers either quit or reduced

their consumption compared to 18% in Melbourne. There were no differences in relapse rates or initiation rates.

Pierce and colleagues⁷⁵ used cross-sectional data to assess the long-term impact of the program between 1981 and 1987 in each of the two cities. Their data consisted of multiple pre- and postcampaign years of population data for each city. A pre- and posttrend analysis estimated the prevalence of smoking as a function of the onset of

Televised Smoking-Cessation Clinics

In a number of cities, mainly in the 1980s, volunteer organizations (e.g., the American Lung Association) worked with local television stations to provide viewers with information, tips, and support for smoking cessation. The rationale for these mass media projects was the reluctance of many smokers to attend actual smoking-cessation clinics or counseling programs. Furthermore, television stations were agreeable to broadcasting short messages (usually under two minutes) daily for 20 days (some up to six weeks) as a public service in conjunction with news programs, in some cases on both the early and late news. Thus, program cost was low, and potential reach was wide. Coordinated printed self-help materials were generally made available to anyone willing to obtain them.

The evaluation of the effect of such programs presented a number of challenges. The percentage of smokers potentially reached by a single local station and who quit as a result may not be high enough to detect with a reasonably sized population survey. Thus, it would be too costly to compare prevalence or recent quitting in communities with such a program to those in matched communities without any program. In reports describing these projects, smokers were asked to register (via the TV spots, flyers, or newspaper advertisements) and to agree to follow-up contacts for up to two years. Most of the reports simply present the cessation outcomes for this sample; some validated quit rates biochemically. However, a few studies compared registrants to random samples of smokers within the city.^{a,b,c} Often, the registrants were heavier smokers and showed signs of being more motivated to quit (more previous attempts, poorer general health, etc.) than smokers in the general population. Higher motivation likely overcame the greater addiction, leading to cessation rates generally better for registrants than for smokers in the general population.

Flay^d reviewed a number of these televised self-help clinics and concluded that they were probably more cost-effective than face-to-face counseling clinics in producing sustained cessation, but the issues regarding participant characteristics mentioned above were noted. The literature review failed to identify any further reports on televised smoking-cessation clinics after 1992.^c Apparently, focus shifted to other media efforts such as promoting telephone quitlines, discussed later in this chapter.

^aDanaher, B. G., E. Berkanovic, and B. Gerber. 1984. Mass media based health behavior change: Televised smoking cessation program. *Addictive Behaviors* 9 (3): 245–53.

^bWewers, M. E., K. Ahijevych, and J. A. Page. 1991. Evaluation of a mass media community smoking cessation campaign. *Addictive Behaviors* 16 (5): 289–94.

^cWarnecke, R. B., P. Langenberg, S. C. Wong, B. R. Flay, and T. D. Cook. 1992. The second Chicago televised smoking cessation program: A 24-month follow-up. *American Journal of Public Health* 82 (6): 835–40.

^dFlay, B. R. 1987. Mass media and smoking cessation: A critical review. *American Journal of Public Health* 77 (2): 153–60.

the campaign. Within this model, this onset variable yielded estimates of the change in the underlying trend in smoking prevalence associated with the onset of the campaigns in Sydney and Melbourne. Results indicate that in the six months following the launch of the antismoking media campaigns in Sydney and Melbourne, smoking prevalence declined significantly for all people in Sydney and for men in Melbourne. The size of these declines was estimated to be 2.6 percentage points for all people in Sydney and 2.9 percentage points for men in Melbourne. In separate analyses by sex, the authors also found that for men in both cities, the campaigns were associated with a continued decline in smoking prevalence of 1.5 percentage points per year, but women did not show a decline.

The Community Intervention Trial for Smoking Cessation (COMMIT) was a large demonstration project focusing on smoking cessation among heavy smokers (≥ 25 cigarettes/day).^{76,77} COMMIT selected 22 matched communities (20 in the United States and 2 in Canada) and randomly assigned one of each pair to receive the multicomponent intervention and the other to serve as a control. The communities were matched on the basis of geographic location, size, and socioeconomic factors. For four years (1989–92), intervention communities received the intervention, which may or may not have included some mass media elements. Community board members were provided media advocacy training that included building a press strategy, identifying and training spokespeople, analyzing available media resources, learning about smoking prevention and cessation campaign design, planning strategies for countering tobacco industry promotions, and using role models. The objectives of the media effort were to implement and publicize events (e.g., “quit and win” contests), publicize local action plans and activities, and enhance local

coverage of national and regional tobacco-related news. Communities could optionally elect to mount antitobacco media campaigns with donated or purchased time or space.⁹⁰ Some states where the COMMIT communities were located (e.g., California) initiated antitobacco media campaigns during this time. COMMIT was evaluated both longitudinally and cross-sectionally. Analyses adjusted for individual variability within community but did not show a greater cessation rate for heavy smokers in the intervention communities compared with the controls.⁷⁷ Cross-sectional analyses also did not find a difference in changes in smoking behavior for the two groups.⁷⁶ However, an increase in cessation was found among light to moderate smokers.⁷⁷

The American Stop Smoking Intervention Study (ASSIST) was a large-scale demonstration project for which the National Cancer Institute provided seed money of about \$1 million per year to selected states to build tobacco control capacity.^{78–80} Chapter 9 gives more information on the media efforts promoted by this project. The ASSIST intervention involved much more than media. Its net effect was evaluated by population surveys before (1992–93) and during (1998–99) the project as well as tobacco sales data before and during the intervention period. The analysis used the state as the unit of evaluation; for smoking prevalence, individual variation within each state was taken into account with a two-stage analytical approach.^{79,80} The decline in prevalence over the evaluation period was significantly greater in ASSIST states compared to non-ASSIST states, even after controlling for tobacco control efforts funded by states in either group. However, no significant difference was found for per capita cigarette consumption according to cigarette sales data. In contrast to the Sydney “Quit for Life” study, women in ASSIST states appeared to account for much of the reduced smoking prevalence.

Analyses of Media Effects in COMMIT Communities

Two analyses relying on population data from the COMMIT communities are relevant to the role of media in influencing smoking behavior^{a,b} These analyses could have been presented in the following section on “Population-Based Studies” because they do not compare intervention and control conditions; however, they involve communities rather than nations, regions, or states.

The first study analyzed data from school surveys of 9th graders in 21 of the 22 COMMIT communities.^a The goal of this analysis was to examine the role of tobacco media exposures and tobacco control policies on smoking (any in the last 30 days) and susceptibility to smoking among nonsmokers. Cigarette price, strength of youth access laws, and recall of school-based tobacco education were negatively associated with both smoking and susceptibility to smoking. Smoke-free policies for public places and schools appeared to be unrelated to either. Frequency of reported exposure to protobacco advertisements was marginally positively associated with smoking and susceptibility to smoking. Perhaps due to selective recall bias, a positive relationship was also observed for frequency of exposure to antitobacco advertisements.

Although mass media were not a major component of the COMMIT study design, a 2006 follow-up study permitted an assessment of the influence of mass media on smoking cessation.^b In 2001, smokers in the evaluation cohort were surveyed again (53% follow-up rate). An analysis was conducted of smokers living in 15 of the U.S. communities located in a major television media market who were smokers at the time of the 1993 evaluation and still lived in the same community ($n = 2,061$).^b Nielsen gross-rating-point data for state-sponsored antitobacco media aired in these communities from 1999 to 2000 were correlated with the observed quit rates for participants in the 15 communities, with significant results ($p = 0.047$). Higher rating points correlated with a higher quit rate. The effect was greater when the analysis was restricted to individuals who believed that media information had increased significantly between 1999 and 2000. It was estimated that quitting increased 10% for every 5,000 additional rating points (or about two additional exposures per month). Media messages may or may not have emphasized smoking cessation. Some of the communities were in states with other tobacco control initiatives (increased excise taxes, clean indoor air laws) in place during this period. The group who believed media had increased significantly may have been those more disposed to quit smoking and thus more likely to remember the messages.

^aLewit, E. M., A. Hyland, N. Kerrebrock, and K. M. Cummings. 1997. Price, public policy, and smoking in young people. *Tobacco Control* 6 Suppl 2: S17–S24.

^bHyland, A., M. Wakefield, C. Higbee, G. Szczypka, and K. M. Cummings. 2006. Anti-tobacco television advertising and indicators of smoking cessation in adults: A cohort study. *Health Education Research* 21 (2): 296–302.

A study of smokers in three Texas border towns used television programming in Spanish and English to promote general health, with smoking cessation as the main focus.⁸⁷ The study began in 1986, lasted four years, and involved three matched towns. One served as a control (Del Rio), sections of another (Eagle Pass) were randomly assigned by residential block to receive either volunteer network activities or an intensive cessation intervention, and the third community (Piedras Negras)

received a media intervention and a brief smoking-cessation intervention. By means of a population survey, a cohort of smokers consuming at least 10 cigarettes per day was identified and followed up during and at the end of the program. The cohort sample sizes were small (<200 people) per group. While the groups appeared comparable at baseline, no attrition analysis was presented. An analysis of the proportion who quit at each follow-up showed little difference within the

two groups of Eagle Pass residents, but together, the quit rate for this community was significantly higher than for Del Rio, the control community. Piedras Negras smokers showed quit rates similar to the control community.

A study from the Netherlands involved two matched communities in which local mass media and health providers promoted a quitline.⁸² A longitudinal panel of smokers identified from a population survey were evaluated again at mid- and postcampaign. No differences were found, although somewhat more quitting occurred in the intervention communities at the midpoint evaluation. The authors note that a national media campaign mandating and reinforcing smoking bans in public buildings was introduced about midway through the intervention period and could have contaminated the results.

A study initiated in 1989 and lasting four years focused on smoking cessation among women in rural communities.⁸³ Two pairs of matched communities were identified in rural Vermont and New Hampshire. The two communities close in proximity received the intervention; their remote matches served as comparisons. The intervention consisted of community efforts, cessation assistance, and the distribution through the offices of health professionals of a videotape that showed four women going through the smoking-cessation process. Analyses of data from cross-sectional population surveys showed good baseline comparability, so simple change analyses were performed. These analyses failed to find a difference in the change in prevalence between the groups, but smokers in the intervention communities appeared to reduce their cigarette consumption to a significantly greater extent than did those in the control group.

Two related projects concerned male Vietnamese Americans and used a mass

media intervention that focused on changing smoking behavior. One project targeted Vietnamese-American men living in San Francisco and Alameda Counties in California.⁸⁵ The other targeted Vietnamese-American men living in Santa Clara County, California.⁸⁴ A single comparison community, Vietnamese-American men living in Houston, Texas, was used for both projects. In the San Francisco and Alameda project, an antitobacco media campaign lasting more than one year immediately preceded the community-based intervention, including cessation assistance, which lasted an additional 24 months. The total intervention time was 39 months for San Francisco and Alameda and 24 months for Santa Clara. The San Francisco and Alameda project had an additional component that targeted students and their families. The media campaign extensively used Vietnamese-language messages in newspapers, billboards, posters, other materials, and a video shown twice on local Vietnamese-language television. Cross-sectional population surveys pre- and postintervention were used to evaluate the projects. At the completion of the intervention, the odds of being a smoker were lower, and the odds of quitting smoking sometime in the past two years were higher in San Francisco and Alameda Counties than in Houston. The Santa Clara project did not demonstrate any significant reduction in smoking prevalence compared with Houston. The antismoking media campaign conducted before the intervention in San Francisco and Alameda Counties may have primed the target audience for the intervention messages, thus improving the efficacy of the community-based interventions.

McVey and Stapleton⁸⁶ evaluated the effectiveness of an antismoking television campaign conducted in England. Two regions in England received an intensive television-based mass media campaign to provide motivation, support,

and confidence for quitting, as well as an understanding of the difficulties associated with it. All spots were tagged with a telephone number for a quitline. Another region received the television campaign and a locally organized antitobacco program encompassing a wide array of antismoking activities, including policy advocacy. A fourth region served as the control (no intervention). These regions were selected to receive their respective treatments because of practical issues, including the need for intervention, as expressed by higher smoking rates, and the existence of a strong, preexisting antitobacco infrastructure. The regions were therefore, by design, significantly different at baseline. After 18 months, the odds of not smoking in the intervention regions were significantly higher than in the control region. No evidence indicated that adding community-based antismoking programming significantly increased the effectiveness of the mass media campaign in reducing smoking prevalence.

In 2000, McAlister and colleagues⁸⁷ used a mass media campaign (including television, radio, newspaper, and billboard advertisements) and community-based efforts to provide cessation assistance in Texas. Spots were tagged with the telephone number for the American Cancer Society quitline. A cohort was identified from a cross-sectional population survey at baseline. The cohort was resurveyed six months later, along with another cross-sectional survey. The authors found in both the cross-sectional and longitudinal analyses that treatment areas receiving both high-level (high-exposure) mass media campaigns along with cessation activities (including both clinical and community-based cessation programs) had the highest rate of reduction in daily smoking, with a significant dose-response effect over the various levels of intervention. The media-alone interventions were not analyzed separately against the no-intervention condition.

Summary of Experimental Studies

The studies discussed above mainly used quasi-experimental designs to assess the effects of mass media campaigns on youth and adult smoking behavior. The media intervention studies had wide variability in scope, duration, and quality. Some studies considered the effect of media alone; in others, media were only one part of a multicomponent intervention.

The majority (seven of ten) of the youth studies provided evidence that media can play an important role in affecting smoking behavior. Although one of the studies that evaluated the effect of media alone (versus no intervention) found evidence for an effect,⁵⁰ three did not,^{29,44,68} and one did not test the effect.⁵² In studies comparing media combined with a school-based intervention to a school-based intervention alone,^{30,40} or to no intervention,^{22,29,35} all but one²⁹ found evidence for an effect. These findings suggest that for maximal effect on youth smoking, media need to be combined with other smoking prevention efforts. Supporting this is another controlled field experiment, the Midwestern Prevention Project, not reviewed above because media were present in both the intervention and control communities. This project compared media alone (control condition) with media together with school and other programs (intervention condition) by using longitudinal cohorts.⁹¹ The study found that the intervention condition was more effective in curbing youth smoking uptake than was the media-alone condition.

The results for the role of media in influencing adult smoking behavior are also mixed. Among studies concerned with promoting cardiovascular health, which had many other media messages besides those related to smoking cessation, seven of ten found at least some evidence of an effect on adult smoking prevalence

or quitting.^{24,27,55,56,66,71,72} Among those concerned with smoking cessation, eight of nine found such evidence.^{75,76,80,81,83,85–87} However, if strong and consistent evidence of an effect is the criterion (uniformly decreased smoking prevalence or increased quitting), only five of the studies concerning cardiovascular health and six of those for smoking cessation would meet this standard.

Whether media alone are as effective as media combined with other program components in promoting quitting is difficult to discern. Of the six studies^{25,55,56,75,86,87} with designs allowing for a comparison of media alone versus no intervention, one did not make the comparison (only analyzed dose-response of intervention intensity⁸⁷), and all of the others showed at least some evidence for an effect. Of those studies with a media-alone condition, five also included a condition for media combined with other program components. Often, there appeared to be a greater effect for the combined intervention, but only one study⁸⁶ provided a direct comparison of these two conditions, and that study did not find them to be significantly different. Although results are less clear than for youth, it is likely that multicomponent interventions that include media will have a greater chance of having an impact than will media-only or other-modes-only interventions.

Each of the studies reviewed had unique strengths and weaknesses. However, some limitations deserve mention as consistent across a number of these studies. Most notably, many studies focused on the individual as the unit of analysis, despite allocating intervention treatments at the community (or regional) level. As discussed earlier, this approach can lead to biased results because it fails to account for the between-community differences associated with hierarchical or nested designs. Preexisting differences between communities, aside from those

explicitly measured and controlled for in the analyses, can obscure or be mistaken for intervention effects. Differential attrition in longitudinal studies can also be a problem if not examined closely for potential effects on the results. Furthermore, few of these studies included measures of prior secular trends, which might have obscured intervention effects.

Population-Based Studies

Overview

The first study of a media campaign aimed at influencing populations' smoking behavior was the natural experiment provided by the Federal Communications Commission's (FCC's) Fairness Doctrine. This campaign and its consequences are described in more detail later in this section. Here it is important to note that it preceded all of the controlled field experiments described above and all of the other population studies described in this section. The campaign may have provided impetus to investigators to undertake controlled studies using media to influence health behaviors, including smoking. Evidence of efficacy from the controlled field experiments and demonstration projects in turn paved the way for governmental agencies charged with improving public health to take action. One example is Australia's National Tobacco Campaign of 1997–2003, which built on the success of the earlier experimental ("Quit for Life")⁵⁶ and demonstration "Quit. For Life" media campaigns.⁷³ The effectiveness of such efforts is discussed below. In some cases, funding for population interventions was obtained from existing public health budgets, and in other cases, public health advocates worked to pass ballot measures to increase tobacco excise taxes (chapter 14) to pay for tobacco control efforts that included

media campaigns. Some U.S. states have also used funds from the 1998 Master Settlement Agreement to fund or augment funding for tobacco control programs.

Many of these U.S. state-sponsored campaigns in California, Florida, Massachusetts, Minnesota, and elsewhere described later in this chapter have included media campaigns as part of a multicomponent tobacco control program to reduce tobacco use. Other components of these programs have included school- and community-based programs, telephone quitlines and other smoking-cessation efforts, efforts to manage the chronic disease burden of smoking, the implementation of new laws restricting smoking in public places and workplaces, increased enforcement of laws restricting youth access to tobacco, and increases in tobacco excise taxes. A comprehensive program includes all of these components as well as provision for program administration and evaluation.⁹² Because many of these program components are often initiated simultaneously, isolating the effects that can be attributed to a mass media campaign is generally not possible. However, this isolation of effect was also not possible in some of the controlled field experiments described in the previous section for the same reason.

Typical Study Designs and Methodological Issues

Researchers have used a variety of analytic approaches to evaluate the results of population-based studies. Typically, studies

- Relate individual recall of mass media campaigns to changes in tobacco use outcomes by using pre-post cohort designs.
- Compare pre-post changes in tobacco use outcomes in a state with a tobacco control program with states without one and use cross-sectional data.

- Correlate levels of aggregate exposure across geographic areas with changes in tobacco use outcomes for the same areas.

The first type of design described above falls under the general heading of longitudinal designs. The other two are considered cross-sectional designs. Some of the advantages and shortcomings of these types of evaluation strategies have already been touched upon in the section “Methodological Issues” for the controlled field experiments, and this section provides more relevant details. Separate sections on “Longitudinal Designs: State and National Mass Media Campaigns” and “Cross-Sectional Evaluations” describe individual studies. However, some studies used both types of designs and are, therefore, mentioned more than once.

Longitudinal Designs

Population-based longitudinal designs can attribute effects to a campaign by relating self-reported exposure at baseline to changes in behavior in subsequent measurements. However, the strength of the observed association is influenced by the extent of control variables available to assess confounding and issues related to sample attrition. Careful attention to potential confounding is critical in such designs to account for the possibility that study participants who recall campaign messages may differ from those who do not. For example, if youth who are susceptible to smoking are more likely to recall campaign messages than are nonsusceptible youth (selective attention bias), then failure to control for baseline susceptibility to smoking could bias the results. For instance, because youth who are susceptible to smoking are more likely to become smokers in the future, failure to account for this in the analysis could lead to a positive correlation between message recall and smoking initiation.

A second potential limitation of longitudinal designs relates to the extent of sample

attrition over time. Invariably, some study participants are lost at follow-up. Random attrition hinders the power of the study to detect an effect but does not bias the observed effects. However, if sample attrition is systematic (nonrandom), it can lead to bias. For example, if at-risk youth who are susceptible to smoking are more likely to move and be lost to follow-up, they will not be adequately represented, possibly resulting in fewer transitions to smoking, which will bias the results. For population samples, this effect can be accounted for with sampling weights that make the sample followed look more like the original representative sample.

Post-Only Cross-Sectional Design

With this design, a single measurement is obtained following an intervention for groups exposed and unexposed to the intervention. The following example illustrates the problems that can arise. It is possible that the level of smoking among individuals more likely to be exposed to an antismoking media campaign (e.g., urban dwellers)^{93,94} is lower than among those unexposed (e.g., rural people) simply because of where they live and the differing smoking prevalence in those areas (typically higher in rural areas). Thus, any difference or lack of difference in smoking rates between intervention conditions (which may have different distributions of urban and rural residents) may be due to underlying smoking rates and not to the intervention. Selective attention can also cloud interpretation from cross-sectional studies; for example, if youth nonsmokers recall a specific antitobacco advertisement more than do smokers, the association of recall and smoking status may only mean that the advertisement was more salient to nonsmokers, not that it prevented them from smoking. Hornik¹⁰ outlines a number of questions that, if answered appropriately, provide some confidence that a campaign evaluated with a post-only design had an effect:

- Does a substantial proportion of the target audience report a high level of exposure to the campaign?
- Is the targeted outcome of campaign exposure negatively associated with smoking?
- Does this relationship continue to hold after statistically controlling for known predictors of smoking?
- Is there a dose-response relationship between exposure and smoking? As exposure increases, does the rate of smoking decrease accordingly?
- Do the attitudes targeted by the campaign change in the expected direction?

Pre-Post Cross-Sectional Design

With measurements before and after a media campaign, change can be measured, and the analysis can control for the preexisting level of the outcome being measured (likely different for different geographical areas, see example above). Again, adjusting for other pre-campaign covariates would be important. However, if there are no comparison areas not receiving the media, it still would be unknown whether the change observed was part of a secular trend, or because of other events, or because of the program. There also is the potential that some of the intervention will “leak” into comparison areas, again making it more difficult to establish that the program was responsible for a desired outcome.

A more rigorous methodology would provide for two (or more) precampaign measures to establish the secular trend and take a postcampaign measurement and perhaps some measurements during the campaign as well. Assuming all else in the environment remained constant (not always the case), it would be expected that comparison areas would continue on the same trajectory as observed during the precampaign period. This method would ensure that any change during the program period in the areas

receiving the intervention would be due to the campaign. If other factors were operative during the campaign period, the multiple precampaign measures would at least enable some estimation of this unplanned effect.

An advantage of cross-sectional measures is that they often are obtained from random samples of the population, and population estimates can be made with appropriate weighting. However, if the demographic composition of the population has changed over time, it would be desirable to standardize these estimates to the composition of the population at a fixed time. Some longitudinal baseline samples are selected from a random population study as well; to the extent that they are appropriately weighted for nonparticipation at baseline and for attrition, the samples can provide population estimates.

Various population-based studies are discussed below under the general headings of longitudinal and cross-sectional designs. However, a number of the population-based studies were evaluated by means of both longitudinal and cross-sectional studies reported separately. Therefore, the individual studies are mentioned under each of the main headings below. Again, to the extent possible, results for youth and adults are presented separately.

Longitudinal Designs

State Mass Media Campaigns

Three population-based longitudinal studies have assessed the effectiveness of two statewide mass media campaigns (Massachusetts and Florida). These studies examined the association between youth smoking and individual recall of media campaign advertisements in the context of statewide tobacco control programs. Additionally, an oral cancer prevention campaign in India and Australia's

National Tobacco Campaign were assessed longitudinally in adults.

Massachusetts, Youth

Siegel and Biener⁹⁵ assessed the impact of Massachusetts's statewide mass media campaign on smoking initiation among youth aged 12–15 years. A baseline population survey was conducted in October 1993 to March 1994 to identify a cohort of youth to follow and to obtain baseline measures. A four-year follow-up survey assessed whether youth initiated smoking, defined as smoking 100 or more cigarettes in their lifetimes. A cigarette excise tax increase went into effect in January 1993. The media campaign, begun in October 1993, consisted of television and radio spots and billboards for the youth-focused media. Approximately 80% of the media expenditures were for television. The campaign primarily focused on reaching a general audience, not youth specifically. This study found that youth aged 12–13 years who recalled campaign messages at baseline were less likely (odds ratio = 0.49; 95% confidence interval, 0.26–0.93) to become smokers than were those who did not recall messages. No statistically significant effects were found for youth 14–15 years old. Among all youth, there was no association between recall of media on seven of the eight knowledge and attitude outcomes.

The observed association between media recall and smoking among 12- and 13-year-old youth is strengthened by the extensive set of baseline control variables included in the analysis. One of the key controls was a measure of baseline smoking status defined as susceptible nonsmokers, nonsusceptible nonsmokers, and experimenters. The researchers also demonstrated that recall of media messages at baseline was not associated with smoking status. The primary limitation of this study is that the authors did not adjust for nonresponse at the follow-up

Typical Measures of Media Exposure

For studies that rely on individual measures of exposure to mass media campaigns, researchers have used a number of methods to operationalize exposure. For clarity, commonly used measures are described and labeled below. Many studies described below used more than one of these measures.

- **Unaided Recall of Campaign Messages.** Reports of campaign messages overall and/or by medium (e.g., television, radio, billboard, print) that respondents recall seeing without prompting for specific message content.
- **Aided Recall of Campaign Messages.** Reports of campaign messages overall and/or by medium (e.g., television, radio, billboard, print) that respondents recall seeing after being provided a brief description of the advertisement. Some studies confirm the accuracy of recall with follow-up questions about the message content.^{a,b}
- **Aided and Unaided Campaign or Brand Awareness.** The ability to recall the campaign slogan or brand (with or without prompting). In some studies, recall is confirmed with follow-up questions regarding details or meaning of a specific advertisement.
- **Message Receptivity.** Several studies measure audience reaction to campaign messages with a series of questions (e.g., did the advertisement grab your attention? did you talk to friends about the advertisement?).
- **Aggregate Measures of Campaign Exposure.** In addition to individual-level measures of campaign awareness, several studies have estimated exposure to campaigns by using aggregate data on campaign advertising such as gross rating points (defined as the percentage of the target population reached by a campaign [reach] multiplied by the frequency at which the target population is exposed). Therefore, if a campaign advertisement reaches 50% of the target audience three times in a week, the gross rating points equal 150. Aided recall appears to correlate well with gross rating points.^c

^aSly, D. F., G. R. Heald, and S. Ray. 2001. The Florida “truth” anti-tobacco media evaluation: Design, first year results, and implications for planning future state media evaluations. *Tobacco Control* 10 (1): 9–15.

^bFarrelly M. C., C. G. Heaton, K. C. Davis, P. Messeri, J. C. Hersey, and M. L. Haviland. 2002. Getting to the truth: Evaluating national countermarketing campaigns. *American Journal of Public Health* 92 (6): 901–7.

^cNiederdeppe, J., M. C. Farrelly, and M. L. Haviland. 2004. Confirming “truth”: More evidence of a successful tobacco countermarketing campaign in Florida. *American Journal of Public Health* 94 (2): 255–57.

survey either with appropriate weights or analytic techniques.

Florida, Youth

Two other studies with longitudinal designs involve the evaluation of the Florida “truth” campaign. Florida’s campaign, begun in April 1998, targeted youth aged 12–17 years with messages that “attacked the [tobacco] industry and portrayed its executives as predatory, profit hungry, and manipulative.”^{96(p.333)}

The first longitudinal study to examine the effectiveness of the Florida “truth”

campaign surveyed youth in February 1999, 5–10 months after a stratified, representative baseline survey (vendor provided sampling frame) conducted within 6 months of the campaign launch. This survey included 1,820 youths, but the study limited the sample to 1,480 who were nonsmokers at baseline. The study examined two measures of smoking initiation: (1) whether a youth smoked at all in the past 30 days at follow-up, and (2) whether a youth was an “established” smoker at follow-up, defined as smoking on six or more days in the past month and more than five cigarettes per day. Campaign exposure was measured

with a complex index that combined three different measures: (1) recall of up to two campaign advertisements, (2) cognitive reactions to these advertisements, and (3) agreement with a campaign-related belief—"you feel tobacco companies are just trying to use you." The index equaled zero if the youth could not confirm awareness of any advertisements. It equaled two if the respondent confirmed awareness of two advertisements, said that both advertisements made him or her "stop and think about whether or not they should smoke," and responded "some" or "a lot" in response to the belief described above. It equaled one for all other respondents. These values were determined from the follow-up survey measures.

The analysis consisted of two separate logistic regressions of smoking initiation (to either smoking or established smoking) as a function of the exposure index. It controlled for month of the baseline survey, age, gender, whether the respondent had at least one friend who smoked, and whether the youth had a parent who smoked. These analyses indicated that those who scored higher on the exposure index were less likely to become smokers and established smokers.

A limitation of this study is that the measure of campaign exposure relied on recall at follow-up. This process can bias the observed findings in favor of finding an effect if nonsmokers at follow-up are more likely to recall or process campaign messages. In addition, the combination of campaign recall with an intermediate outcome (i.e., agreement with a key belief question) that is on the causal pathway between campaign exposure and smoking initiation is a questionable measure of campaign exposure. If nonsmokers are more likely to hold this belief compared with smokers, then combining recall with agreement with this belief will bias the analysis in favor of finding an effect.

A second longitudinal study of the effectiveness of the Florida "truth" campaign, by Sly and colleagues,⁹⁷ takes a somewhat different approach from the study described above.⁹⁶ In the later study, another follow-up survey was conducted of adolescents who responded to the earlier surveys. Those who were nonsmokers (1,805) at their baseline interview were included in this analysis. The outcome measures are identical to those of Sly and colleagues⁹⁶ for current smoking and established smoking. The measure of campaign exposure is constructed differently from the measure in the earlier study. Youth were asked at the new follow-up survey if they had seen any of the 11 advertisements that had aired since the inception of the campaign.

Youth were given a short description of the beginning of each advertisement and then asked to confirm their awareness by describing what happened in the advertisement. Exposure to these advertisements was categorized into three levels: zero, one to three, and four or more advertisements. A separate measure was constructed to capture the influence of the campaign message theme on smoking initiation on the basis of agreement with a key campaign belief ("You feel tobacco companies are just trying to use you"). Responses to this statement were grouped into "a lot," "some or a little," and "not at all." A third measure was summed across nine attitude and belief statements to test the influence of tobacco industry attitudes and beliefs on smoking initiation. The authors estimated two logistic regressions of initiating smoking and established smoking as a function of number of advertisements recalled, agreement with a key campaign message theme, and the index of industry attitudes. The latter three constructs were tested individually and jointly. Other controls included age, gender, and how many of the respondent's best friends smoked at baseline. Unlike the previous study, there was no

control for parental smoking or the timing of the baseline survey.

The results indicated that the number of advertisements recalled, agreement with the key campaign message, and the industry attitude index all were associated with decreased smoking initiation. The analyses also suggested that exposure to the campaign works indirectly through changing attitudes and beliefs, which in turn influence smoking uptake. This finding is consistent with the theory of planned behavior.⁹⁸

National Mass Media Campaigns

India, Adults

To determine whether the rate of oral cancer in India could potentially be reduced, an intensive, ongoing, media-based educational program (films, posters, folk theater, radio broadcasts, and newspaper articles) to discourage all forms of tobacco use was undertaken in three districts of the country. The intervention period began in 1979 and lasted at least five years.^{99,100} A cohort of tobacco users (identified from all adults screened in randomly selected villages in each district) was interviewed in their homes by dentists and followed annually for five years. The dentists advised participants of any precancerous conditions discovered; these individuals were not included in the analyses. These and all other tobacco users were advised of the dangers and encouraged to quit at each follow-up. A comparison cohort was obtained from a similar in-home surveillance effort that took place a decade earlier in the same districts, with the baseline interview in 1966–67. This earlier cohort was not exposed to the media campaign. Cessation of all forms of tobacco use was increased in the intervention cohort in two of the three districts; in the third district, the increase was slight and not significant. Chewing tobacco cessation rates were higher than for other forms of tobacco (bidis and clay pipes; cigarette smoking was rare). Many more in the intervention

cohort also reported reducing consumption. Whether or not tobacco use was declining in other districts during the media intervention phase was not reported.

Five-year follow-up examinations by the dentist interviewers showed the age-adjusted rate of occurrence of precancerous conditions to be reduced to nearly one-quarter of that observed in the earlier control cohort in two of the regions, but it increased in the third (the same region with no significant reduction in prevalence). A 10-year evaluation of one of the districts that the authors considered most representative of India showed that tobacco users in the intervention cohort continued to quit, but quit rates in the control cohort remained stable.¹⁰⁰ At 10 years, the incidence of precancerous lesions in the intervention cohort was 40% of the incidence in the control cohort. Because oral cancer is usually preceded by precancerous conditions, the authors concluded the media program likely would reduce the incidence of oral cancer.

Australia, Adults

Smoking rates declined steadily in Australia during the 1980s and early 1990s. However, these declines stalled during the mid-1990s, raising concerns in the public health community.¹⁰¹ Encouraged by the earlier “Quit for Life” campaigns,^{56,73} the federal government of Australia subsequently committed an initial A\$7 million to an additional cessation-focused campaign to target adult smokers aged 18–40 years.

Launched in June 1997, the National Tobacco Campaign (NTC) was the largest and most intense antismoking media campaign ever implemented in Australia. The central communications element of the campaign consisted of television advertisements designed to convey information about the relatively certain effects of smoking. The campaign slogan was “every cigarette is doing you damage” and focused on the continuing damage

that results from smoking, rather than on long-term health risks. The campaign used three television advertisements—*Artery*, *Lung*, and *Tumor*—to launch the campaign. These advertisements used highly realistic and graphic images to portray the deadly pathology of what happens inside the arteries, lungs, and brain as cigarette smoke enters the body. These advertisements were supplemented by a series of similar radio advertisements that reinforced the campaign's messages, and in later years, by television ads about the effects of smoking on damage to the brain and eyes and a further ad on damage to the lungs. For a full description of the NTC and its implementation, see Hill and Carroll.¹⁰¹

Borland and Balmford¹⁰² conducted a longitudinal analysis to explore the short-term impact of Australia's NTC on thoughts about quitting smoking and progression toward cessation. A random sample of the electronic white pages identified 1,000 current smokers, aged 18–40 years, who lived in Sydney, Melbourne, Brisbane, and Adelaide. A total of 250 baseline interviews were conducted in each of the four cities, with 119 of the original 1,000 interviewees lost to follow-up for the survey two weeks after baseline (88% retention). Primary outcome measures included the frequency of various thoughts about smoking and the tobacco industry, concerns about passive smoking, and the prequitting stage of change. They also included a measure of self-reported quitting activity that was based on a survey question to assess whether participants had changed or thought about changing their smoking behavior in the past two weeks. This study also included measures of exposure to the NTC on the basis of survey questions that assessed unprompted and prompted recall of NTC advertisements from the “every cigarette is doing you damage” campaign.

Between the baseline and follow-up surveys, 33% of smokers progressed toward cessation

after the onset of the campaign. Recall of the NTC also was found to be significantly associated with greater self-reported quitting activity and an increase in negative thoughts about smoking. These results suggest that the NTC may have had a short-term impact on smokers' preparedness to quit smoking. Study limitations noted by the authors included lack of a control and selective attention. Also, the analysis did not adjust for the potentially confounding factors in a multivariable model.

Cross-Sectional Evaluations

A number of studies have assessed the effectiveness of state and national mass media campaigns in preventing youths' smoking and in promoting smoking cessation in the United States and abroad. The next two subsections review studies concerning national campaigns and discuss the evidence from state-based media campaigns in the United States. The last subsection discusses the efficacy of media advertisements for quitlines.

National Antitobacco Media Campaigns

United States Fairness Doctrine, Adults and Youth

The earliest opportunity for evaluation of antismoking media campaigns occurred with the 1967 FCC ruling that the Fairness Doctrine applied to cigarette commercials, requiring broadcasters to air antismoking commercials in proportion to cigarette commercials. This balance was defined as a ratio of one free antismoking advertisement on television or radio for every three cigarette commercials.¹⁰³ The first evaluations of the natural experiment provided by the Fairness Doctrine were simple models of cigarette demand, using time-series data on annual per capita cigarette consumption.^{103–105} These studies provided convincing evidence that the Fairness Doctrine had a significant impact on

smoking during the late 1960s. Antismoking advertisements aired from 1967 through early 1971 when cigarette advertising was banned in the broadcast media.

Studies by Lewit and colleagues¹⁰⁶ and Warner and Murt¹⁰⁷ add to the evidence base on the effectiveness of the Fairness Doctrine. Warner and Murt¹⁰⁷ evaluated the Fairness Doctrine by using a time series of cross-sectional data from the 1978 National Health Interview Survey (NHIS). These surveys contain self-reported smoking rates in the United States for each year from 1901 through 1978 for six 10-year birth cohorts of males and females. The 1901–10 cohort is the eldest, and the 1951–60 cohort is the youngest. To assess the effect of the campaign on smoking rates, the authors estimated what smoking rates would have been between 1964 and 1978 in the absence of the campaign. They then compared those estimates with the actual self-reported smoking rates in NHIS data.

In estimating the rates of smoking that would have occurred for each cohort, in each year of the antismoking campaign, Warner and Murt used assumptions that, without the campaign, secular trends in smoking would have persisted through the 1960s and 1970s. To estimate these rates, the authors added or subtracted the earlier cohorts' average percentage point changes for the relevant ages to the 1963 base smoking rate for the cohort in question. This process was repeated for the 1964–78 estimates.

Warner and Murt's¹⁰⁷ time-series analysis indicated that self-reported smoking rates in NHIS data would have been significantly higher through 1978 in the absence of the antismoking campaign. This analysis suggests that the campaign had a measurable effect on U.S. smoking rates. More specifically, these researchers found that the campaign may have been more effective at encouraging males to quit smoking or not to start. Males in the youngest cohort were projected to have

a 61% smoking prevalence by 1978 without the campaign, a difference of 22 percentage points from that cohort's actual reported rate of 39%. Although the largest effects appeared to be within male cohorts, the campaign had a significant impact on most female cohorts as well.

The primary limitation of Warner and Murt's¹⁰⁷ analysis is that it used a number of unverifiable assumptions to calculate estimated smoking rates in the absence of the campaign and did not control for possible confounding influences, such as cigarette prices, that may have affected smoking rates during the campaign. Also, these estimated rates were not based on model predictions that could have accounted for a number of influences. Nonetheless, to check the overall validity of their assumptions, Warner and Murt converted the cohort estimates of smoking prevalence into estimates of cigarette consumption and compared them with consumption estimates produced by Warner^{104,105} from cigarette production and sales data. The similarity of these estimates, they argued, provided reasonable support for the validity of their assumptions.

Lewit and colleagues¹⁰⁶ conducted a more traditional analysis of the effects of the antismoking campaign that aired under the Fairness Doctrine. They used a cross-sectional sample from Cycle III of the National Health Examination Survey to estimate demand functions for cigarette smoking by adolescents. Their analysis used a large sample of youth ($N = 6,768$), aged 12–17 years and data collected between March 1966 and March 1970. These researchers estimated self-reported smoking behavior as a function of various measures of exposure to antismoking advertisements. Unlike previous studies, the analysis by Lewit and colleagues controlled for an extensive set of potential confounding influences that included cigarette prices, family income, family size, employment status, family structure,

parents' education, age, gender, race, and exposure to prosmoking messages.

The analysis by Lewit and colleagues¹⁰⁶ used two measures of smoking behavior as the dependent variables in regression models: (1) whether the youth was a current smoker and (2) the number of packs of cigarettes smoked per day. Youth exposure to the antismoking commercials aired under the Fairness Doctrine was captured with a series of dichotomous and interaction variables. The simplest measure was a dichotomous variable that distinguished youth who were interviewed during the Fairness Doctrine period. Alternative measures were used to capture the possibility that youth who watch more television would be more likely to see antismoking campaign commercials. To do so, the authors used two variables consisting of youths' daily hours of television and an interaction between daily television and an indicator for Fairness Doctrine periods. The final specification of campaign exposure by Lewit and colleagues consisted of a proxy for the number of antismoking commercials that youth viewed. This proxy was defined as the product of the number of antismoking commercials that aired in a given year and the number of hours per day that each youth spent watching television. The study by Lewit and colleagues also included a squared term for this variable to capture the possibility that the impact of antismoking commercials is subject to diminishing returns.

The regression analyses by Lewit and colleagues¹⁰⁶ indicated that smoking prevalence among youth was between 3.0 and 3.4 percentage points lower during the Fairness Doctrine than during the previous 16 months. Consistent with their hypotheses, they also found that the interaction between television watching and the Fairness Doctrine periods had a negative and statistically significant impact on the probability of smoking, suggesting that youth who watched more television during the Fairness Doctrine

era of antismoking commercials were less likely to smoke cigarettes. Lewit and colleagues further found that their proxy for the number of advertisements youths saw was negatively and statistically associated with a lower probability of smoking. However, the squared term for this proxy had a positive and significant effect on smoking. These results suggest that the Fairness Doctrine had a significant negative impact on smoking by youth and that this impact was subject to diminishing returns. None of the specifications estimated by the Lewit study found a significant impact of the campaign on the number of cigarettes smoked per day. This finding is not surprising, as many youth are not yet regular or addicted smokers.

Lewit and colleagues¹⁰⁶ made significant improvements in estimating the effects of Fairness Doctrine antismoking commercials. They did so by estimating youth smoking behaviors as a function of proxies for exposure to the antismoking campaign while controlling for a broad set of potentially confounding influences. This study made significant strides in using more complex measures of exposure to the campaign. As in other studies that rely on aggregate rather than self-reported individual exposure, the measures were of potential rather than actual exposure.

Despite their limitations, these cross-sectional studies provided fairly convincing evidence of the impact of the Fairness Doctrine and were consistent with previous time-series analyses of cigarette sales and consumption data.^{103,104} As noted by Flay,¹ these findings were further validated by other analyses and studies showing that cigarette consumption increased after antismoking commercials were no longer broadcast, following a ban of cigarette advertising on television and radio. Thus, the Fairness Doctrine advertisements appeared to be more effective in deterring cigarette consumption than were the cigarette commercials in encouraging consumption,

even though the latter outnumbered the former. The Fairness Doctrine and ensuing evaluations showed that antismoking advertising on television and radio, when implemented with sufficient intensity and reach, could produce behavioral changes in smoking. As such, these studies laid groundwork for further investigation and eventually for antismoking media campaigns to become one of the preeminent tools used by governments and private health organizations for curbing youth and adult smoking in the United States.

Australia's NTC, Adults

The details of this campaign were described above in "Longitudinal Designs, National Mass Media Campaigns." In addition, Wakefield and colleagues⁸ used a national cross-sectional population telephone survey method, involving a baseline survey of adults and cross-sectional follow-up surveys in subsequent years. The surveys measured unprompted recall of the NTC, recognition of advertising, campaign-attributed encouragement to become or remain a quitter, and beliefs and attitudes about smoking and health. Overall, 88% of Australian adults had confirmed recall of the NTC in 2000. In addition, roughly one-half of the smokers who had seen the NTC believed that it made them more likely to quit smoking cigarettes. Specific changes between surveys—in unprompted awareness of health effects caused by smoking, and new learning about smoking and health—were observed in relation to the main messages of the advertisements, which were time sensitive, according to the year of launch of each of the ads. This analysis relied on a basic descriptive analytic strategy and specifically did not link self-reported measures of awareness of the NTC to outcomes of interest because of the problem of selective recall bias.

Australia's NTC, Youth

Other studies have used cross-sectional data to assess whether the NTC, which focused on

adults, had an impact on youth in Australia. White and colleagues¹⁰⁸ used two cross-sectional surveys of youth (one telephone and one school based; both postintervention only) to examine youth awareness of the "every cigarette is doing you damage" campaign and whether the campaign had any measurable impact on tobacco-related attitudes and behaviors among youth. The national telephone survey targeted youths aged 14–17 years. The school survey included secondary school students aged 12–17 years in Victoria. The telephone survey assessed youth awareness of campaign messages, attitudes about smoking, intentions to smoke, and quitting behaviors. The school survey also assessed youth awareness of campaign messages and whether the students took any actions as a result of seeing the campaign advertisements.

Again, the primary analytic strategy of White and colleagues¹⁰⁸ consisted of simple descriptive analyses rather than multivariate analyses that adjusted for potential confounding factors. Analyses were conducted separately for smokers and nonsmokers and summarized youth awareness of the campaign and responses to various questions about tobacco-related attitudes and quitting behaviors. Results from both the telephone and school surveys show that recognition of the NTC's tagline was extremely high (90% or greater) among Australian youth. Analyses from the telephone survey indicate that a high proportion of smoking and nonsmoking youth agreed with statements about campaign-related beliefs. A high proportion of youth also indicated beliefs that the campaign was relevant to primary students, secondary students, and young smokers.

Students in the Victoria school survey were asked questions about whether they took any action in response to the campaign. Students were allowed to indicate any one of a number of possible actions, such as quitting smoking, reducing their cigarette

consumption, and telling someone else to quit smoking. Compared with never smokers, a significantly higher proportion of youth who had smoked at least once in their lifetime indicated taking at least one action in response to the campaign. Among current established smokers, for example, 27% said they cut down the number of cigarettes they smoked in response to the campaign, 26% indicated they thought about quitting, and 18% said the campaign made them try to quit smoking. However, 42% did nothing in response to the campaign.

These data suggest that, although the NTC was aimed at adult smokers and had a strong cessation message, the campaign had at least some impact on youth in Australia. Awareness of NTC advertisements was assessed in both surveys used in this study, but the authors did not estimate the direct statistical relationships between self-reported awareness of the campaign and the attitudinal and behavioral outcomes assessed in the study.

American Legacy Foundation's National "truth" Campaign Aimed at Youth

Cross-sectional studies also have been used extensively to evaluate high-profile, national antismoking campaigns aimed at curbing youth smoking in the United States, such as the American Legacy Foundation's (Legacy's) national "truth" campaign. When launched in 2000, the "truth" campaign differed from other national smoking prevention campaigns in being marketed as a popular youth brand and delivering blunt facts and messages about the tobacco industry (such as industry efforts to obscure the health effects of tobacco). The campaign's messages were delivered in a variety of television advertisements that featured risk-taking adolescents and were designed to avoid making directive statements that tell youth not to smoke.

The Legacy "truth" campaign strategy is generally consistent with modern theories

of persuasion. These theories hold that, for a message to have an effect on desired outcomes, it must not only be viewed and remembered but also must be understood and perceived as credible and relevant. The Legacy "truth" campaign's general approach contrasts with other national campaigns, such as Philip Morris's "Think. Don't Smoke" campaign, the second-largest national antismoking campaign to air during the early years of the Legacy "truth" campaign. The "Think. Don't Smoke" campaign, which aired between 1998 and 2002, featured role models displaying firm decisions not to smoke and explaining their reasons for not smoking.

The first cross-sectional studies on the effectiveness of the Legacy "truth" campaign provide fairly convincing evidence that the campaign had a significant impact on tobacco industry-related attitudes, beliefs, and other behavioral precursors, as well as a significant impact on youth smoking prevalence in the United States. Farrelly and colleagues¹⁰⁹ used a nationally representative sample of 12- to 17-year-olds from the Legacy Media Tracking Survey. Data were from two waves: a baseline period during the months before the campaign's launch, and approximately 10 months afterward. This study included self-reported measures of confirmed recall of Legacy "truth" advertisements, multiple measures of campaign-related attitudes and beliefs, and a comprehensive set of individual background characteristics.

The study indicated that 10 months subsequent to the campaign's launch, a high percentage of youth (75%) had seen at least one specific campaign advertisement. Using multivariable logistic regressions, the authors also showed that awareness of specific campaign advertisements was significantly associated with greater anti-tobacco-industry attitudes and with beliefs that were targeted by the campaign.¹⁰⁹ A subsequent study, using six waves of

the same survey, examined antitobacco attitudes over time in groups of states: (1) tobacco-producing states, (2) non-tobacco-producing states with low tobacco control funding, (3) non-tobacco-producing states with relatively high tobacco control funding, and (4) non-tobacco-producing states with well-funded media programs. The authors found no significant difference in how antitobacco attitudes changed over time among the state groups and concluded that response to the Legacy “truth” campaign was not influenced by residence in a tobacco-producing state.¹¹⁰

For the earlier study,¹⁰⁹ findings also showed that the Legacy “truth” campaign was associated with a significant reduction in youths’ intentions to smoke in the future. Interestingly, this study also found that youth awareness of Philip Morris’s “Think. Don’t Smoke” campaign was associated with a lower level of several anti-tobacco-industry attitudes as well as increased intentions to smoke. As with all cross-sectional studies, the primary limitation of this study is the potential for bias in selective attention, which precludes strong causal inferences.

A subsequent cross-sectional study, published in 2005, examined effects of the Legacy “truth” campaign on smoking behavior of youth.⁹³ This study used a large national sample of 8th-, 10th-, and 12th-grade students from the Monitoring the Future survey. Multivariable logistic regression models estimated youth smoking prevalence as a function of the Legacy “truth” campaign’s intensity measured at the media market level. The media market measure of “truth” campaign exposure was based on gross-ratings-point data provided by the campaign’s media contractor. These data captured the relative reach of and frequency of exposure to the campaign among its target audience of 12- to 17-year-olds within each of 210 media markets in the United States. Because gross rating points varied greatly across U.S. media markets, these data allowed

the formation of multiple natural comparison groups and provided an alternative analysis approach in the absence of true experimental implementation of the campaign. This study also controlled for a wide range of individual demographic characteristics as well as preexisting levels of smoking in each of the 210 U.S. media markets.

Findings from this study associate the Legacy “truth” campaign with a significant decline in youth smoking, resulting in approximately 300,000 fewer youth smokers in the United States. The authors showed that smoking prevalence among students in 8th, 10th, and 12th grades combined declined from 25.8% to 18.0% between 2000 and 2002. The Legacy “truth” campaign accounted for approximately 22% of this decline. Although the Legacy “truth” campaign had no effect on youth smoking after only a few months of the campaign in 2000, the effects were statistically significant in 2001 and 2002. These findings suggest that the association between the Legacy “truth” campaign and youth smoking strengthened over time and, as expected, had little effect in the early months after the campaign’s launch. Furthermore, Thrasher and colleagues¹¹⁰ found that the effect on smoking was similar among high- and low-risk adolescents, when high risk was defined in multiple ways.

The above studies, like all other population studies, relied on self-reported measures of youth smoking. These measures may be subject to social desirability bias; that is, youth are less likely to report smoking in media markets that received high levels of exposure to the campaign. This would lead to an overstatement of the campaign’s effects. However, in a study published in 2007,¹¹¹ biochemically validated smoking status in a school-setting survey (5,511 students from 48 high schools) showed that only 1.3% of respondents underreported smoking via self-report, and recall of “truth” advertisements was not

related to underreporting. The campaign's effects could have resulted from other youth-focused prevention programs, such as the national antidrug campaign by the Office of National Drug Control Policy.²⁰ However, in similar models, the authors found no associations between Legacy "truth" gross rating points and heavy drinking among youth, which may be influenced by the Office of National Drug Control Policy campaign and other drug and alcohol prevention initiatives. These findings help rule out the possibility that the correlation between Legacy "truth" gross rating points and youth smoking was spurious.

Tobacco Industry-Sponsored Media Campaigns Aimed at Youth and Parents

In contrast to the Legacy "truth" campaign, Philip Morris's "Think. Don't Smoke" campaign was associated with lower levels of antitobacco attitudes and higher intentions to smoke.¹⁰⁹ Another analysis of this campaign by Wakefield and colleagues examined its association with smoking behavior as well as attitudes and intentions.¹¹² This study also included Lorillard's "Tobacco Is Whacko if You're a Teen" and a Philip Morris media campaign aimed at parents, "Talk. They'll Listen." The study used Monitoring the Future school survey data (8th, 10th, and 12th graders) from tens of thousands of students and related the data to gross-rating-point data for the four months preceding the surveys in the media markets where the schools were located. Models for the variables associated with behavior, attitude, and intention controlled for demographic and other personal data, region, the real price of cigarettes, a smoke-free air index, and exposure to state tobacco control program media. Additional models for smoking behavior also controlled for frequency of television watching, with consistent outcomes.

The analyses discerned no association between smoking in the past month with

the youth-directed media campaigns as measured by gross rating points. However, exposure to the tobacco industry's youth-directed campaign advertising was associated with an intent to smoke in the next five years for 8th graders. In contrast, greater exposure to the rating point variable for media directed toward parents was associated with a higher likelihood of smoking in the past month for 10th and 12th graders, increased intent to smoke for all grades, and lower levels of a few antitobacco attitudes. Wakefield and colleagues¹¹² cite theories in developmental psychology to explain these findings. As adolescents mature, they consider themselves more independent and less reliant on their parents. Thus, messages aimed at parents as authority figures invite rejection by older adolescents. The nature of the media buy for the campaign directed toward parents was unlikely to result in more rating points in areas with higher adolescent smoking rates. Sensitivity analyses explored the effect of removing some of the key control variables (cigarette price, smoke-free air index, exposure to public health-sponsored antitobacco campaigns) from the model; however, the results were basically unchanged.

Cross-Sectional Results from Other Countries for Adults

In addition to the studies described above, several national antismoking media campaigns in other countries have been evaluated with cross-sectional data and have shown similar results. In March through May 1977, Norway conducted a mass media campaign to inform its population about the health consequences of smoking, with no other tobacco control measures mentioned.¹¹³ The publicly controlled media ran six large advertisements in 170 newspapers and magazines, and the state-owned television station twice aired the British documentary film *Dying for a Fag*. The first showing was followed by a call-in radio program for viewers to discuss

their reactions to the film. An in-home population survey, conducted in June 1977 to evaluate the effect of this campaign, found that 86% of the population had seen a newspaper advertisement, 62% had seen a magazine advertisement, and 66% had seen one of the showings of the film on television. Compared with surveys conducted before the campaign, daily smoking prevalence among men dropped from 53% to 45%. It had been close to 53% since 1971, after declining from the mid-1950s. Daily smoking prevalence among women had been steadily increasing from the mid-1950s through 1973, declined through 1976, but remained even between 1976 and 1977. Per capita cigarette consumption declined 4.3% in the 12-month period from July 1976 through July 1977 compared to the preceding 12-month period. Gredler and Kunze,¹¹⁴ using a pre-post design, suggested that a large-scale antismoking campaign that aired in Austria for eight weeks at the end of 1980 and the beginning of 1981 was responsible for a significant reduction in the prevalence of smoking in Austria between 1979 and 1981. Using multiple cross-sectional surveys, Doxiadis and colleagues¹¹⁵ found that an intensive antismoking campaign in Greece that consisted of radio and television advertisements virtually eliminated annual percentage increases in smoking between 1979 and 1980. Doxiadis and colleagues also found that when this campaign ceased, cigarette consumption again rose to precampaign rates. These findings suggest that a media campaign that reaches a high proportion of the population can influence smoking behavior, even without other tobacco control efforts in place.

Statewide Antitobacco Media Campaigns

Comparative Cross-Sectional Evaluation Among States of Effects on Youth

A study by Emery and colleagues¹¹⁶ published in 2005 provides compelling evidence

from a correlational analysis that youth exposure to state-sponsored antismoking commercials within the United States is associated with stronger intentions not to smoke in the future and with a lower probability of being a smoker. This study used cross-sectional data for two years (1999 and 2000) on 8th-, 10th-, and 12th-grade students from the Monitoring the Future survey to link exposure to state antismoking commercials to youth smoking outcomes. Their analysis was similar to that of Farrelly and colleagues,⁹³ using commercial ratings data from Nielsen Media Research to calculate a measure of audience exposure to antismoking advertising across the 75 largest media markets for the years 1999 through 2000. These data enabled Emery and colleagues to measure exposure to state antismoking advertisements across the 75 media markets separately from exposure to antismoking advertisements sponsored by the tobacco industry and advertisements for smoking-cessation aids sponsored by the pharmaceutical industry. These measures were incorporated as independent variables in a series of multivariable logistic regressions that estimated outcomes related to smoking as a function of exposure to advertising. This study was the first to examine the impact of state-funded antismoking campaigns on youth smoking while controlling for other tobacco-related advertisements. The analyses controlled for a comprehensive set of potential confounding influences—such as demographics, family structure, parents' education, average state cigarette prices, clean indoor air laws, and secular trends—to account for potential influences they were unable to model (e.g., such as Legacy's "truth" campaign).

The results from these analyses indicate that exposure to at least one state-funded antismoking advertisement in the prior four months is associated with lower perceived rates of friends' smoking, greater perceived harm of smoking, stronger intentions not to smoke in the future, and lower likelihood

of being a smoker. These findings are particularly compelling because the models consistently yield significant associations between exposure to state antismoking campaigns and youth smoking-related outcomes. This association occurred even though state campaigns, as captured by the awareness measures used by Emery and colleagues, varied dramatically in the number and frequency of advertisements aired.

A limitation of this study was that the authors could not control for preexisting correlations between levels of smoking in the media markets and the number and frequency of advertisements aired in each market. As Farrelly and colleagues⁹³ noted, markets with low media exposure tend to have populations that are more rural, white, and less educated, and lower in income than do markets with high exposure. These factors are all associated with higher levels of smoking. Thus, failing to control for these potential preexisting correlations could lead to a spurious negative correlation between antismoking advertising and youth smoking rates. In subsequent analysis, the same methods applied to five years of advertising exposure and youth smoking outcome data, and controlling for preexisting youth smoking rates in 1995–96, found the same pattern of results, linking greater advertising exposure to reductions in youth smoking.¹¹⁷

Minnesota, Youth

In 1985, Minnesota was the first state to mount a statewide antismoking campaign aimed at youth. The campaign used paid and donated spots on television and radio as well as newspaper and billboard ads, particularly in connection with sports and other events attracting large adolescent audiences. Murray and colleagues¹¹⁸ evaluated the effects of this campaign during 1986–90 on youth attitudes toward tobacco and smoking by contrasting change over time among Minnesota youth relative to youth in Wisconsin. They demonstrated a

small but statistically significant increase in exposure to antismoking messages but no changes in attitudes or smoking behavior. Given the relatively low level of spending for the campaign and only a small increase in exposure to antismoking messages, it is possible that the campaign's reach was not sufficient to lead to change in smoking behaviors.

Another cross-sectional study examined the effects of Minnesota's Target Market youth media campaign. This campaign, launched in the spring of 2000 and continued for three years, was phased out after state budget cuts. To evaluate the campaign, four cross-sectional surveys of approximately 1,100 12- to 17-year-olds were conducted between summer 2002 and winter 2003.¹¹⁹ The last survey was conducted five months after the last advertisement aired. The authors used several measures to test whether or not ending the campaign had a negative impact on outcomes: awareness of Target Market; smoking susceptibility ("if someone you thought was cool offered you a cigarette, would you smoke it?") and "would you wear a shirt, hat, or sunglasses with a tobacco company logo on it?"); intention to smoke in the next year; and three attitudinal scales. One scale measured attitudes toward the tobacco industry (central to the campaign), one included traditional normative attitudes and beliefs, and the third reflected antitobacco empowerment.

The results show that awareness of the advertising dropped from 59% to 50%, and awareness of the Target Market brand dropped from 85% to 57%. By the last survey, the two measures of smoking susceptibility increased, as did intentions to smoke in the next year. Finally, scores on all three attitudinal scales decreased. These results may provide evidence of the effectiveness of Minnesota's media campaign by showing that the absence of the campaign led to adverse changes in key tobacco outcomes. However, without a

comparison sample, it is difficult to know if the trends in Minnesota reflected, in part, a national trend.

California, Youth and Adults

Popham and colleagues¹²⁰ conducted a before-and-after cross-sectional design to assess the effectiveness of California's 1990–91 mass media campaign among youth and adult smokers. This assessment occurred before the implementation of most other statewide tobacco control activities and after an increase of 25 cents per pack in the state cigarette excise tax. The pre- and posttest surveys of youth in grades 4–12 were conducted in schools; the adult smoker survey was conducted by telephone. For youth, posttest surveys were conducted 3, 7, and 12 months after baseline and 2, 6, and 11 months after the campaign launch. The authors used *t*-tests to evaluate differences between surveys and in the final survey and differences between those exposed and unexposed (self-report) to the media messages. The results indicate positive changes in tobacco attitudes, intentions, and use. However, these differences appear between the baseline and first posttest survey only after two months of exposure to the campaign. For example, smoking prevalence declined from 12.8% to 10.3% over this period and was 10.9% in the 12-month survey. A similar pattern was found for attitudes and intentions. In addition, the statistically significant differences were of modest magnitude. When authors analyzed outcomes in the 12-month survey for those who reported awareness of the campaign versus those who did not, they found conflicting results: those exposed to the campaign showed significantly more health-enhancing attitudes, but more nonsmokers indicated they were thinking about starting to smoke. The authors suggest that their measure for “thinking about starting” may not have been valid. Selective attention among nonsmokers susceptible to smoking may also explain this result.

The results for the adult smoker surveys show an increase in awareness of campaign messages between the baseline and 12-month surveys, a modest but statistically significant decrease in antitobacco attitudes, and no difference in intentions to quit. No meaningful differences were found in the final survey between those reporting and those not reporting awareness of the campaign. Given the relatively short timeframe for the study and analyses that did not control for potentially confounding influences among those either reporting or not reporting exposure, it is not surprising that this study had mixed results.

One other study attempted to assess indirectly the impact of California's media campaign on tax-paid cigarette sales. Hu and colleagues¹²¹ conducted a regression analysis of quarterly cigarette sales between 1980 and 1992 and mass media campaign expenditures, controlling for cigarette price excluding cigarette excise taxes, the amount of cigarette excise taxes, and time. They found a significant association between expenditures on mass media campaigns and declines in cigarette sales.

Florida, Youth

In addition to the evidence of effectiveness for the Florida “truth” campaign noted earlier in this chapter from longitudinal evaluations,^{96,97} Sly and colleagues⁹⁶ used a before-and-after design with a comparison group to assess the effectiveness of the Florida “truth” campaign in the first year of the campaign. The central comparisons in this study are between independent cross-sectional samples of 12- to 17-year-olds in Florida and the rest of the United States (excluding Arizona, California, Massachusetts, and Oregon, which had preexisting campaigns) in April 1998 and May 1999. Key outcome measures included campaign-targeted beliefs and attitudes, smoking susceptibility, and behavior. Target sample sizes were

1,800 and 1,000 for the Florida and national population samples, respectively.

One year after the campaign was launched, 89% of Florida youth sampled reported seeing at least one of the Florida “truth” advertisements. At baseline, the level of agreement with beliefs and attitudes was similar between Florida and national youth for 9 of the 11 items. By the May 1999 survey, youth in Florida had more favorable beliefs and attitudes than did the national sample for 9 of the 11 items. Between the baseline and the May 1999 surveys, statistically significant decreases occurred in the percentage of youth who had ever tried a cigarette and the percentage of nonsmoking youth who were open to smoking. In addition, rates of change in ever trying a cigarette, currently smoking, and being open to smoking among nonsmokers over the one-year period compared favorably in Florida with the national sample. For example, current smoking declined by 8.9% in relative terms in Florida and increased by 11.9% nationally. These results are consistent with the longitudinal studies by Sly and colleagues.^{96,97} They indicate that the Florida “truth” campaign reached a significant proportion of all Florida youth in its first year and had a positive impact on beliefs, attitudes, and intentions to smoke.

Using an approach similar to that of Sly and colleagues,⁹⁶ Niederdeppe and colleagues¹²² compared 12- to 17-year-old youths in Florida ($N = 1,097$) and nationally ($N = 6,381$, excluding youth in states with large-scale media campaigns in Arizona, California, Massachusetts, Mississippi, and Oregon) with cross-sectional surveys conducted between fall 2000 and spring 2001. Key measures included current and lifetime smoking, smoking intentions, awareness of tobacco control activities, and agreement with four belief items about cigarette companies that are central to the Florida “truth” and the Legacy national

“truth” campaigns as well as eight other beliefs about the social and physical effects of tobacco use.

The results indicate that Florida adolescents were less likely than youth nationally to have smoked in the past 30 days, to have ever tried smoking, and to be open to smoking in the future (among never smokers). Florida adolescents also had higher awareness of “truth” and community antitobacco organizations (e.g., Florida’s Students Working Against Tobacco) but similar levels of exposure to school-based tobacco prevention education. Florida youth had less-favorable beliefs about cigarette companies (all four items were statistically significant) compared with youth nationally, but all other beliefs surveyed were similar.

Another evaluation of Florida’s campaign relied on the cross-sectional Florida Youth Tobacco Surveys (more than 20,000 students in more than 240 middle and high schools each year) conducted in 1998 (preprogram) and in both 1999 and 2000 (postprogram).¹²³ No comparison group in other states was presented. However, over the two-year period, both experimentation and current smoking declined markedly for both middle school and high school students. Experimentation declined from 21.4% to 16.2% among middle school students and from 32.8% to 28.2% for high school students. The corresponding percentages for current smoking were 18.5% to 11.1% and 27.4% to 22.6% for middle and high school students, respectively. In addition, among never smokers, there were significant increases in the percentages committed to never smoking: 67.4% to 76.9% for middle school students and 73.7% to 79.3% for high school students. Furthermore, the percentage of experimenters who said they would not try smoking again went from 67.4% to 76.8% for middle school students and from 44.4% to 51.0% for high school students. This study documented very

encouraging trends in Florida over the course of the campaign.

British Columbia, Canada, Adults

Gagne¹²⁴ described the short-term results of a provincewide media campaign conducted in two waves—four weeks in early 2005 and four weeks in early 2006—but postcampaign data were available only for the 2005 segment. The media campaign consisted of television and radio spots, together with a poster campaign, and focused on the short- and long-term benefits of quitting. Cross-sectional national population surveys conducted before (from 1999) and after (to 2005) the first segment provided trend data on smoking behavior for analysis. Smoking prevalence is lower in British Columbia than in the rest of Canada, so deviations from expected trends for prevalence or self-reported cigarette consumption among smokers for British Columbia and the rest of Canada were computed. Both prevalence and smokers' daily cigarette consumption increased in the rest of Canada, but they continued a downward trend in British Columbia. Low-consumption smokers in British Columbia showed a greater decline in consumption than expected, but those in the rest of Canada continued on trend. Higher consumption smokers in British Columbia remained on trend, but those in the rest of Canada increased consumption beyond that expected from the preexisting trend. These results suggest that the media campaign helped British Columbia residents curb their smoking, while smoking increased in the rest of Canada.

State and National Tobacco Control Programs with Antitobacco Media Components

As the study by Emery and colleagues¹¹⁶ described above indicates, a number of statewide mass media campaigns have aimed at curbing youth and/or adult smoking in

the United States. A central challenge in assessing these efforts' effectiveness is that these campaigns often take place within the context of a comprehensive approach to tobacco control that includes tobacco prevention education in schools, community mobilization efforts to change policy and educate the public, smoking cessation telephone quitlines, and policy initiatives (e.g., banning smoking in public places, raising excise taxes, subsidizing smoking cessation therapy, restricting youth access to cigarettes). Reviews of multicomponent tobacco use prevention and control programs have shown them to be effective in reducing both smoking by youth and adults and cigarette sales.^{6,7,125–129}

The population studies described earlier in this chapter (national and state programs, evaluated longitudinally and cross-sectionally) mostly concerned the media campaign component of a multicomponent program; in general, other tobacco control measures were also operative. These evaluation studies generally related behavior and attitudes directly to some measure of exposure to the media campaigns. This section looks at programs regarded as multicomponent or even comprehensive tobacco control programs.⁹² Although antitobacco media campaigns are an important component of these programs, other components may have played at least as great a role in discouraging smoking. It is difficult to determine the separate effectiveness of campaign components. Furthermore, the programs are generally directed at the entire population, not just youth. The studies described below concern the net effect of all program components together for two national, four statewide, and one citywide campaign. Although other U.S. states have also mounted tobacco control programs, peer-reviewed, published results are insufficient to include them in this summary. Results from state reports and other sources are summarized, however, in a 2005 review.¹²⁸

Singapore

This city-state appeared to be among the first countries to undertake a concerted and coordinated tobacco control program, in 1986, that sought to denormalize tobacco use with its theme, "Towards a Nation of Non-Smokers."¹³⁰ The program aimed to prevent youth smoking, encourage smokers to quit, and protect the rights of nonsmokers. Tobacco control measures included restriction of smoking in public places and workplaces, restriction of tobacco advertising, increased excise duties on imported cigarettes, and provision of cessation assistance. Educational programs in schools, clubs, worksites, and within the community also were undertaken, and written materials were part of this effort. Emmanuel and colleagues¹³⁰ noted that all these educational programs "were complemented by intensive mass media coverage." It is not known whether these media efforts were paid announcements by the government or provided as news coverage (perhaps requested by the agency running the campaign). Cross-sectional, population-based surveys indicated that smoking prevalence (aged 15 and older) fell from 19.0% in 1984 to 13.6% in 1987, or a 28% decrease. Per capita tobacco consumption decreased 26% over this period, while youth (15–19 years old) smoking prevalence decreased from 5.1% to 2.9%. Declines were observed for both genders and all age and ethnic groups. Smoking prevalence had been declining in Singapore before this tobacco control effort, but the rate of decline increased during the campaign.

New Zealand

From 1985 to 1998, New Zealand undertook an extensive tobacco control program that included restrictions on tobacco advertising and sponsorships, increased taxation of tobacco products, regulation of nicotine and tar yields in manufactured cigarette brands, stronger warnings on cigarette packaging, increased but not total smoking restrictions

in enclosed public places and workplaces, school-based education programs, a ban on the sale of tobacco products to those under age 16, and public education through both paid advertising campaigns and news items.¹³¹ However, the paid advertisements were limited because of cost. The campaign effect was evaluated by annual cross-sectional population surveys (1985 through 1995), and data were compared to available published data from other Organisation for Economic Co-operation and Development (mostly European) countries. Adult smoking prevalence fell from 30% in 1985 to 25% in 1998, and was then the eighth lowest among 21 comparison countries. Youth (15–24 years old) smoking prevalence decreased from 35% to 28% over this period. Among the 17 comparison countries with data for this age group, New Zealand ranked third in the rate of decline. The decline was also observed among the Maori population, which was an important program goal. In general, the declines were greater among those with more education. Between 1975 and 1985, adult per capita tobacco consumption fell 23%; the decline nearly doubled to 45% from 1985 to 1998. The adult per capita consumption level in 1995 was second lowest behind Sweden among the comparison countries.

California

California was the first U.S. state to fund a tobacco control program from the revenues of a voter-approved cigarette excise tax hike, Proposition 99. The initiative passed in 1989, boosting the tax by 25 cents per pack, with 20% of the new revenue to be devoted to a comprehensive tobacco control program. California's program featured an antitobacco media campaign that began in late 1990. Shortly thereafter, community and school programs were initiated. Activists instrumental in the passage of Proposition 99 worked for local and then statewide bans on smoking in workplaces. The state ban became law in 1995 and was extended to bars and clubs in 1998.

Increased efforts began in 1996 to enforce laws banning the sale of cigarettes to minors. In 1998, voters approved a further increase of 50 cents per pack in the cigarette excise tax; the increase took effect in 1999.

Further evaluation efforts documented a decline in per capita cigarette consumption (sales).^{121,132,133} Later studies compared both per capita cigarette consumption and adult smoking prevalence in California with similar data for the rest of the United States and found greater declines in California than in any other state.^{95,134} Comparisons were from state-specific sales data and national cross-sectional surveys as well as the cross-sectional California Tobacco Surveys, conducted approximately every three years as part of the program evaluation. Pierce and colleagues¹³⁴ presented evidence of a halting of favorable downward trends coincident with severely reduced funding for the program, including the media campaign, in 1993–96. Program funding was restored in late 1996.

Evaluations of the California Tobacco Program's effect on cigarette consumption^{135,136} and adult smoking cessation¹³⁷ provide additional evidence of program success. Between 1988 and 2002, per capita consumption (sales data) declined by 60% in California compared to 40% in the rest of the United States.¹³⁵ During the early part of the program, analyses of self-reported consumption (from California Tobacco Surveys) indicated that most of the decline could be attributed to California smokers' smoking less. However, between 1996 and 2002, a significant proportion of the decline was because of smokers' quitting. Self-reported consumption by non-Hispanic, white, daily smokers between the ages of 35 and 64 years responding to national cross-sectional surveys (U.S. Census Bureau Current Population Surveys) declined faster in California, with its comprehensive tobacco control program, than in smokers of similar ages

in (1) New York and New Jersey, with cigarette prices similar to those in California and no program, and (2) in tobacco-growing states (Kentucky, Tennessee, North Carolina, South Carolina, Virginia, and Georgia), with low cigarette prices and no program.¹³⁶ Although consumption among daily smokers was lower in California among younger, non-Hispanic, white smokers aged 20–34 years than in the other state groups, all groups showed similar rates of decline. In contrast, successful cessation increased among this younger age group of California smokers faster than in the other state groups.¹³⁷ Faster increases in quitting for California smokers were also observed for the age group of 35–49 years, but not for those 50–64 years old. An analysis of trends in the prevalence of daily smoking among African Americans in these state groups (above) showed no program or tax effect,¹³⁸ the levels and trends for all state groups were virtually the same. All these analyses adjusted for demographic factors and estimated the trends from general linear models that accounted for variability within state groups.

Youth outcomes have also been investigated.^{139–141} Trends in unstandardized measures of several adolescent (12–17 years old) smoking behaviors (ever puffed, ever smoked a whole cigarette, and smoked at least 100 cigarettes in lifetime) from the California Tobacco Surveys showed overall declines from 1990 to 2002.¹³⁹ However, while the decline in ever puffing was apparent after 1990 in the youngest age group (12 and 13 years), it became apparent after 1993 for adolescents aged 14 and 15 years, and after 1996 for those aged 16 and 17 years. The declines in the other measures did not begin until after 1996 for all age groups. The prevalence of smoking in the past 30 days for all adolescents remained constant from 1990 to 1992 (approximately 9%), increased to 12% in 1996, declined below 1990 levels to about 7% in 1999, and declined further to about 5% in 2002. The California

Tobacco Surveys also showed a decline (standardized) in prevalence of young adults' (aged 18–24 years) ever smoking over this period, and national survey data (Current Population Surveys, again standardized) indicate that while young adults' smoking prevalence remained level in the rest of the United States, a marked decline occurred between 1998–99 and 2001–02 in California. These results suggest that fewer of California's adolescents are moving to young adulthood as smokers.

Two longitudinal population surveys of adolescents aged 12–17 years were conducted: (1) at baseline in 1993, followed in 1996; and (2) at baseline in 1996, followed in 1999; and transition rates were examined.¹⁴⁰ Adjusted analyses indicate that transitions from being a committed never smoker at baseline to any smoking by follow-up, from being a susceptible never smoker to any smoking, and from being an experimenter to becoming an established smoker were significantly lower in the second survey compared to the first for those aged 12–14 years. Only the first transition was significantly less likely for those aged 15–17 years in the second cohort. Although the other transition rates were lower in the second cohort compared with the first, they were not significantly lower.

An analysis by Chen and colleagues¹⁴¹ used age-period cohort analyses of the California Tobacco Surveys and California Youth Tobacco Surveys (similar surveys, but the latter are smaller and conducted continually) to examine the prevalence of never smoking from 1990 to 1999. They concluded that the California Tobacco Control Program affected only those born after 1978 who would have been 12 years of age or younger when the California Tobacco Program began.

Taken together, these studies suggest that an environment of tobacco control and the denormalization of tobacco use decrease smoking initiation.

Massachusetts

Koh and colleagues present a thorough review of the history of tobacco control in Massachusetts.¹⁴² Following California's example, Massachusetts voters approved a ballot initiative in 1992 that raised the excise tax on cigarettes by 25 cents per pack, with a portion of the revenues (initially about 30%, but less later) dedicated to funding a tobacco control program. The program was implemented in 1994. It included a mass media campaign, community-based programs to promote change at the local level (including the adoption of smoking restrictions), the passage and enforcement of laws restricting youth access to cigarettes, school-based prevention programs, and efforts to help smokers quit (including a quitline).

First evaluations of the program examined per capita cigarette sales data and adult smoking prevalence.¹⁴³ Taking into account cross-border sales, Harris and colleagues¹⁴³ found a 17% reduction in sales for Massachusetts from 1992 to 1996, compared to a decline of 6% nationally. Using Behavioral Risk Factor Surveillance System (population survey) data, they found that adult prevalence declined 9.4% from 1990–92 (before the program) to 1993–95 (after the program), but declined only 2.9% during this period in all other 41 states surveyed (excluding California). A subsequent analysis of per capita consumption data indicated an annual decline of 4% for Massachusetts compared to only 1% in the rest of the United States (excluding California) from 1993 to 1999.¹⁴⁴ Unadjusted adult prevalence rates from the Behavioral Risk Factor Surveillance System, together with the random, population-based Massachusetts Tobacco Surveys, showed an annual decline of 0.43 percentage points for Massachusetts compared to no change in the other states from 1992 to 1999. Prevalence trends through 1999 were examined again later by using the Behavioral Risk Factor Surveillance System data,¹⁴⁵ with the addition of regression

models that adjusted for demographics. On the basis of the model estimates, prevalence declined 22% (or 2.4% per year on average for nine years) from 1990 to 1999 in Massachusetts but only 5% nationally (<0.5% per year) during this period.

Surveys of students in secondary schools and colleges have shown a decline in youth tobacco use.^{146,147} Triennial school surveys of students in randomly selected classes of randomly selected schools showed a decline from 1996 to 1999 in current smoking (in last 30 days) from 21.0% to 12.6% for students in grades 7 to 9, and from 35.6% to 29.9% for students in grades 9 to 12.¹⁴⁶ Data were weighted to account for any changes in population demographics. The greater relative decline for younger students compared to older students (67% vs. 16%) supports the California results,^{139,141} that is, children who grow up in an environment that denormalizes tobacco use may be more likely to remain never smokers. Rigotti and colleagues¹⁴⁷ examined smoking prevalence (last 30 days) among young adult college students, using the 1999 Massachusetts College Alcohol Survey administered to 11 public colleges and universities in Massachusetts. Current smoking was lower among public college students who had attended high school in Massachusetts compared with out-of-state students: 35.5% versus 42.6%, respectively. Adjusting for demographic factors including age, sex, race, parental education, and college residence found the in-state students were only 67% as likely to be smokers as the out-of-state students.

Arizona

Arizona's comprehensive program began in 1995, following a 1994 voter-approved initiative raising the excise tax on cigarettes by 40 cents per pack, with 23% of this new revenue devoted to tobacco control.¹⁴⁸ The resulting program included all nine components of a comprehensive tobacco control program subsequently recommended by the Centers for Disease

Control and Prevention.⁹² Cross-sectional surveys conducted in 1996 and 1999 assessed changes in adult smoking prevalence with standardization to 1996 state demographics for comparability. Although the 1996 survey was not a true preprogram survey, the changes between the two surveys were notable. Overall, adult smoking prevalence decreased from 23.1% to 18.3%, and significant decreases were observed for important population subgroups, including Hispanics, low-income households, and low-education groups. Whether the decline in prevalence was due to national or regional influences rather than to the state tobacco control program could not be established without data from a comparison group of states.

Ross and colleagues¹⁴⁹ report that youth smoking in Tucson, Arizona, declined between 1996 and 2001 coincident with the city's Full Court Press (FCP) project, a comprehensive, community-based program for prevention of adolescent tobacco use. Factoring out the expected decline from increases in cigarette prices during this period, the percentage decline in 30-day smoking prevalence attributable to the FCP was 13.8% for 7th and 8th graders, 10.9% for 9th and 10th graders, and 8.8% for 11th and 12th graders. However, because the FCP supplemented the state's tobacco control program and students were, therefore, exposed to multiple programs, the resultant decline would represent the combined program effects and does not factor in national or regional secular trends.

Oregon

Voters in Oregon also approved an initiative increasing the excise tax on cigarettes.¹⁵⁰ This increase occurred in 1996, and 10% of the revenue generated was allocated to the development and implementation of a comprehensive tobacco control program that became operational in 1997. Oregon's Tobacco Prevention and Education Program included community-based tobacco use

prevention coalitions in every county, a statewide media-based public awareness and education campaign, comprehensive school-based programs, tribal tobacco use prevention programs, multicultural outreach and education, a quitters' help line providing smoking cessation support, and projects evaluating new approaches to prevent and reduce tobacco use. Cigarette sales data from Oregon were compared with the United States as a whole, excluding California, Massachusetts, and Arizona. In the baseline period before program onset, per capita cigarette sales decreased 2.2% in Oregon compared to 0.6% in the rest of the United States. During the program (1996–98), per capita consumption declined by 11.3% in Oregon compared to 1.0% in the other states. Adult smoking prevalence, as estimated from the cross-sectional Behavioral Risk Factor Surveillance System, indicated a decline of 6.4%. How this decline in prevalence compared with other states was not described.

New York City

Although New York City is not a state, its population is larger than that of many U.S. states. Between 2002 and 2003, the city undertook a number of tobacco control activities, including a large increase (\$1.42 per pack) in the excise tax on cigarettes, an indoor air smoke-free policy that covered all workplaces including restaurants and bars, an emphasis on the treatment of nicotine dependence with distribution of nicotine patches in conjunction with brief telephone counseling for heavy smokers, and educational publications and advertisements in broadcast and print media that emphasized the health risks of secondhand smoke and the benefits of quitting.¹⁵¹ Cross-sectional population surveys show that adult smoking prevalence remained remarkably stable from 1993 to 2002 (between 21.5% and 21.7%) but dropped 11% (to 19.2%) between 2002 and 2003. Subgroups showing the greatest declines (>15%) were smokers aged

18–24 years, those residing in the Bronx, those with some college, U.S.-born African Americans, and those who smoked more than 10 cigarettes per day. Many smokers, especially those with lower incomes, reported that they had tried to quit or had cut down the number of cigarettes they smoked per day. Furthermore, nearly half the population reported reduced exposure to secondhand smoke. Although the proportion of cigarettes reportedly purchased outside the city increased by nearly one-third, city tax revenue increased by a factor of 10. However, tax avoidance practices such as city residents purchasing outside the city, or nonresidents bringing cigarettes into the city instead of purchasing them while there, meant that the reported average price paid per pack increased just 20% instead of the 32% expected in the absence of such behavior. Although declines may have occurred in other metropolitan areas between 2002 and 2003, the stable prevalence rate leading up to the city's tobacco control program suggests that the program was responsible for at least some of the decline in smoking.

Because the decline in smoking prevalence in New York City appeared to level off by 2005, an intensive mass media campaign was planned to augment a statewide media campaign planned for January through October of 2006.¹⁵² The city campaign aimed to increase smokers' motivation to quit; the statewide campaign had the same theme but also focused on the effects of secondhand smoke on children. No new additional tobacco control efforts were undertaken either by the state or by the city during this period. Adult smoking prevalence declined from 18.9% in 2005 to 17.5% in late 2006, and the decline was observed particularly among males and Hispanics. Unless statewide or nationwide secular trends show a decline of similar magnitude during this period (data not yet available), this study suggests that a well-funded, intensive antitobacco mass media campaign can have an effect in the setting

of an ongoing, multicomponent tobacco control program.

Media and Calls to Cessation Information Centers and Quitlines

Mass media messages have sometimes been “tagged” with phone numbers for interested viewers to call for information about cessation services or to get cessation help directly. It can be argued that prompting a smoker to make a call for information or help is a behavioral outcome for a media campaign. Quitlines can be an effective mode for the delivery of cessation services for a number of reasons, including accessibility and convenience to the smoker.¹⁵³ The studies described below indicate that tagged media can increase call volume to informational services and quitlines.

For five years, from 1985 through 1989, the U.S. Department of Health and Human Services, through its Public Health Service, Centers for Disease Control and Prevention, Office on Smoking and Health, conducted a media campaign through PSAs to encourage smokers to inform themselves about smoking cessation. During three months (August 1983, January 1985, and January 1987), the PSAs were tagged with a telephone number staffed by the Cancer Information Service (CIS) of the National Cancer Institute. The numbers of calls to the information and referral service related to smoking cessation were much higher (approximately 20% of total calls) during the months when the PSAs were tagged (three spots) with the service center number¹⁵⁴ than in months when no cessation-related messages, or cessation-related messages (nine spots) not tagged with the telephone number, were shown (approximately 8% of total calls). This campaign appeared to be effective in prompting smokers who possibly already were motivated to take an action that might help them quit. An estimated 63% of the television-viewing audience saw a tagged announcement, but no

indication of a noticeable change in smoking prevalence was found during this period.¹⁵⁵

Another study involving the CIS used strategically placed media spots to encourage African Americans to call for help with quitting.¹⁵⁶ Fourteen communities were selected for similar demographic profiles, including race, to form seven matched pairs. One community of each pair was then randomly assigned (to the extent possible, as determined by media markets) to the intervention condition. Within the intervention communities, newly designed radio and television spots were placed on stations with predominantly African-American adult audiences. Copies of these spots were also disseminated through community-based organizations. Call records that obtained demographics, address, smoking status, and how the caller heard about the CIS were the basis for evaluating campaign effectiveness. During the campaign, African Americans made 82% of the calls in the intervention communities but only 26% of the calls in the control communities. Before the campaign, African Americans in all communities averaged only 1.6 calls per week; during the first wave of the campaign, however, the average was 86 calls per week. Call volume for African Americans fell to near baseline levels just before the second wave of the campaign, but during the second wave, call volume for African Americans increased to 40.3 per week. Slightly more of the African Americans said their calls were prompted by radio spots than by television.

One of the first smokers' quitlines was part of the Sydney, Australia, “Quit. For Life” antismoking campaign.⁷³ Call volume increased markedly during the first week of airing of commercials with the theme: “I’ve had enough.” The commercials depicted social reasons for not smoking and smokers unhappy with their smoking, as well as including the suggestion that smokers call the quitline. Enrollment in Quit Centre programs at Sydney Hospital also was higher

during the part of the media campaign that emphasized the “I’ve had enough” theme.

Other media-promoted quitlines^{157–163} also saw increases in call volume coinciding with the airing of tagged messages. Since 1994, the Health Education Authority for England has funded a mass media campaign aimed at getting smokers to quit.¹⁶⁴ The campaign advertisements urge smokers to call a quitline. Although the quitline receives about one-half million calls per year, more than 70% of calls occurred during the three months of the advertising campaign. In 2004, quitline call volume increased fourfold compared with the average, coincident with the media blitz associated with the United Kingdom No Smoking Day.¹⁶²

The California Smokers’ Helpline appears to reach a fairly representative sample of California smokers, as the demographic characteristics of helpline callers are similar to those of the general population.¹⁶⁵ During the first period when media messages were tagged with the helpline phone number, call volume increased more than three times compared with that observed for a period of similar length before the media campaign.¹⁵⁷ Furthermore, a greater proportion of callers during the first and subsequent periods of intense, tagged media messages indicated the spots as the reason they had called. In periods when media use was minimal, a higher proportion of callers cited other sources of referral to the helpline.

As in previous campaigns, some media messages for Australia’s NTC were tagged with a telephone number for the Australian National Quitline Service.^{159,166} Quitline call volume was higher when media messages were present. Overall, the NTC quitline call volume was significantly related to television target rating points for the tagged advertisements. However, calls from people making counseling requests occurred more when rating points were lower; counseling was not suggested proactively during times

of high call volume. Some of the callers during lower call-volume periods may have been specifically referred.¹⁵⁹ Carroll and Rock¹⁶⁶ found that certain of the campaign ads, especially those that showed someone calling the quitline, and placement in low involvement programs tended to yield greater quitline activity.

In contrast to the egalitarian reach of the California quitline, a study in Victoria, Australia, found lower response in low socioeconomic areas;¹⁶³ however, the increase in quitline call volume¹⁶¹ coincident with increased media messages was the same regardless of socioeconomic area.¹⁶³ Furthermore, the Maori population, a minority group in New Zealand, called a national quitline at higher rates during an intense media campaign.¹⁶⁰

Summary of Population-Based Studies

The earliest evidence that mass media could affect smoking behavior was discerned from events surrounding the natural experiment created by the Fairness Doctrine. This evidence provided the impetus to investigate further the effects of well-defined media interventions aimed at national and statewide populations. Often, the evaluation of these media campaigns has taken place within the framework of a multicomponent tobacco control program. In many instances it is not possible to separate the effects of the media component from the other components of the tobacco control program.

When studies have related various measures of exposure to media from these campaigns to behavioral outcomes, the evidence has been very consistent. The findings described above suggest that antismoking media campaigns can influence attitudes toward tobacco within a short period, followed by longer-term effects on smoking behavior. Moreover, these studies highlight the validity of modern health behavior change

theories that predict that health-marketing campaigns bring about behavior changes by first influencing behavior-related attitudes, beliefs, and intentions. This evidence also highlights the importance of identifying in the formative stages of campaign development the attitudinal constructs that health marketing advertisements are likely to influence, and then using those constructs to inform and enhance the evaluation of health marketing campaigns.

As in the controlled experimental studies, methodological issues (similar and unique) related to population studies deserve attention. Particular care to separate program effects from secular trends is essential. Repeated cross-sectional surveys to establish preexisting secular trends and track progress during the program need to take into account changing population demographics. Longitudinal surveys need to investigate the possible effects of differential attrition. Selection of a comparison group for evaluating a state-level program is complicated by spillover of media and other program elements from other states and programs, however modest, within the comparison states.

Summary

Controlled Field Experiments

A large number of field experiments have assessed the efficacy of mass media campaigns in the United States and in other countries. Taken as a whole, these experimental studies provide evidence that antismoking media campaigns can affect smoking-related attitudes, smoking initiation, and smoking cessation. However, these findings are not uniformly positive.

Early, longitudinal, community-based studies such as the North Karelia Project and the Stanford Three Community Study used multicomponent approaches,

including mass media, to reduce risk factors, including smoking, for cardiovascular disease. These studies provide some initial evidence of efficacy that such approaches can alter health behaviors.

A second wave of large-scale studies (e.g., the Stanford Five-City Project and the Minnesota Heart Health Program), using approaches similar to those in the North Karelia Project and the Stanford Three Community Study, also documented declines in cardiovascular disease risk factors. However, interpretation of these later studies was complicated by favorable secular trends that occurred simultaneously with the study, possibly obscuring the results in the intervention communities. Overall, these studies provide only modest evidence of intervention effects over time.

Although most of the large-scale cardiovascular disease prevention studies examined outcomes related to adults, several also assessed their effect on youth (North Karelia Project, Stanford Five-City Project, and Minnesota Heart Health Program). A number of controlled field experiments also were aimed specifically at preventing smoking in youth or at encouraging smoking cessation among adults. Several cited studies focused solely on evaluating mass media campaigns, while others, like the seminal community-based cardiovascular disease prevention studies mentioned above, observed the role of media as part of a comprehensive approach. Again, results from the prevention and cessation studies have been mixed. Nevertheless, evidence exists for the potential effectiveness of intensive, well-planned, and coordinated mass media campaigns, together with school- and community-based programs, to reduce youth smoking and support adult smoking cessation.

Intrinsic in controlled field experiments are a number of considerations that may cloud intervention effects or lead to

inaccurate conclusions, possibly explaining some of the variation in findings from the studies reviewed. Common issues, such as insufficient control for baseline community characteristics, smoking-related risk factors, and prior and concurrent secular trends, along with small sample sizes, can result in reduced statistical power. In most studies, only a few communities are included. Appropriate analyses of field experiments should account for the fact that individuals “nested” within schools, organizations, and communities tend to share similar characteristics. Failure to account for the homogeneity among individuals within communities, if present, can result in a type I error (p -values that are too small). Analyses that account for these similarities among individuals within communities are more precise but at the cost of significantly reducing statistical power (p -values that are too large). Differential attrition in longitudinal samples also can either mask or contribute to observed effects. Differences in how researchers treat these issues likely account for some of the inconsistency in study findings.

Population Studies

Population research regarding the effect of mass media on smoking behavior began with the evaluation of the Fairness Doctrine. The results of the Fairness Doctrine natural experiment, evaluated by cross-sectional studies, provided impetus for much that followed. Since then, a number of longitudinal and cross-sectional studies evaluated the effectiveness of novel, large-scale national and state-level campaigns aimed at youth and/or the general population in the United States and Australia and smaller-scale campaigns in other countries. In most of these studies, mass media was a major component of a multicomponent tobacco control program.

A number of population-based, cross-sectional studies and a few longitudinal

studies have validated the findings from the controlled field experiments. All of these population studies showed evidence of effectiveness. Three longitudinal studies examined two state campaigns to investigate how mass media campaigns curb smoking initiation among youth. Although both campaigns were conducted in states that implemented other tobacco use prevention and control interventions, all three studies found an association of recall of campaign messages with decreased initiation. None of these studies addressed how attrition from the longitudinal sample may have influenced the findings, but all three studies provide evidence of effectiveness. One longitudinal study of smoking cessation indicated that exposure to mass media messages is associated with increased thoughts about quitting and negative thoughts about smoking. However, the study did not control for potentially confounding influences.

Cross-sectional studies of Legacy’s national “truth” campaign, which featured hard-hitting messages that highlight tobacco industry practices and stark facts about the deadly effects of tobacco (similar to the successful Florida “truth” campaign), found that the campaign was associated with stronger antitobacco attitudes and reduced smoking. Philip Morris’s “Think. Don’t Smoke” campaign, which takes a “just say no” approach and lacks hard-hitting messages and facts about tobacco, has not been shown to be effective, however. In addition, the company’s “Talk. They’ll Listen” campaign directed to parents may encourage prosmoking beliefs and attitudes among older adolescents. On the other hand, evaluations of state tobacco control programs with significant media components have shown encouraging results.

Conclusions

1. Several evaluations of the antismoking public service announcements required

- under the Fairness Doctrine between 1967 and 1970, the first large-scale U.S. national mass media campaign, indicate that there were discernible reductions in tobacco consumption, smoking prevalence, and smoking initiation. This natural experiment spurred research into the use of media to influence health behaviors.
2. Evidence from controlled field experiments suggests that antitobacco mass media campaigns conducted in conjunction with school- or community-based programming can be effective in curbing smoking initiation in youth and promoting smoking cessation in adults. This evidence has provided the impetus for antitobacco mass media campaigns to become important components of tobacco control programs.
 3. The few population-based studies of antitobacco mass media campaigns, in which the media campaign was the only antitobacco program, demonstrate that the media campaigns were effective in reducing smoking in the youth and adult target populations.
 4. Population-based studies of antitobacco mass media campaigns that were only one component of multicomponent tobacco control programs provide considerable evidence for reduced use of tobacco by youth and adults. The antitobacco mass media campaign and the other program components together may have reduced smoking more than did any single component alone. The relative contributions of various components to program effectiveness are difficult to determine, but some of the controlled field experiments showed a dose-response relationship between reduced smoking and an increased number of program components.
 5. Evidence from controlled field experiments and population studies conducted by many investigators in many countries shows that antitobacco mass media campaigns can reduce tobacco use.

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Media, Tobacco Control Interventions, and Tobacco Industry Mitigation Efforts

Tobacco use is exacerbated by the efforts of a profit-making industry. This part explores two areas in which tobacco industry efforts against tobacco control and interventions involve the media. The first chapter reviews state-level tobacco control media programs in Minnesota, California, Arizona, and Florida as examples of industry attempts to prevent or limit the scope of antitobacco media campaigns through political advocacy, claims of fiscal crisis, negotiated restrictions, or legal challenges.

The second chapter addresses the use of media in attempting to defeat state tobacco control initiatives and referenda, looking at results from several state-level propositions. Television, radio, print, and billboard advertising have been used to portray tobacco tax initiatives as unfair taxation, limitation of personal choice, or wasteful government spending with mixed levels of success. By understanding how tobacco control efforts can be blunted by protobacco media interventions, public health stakeholders can more effectively plan efforts to reduce tobacco use in their states and communities.

Tobacco Industry Efforts to Influence Tobacco Control Media Interventions

Tobacco control media interventions often face opposition from the tobacco industry at both the state and national levels. This chapter examines how tobacco industry interests and their allies work to inhibit antitobacco media efforts, including examples from specific media campaigns:

- *Minnesota Plan for Nonsmoking and Health, one of the first state-level tobacco control efforts to include a large-scale media campaign*
- *California Tobacco Control Program, a voter-approved initiative under Proposition 99 that targeted tobacco industry practices and social norms regarding smoking*
- *Arizona's efforts toward tobacco prevention and education programs under Proposition 200*
- *Florida's Tobacco Pilot Program, which led to the successful state "truth" media campaign designed by young people for their peers, and to the American Legacy Foundation's national rollout of a similar program*

Tobacco industry strategies to counter or weaken these programs include efforts to divert funding away from tobacco control media campaigns, lobbying and financial support of elected officials, negotiated settlement restrictions, and legal challenges.

Introduction

Tobacco control media campaigns can be an effective means to reduce cigarette consumption (see chapter 12). Such efforts clearly have the potential to affect tobacco sales, while advertisements that educate the population about the industry's practices can influence perceptions about tobacco companies. This chapter examines how the tobacco industry works, at times through intermediaries, to prevent or limit the effectiveness of these campaigns. Readers may also refer to the National Cancer Institute's Tobacco Control Monograph 16 for a description of tobacco industry attempts to counter the American Stop Smoking Intervention Study (ASSIST),¹ which included media campaigns in some states (such as Massachusetts).

This chapter provides some historical context for the development of antismoking and anti-industry advertisements, beginning with the Fairness Doctrine messages in the 1960s, and outlines the corresponding tobacco use behaviors that result from changes in regulation of tobacco industry advertising. Second, this chapter reviews published information on selected state tobacco control media campaigns as they developed over time from Minnesota to California to Arizona and Florida. It also reviews the American Legacy Foundation's (Legacy's) tobacco control media activities at the national level and its adoption of Florida's "truth" campaign. The chapter concludes by identifying four specific approaches the tobacco industry uses against tobacco control media campaigns.

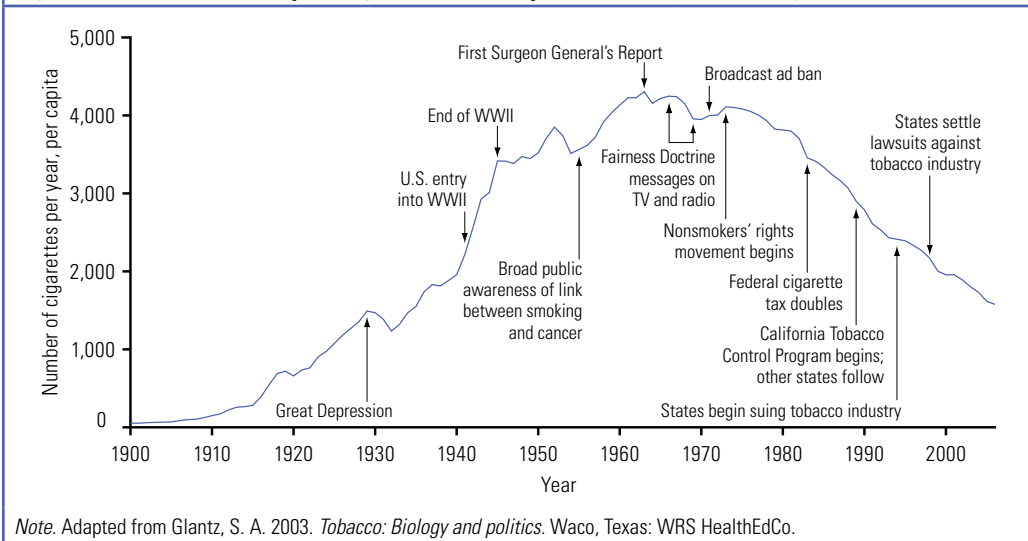
Fairness Doctrine

One of the first examples of a large-scale tobacco control advertising campaign came in 1966, when Action on Smoking and Health (ASH) approached a New York

television station for free air time to respond to cigarette advertisements and was denied.² After this denial, ASH filed a complaint with the Federal Communications Commission (FCC) under its Fairness Doctrine. The doctrine required television and radio stations to air both sides of "controversial issues," even though doing so required the provision of free air time to one side of the "controversy."²

The Fairness Doctrine was created in 1949 as a result of the FCC's decision that licensed stations were obligated to provide a reasonable opportunity for interested parties to present both sides of a controversial issue. The doctrine was designed to ensure that all sides of controversial issues would be given access to the airwaves, even if one side could not pay for access.³ In 1967, when the FCC declared cigarette advertising "controversial," it opened up the broadcast airwaves to large-scale antitobacco advertising for the first time. (Before then, free public service announcements were rare and generally were not placed in prime time.) While there was no specific formula, the common practice was to provide approximately one antismoking advertisement for every three advertisements that the tobacco industry placed.² Nearly \$200 million in free air time (in 1970 dollars) was donated for antismoking messages between 1967 and 1971⁴ (or \$341 million in 2006 dollars) (see chapter 11). The effect was dramatic, with an immediate drop in cigarette consumption. The antismoking messages that aired slowed cigarette consumption by 531 cigarettes per person per year, while tobacco company advertising increased consumption by only 95 cigarettes per person per year⁵ (figure 13.1).

Subsequent to this decrease in consumption, Congress banned cigarette advertising on television and radio, effective January 2, 1971. Between 1970 and 1971, cigarette advertising decreased by 20%–30%, thereby also decreasing the number of antismoking

Figure 13.1 Adult Per Capita Cigarette Consumption and Major Smoking-and-Health Events


messages, resulting in an increase in cigarette consumption.⁵ Public health authorities viewed the legislation ending broadcast cigarette advertising as a step forward. However, by removing cigarette commercials from television and radio, the broadcast advertising ban removed the requirement for antitobacco advertisements as well. This eliminated the most effective antismoking campaign at that time. While losing direct broadcast advertising, the tobacco industry was able to compensate by increasing its advertising and promotional expenditures elsewhere.⁶ The public health community did not have the resources to buy advertising to counter the increased cigarette advertising appearing on billboards, in magazines, and in other venues. In addition, the industry continued to effectively use sports sponsorship, advertising in baseball and other stadiums, and event sponsorship to ensure that its logos and images remained prominently displayed on television. The result was that rates of tobacco consumption began to increase again.⁵

After the Fairness Doctrine antismoking messages ended, there was no systematic tobacco control advertising at the national

level for 30 years, until 2000. That year, Legacy (created as part of the Master Settlement Agreement [MSA] between 46 state attorneys general and the tobacco industry)⁷ began its national “truth” campaign.

With the elimination of tobacco control advertisements at the national level in 1970, the focus shifted to the state level. In the mid-1980s, states began to establish tobacco control programs, including paid media campaigns. Several states, beginning with Minnesota, developed and implemented significant media campaigns, which were met by tobacco industry efforts to curtail the effectiveness of such media campaigns. This chapter presents case studies to illustrate efforts that helped eliminate antitobacco campaigns in Minnesota and Florida, limited the scope of the campaigns in California and Arizona, and impeded progress on campaigns such as that of Legacy.

Minnesota

Minnesota was the first state to create a statewide paid tobacco control media

campaign. In 1982, Minnesota commissioner of health Sister Mary Madonna Ashton convened the Technical Advisory Committee on Nonsmoking and Health (TACNH) to formulate recommendations to promote nonsmoking and health for individuals. On September 14, 1984, the TACNH released its report, *The Minnesota Plan for Nonsmoking and Health* (Minnesota Plan). The document proposed “a coordinated statewide program to prevent young people from starting to smoke, to encourage and assist smokers to quit, and to promote clean indoor air.”⁸(Bates no. 680581560) The Minnesota Plan made recommendations for the creation of multiple components of a program, including promotion of nonsmoking through marketing and communication techniques.⁸

As a first step, the advisory committee reviewed the pertinent literature on the tobacco industry’s marketing techniques, which had become available in the early 1980s through a subpoena by the Federal Trade Commission. The committee discovered that the tobacco industry planned to “associate particular brands with a lifestyle that is ‘masculine, contemporary, confident/self-assured, daring/adventurous, mature’”⁹(Bates no. 505774507) and to stress that smoking was an initiation into the adult world.⁹ In response to the tobacco industry’s strategies, the committee reasoned that a strategy for marketing nonsmoking should be based on the “problems which are to be solved by the nonsmoking product.”⁸(Bates no. 680581671) These problems include social isolation, knowing the health effects of smoking, the cost of cigarettes and their health effects, and self-image. In addition, an information component would provide regularly to the news media and other communication channels scientific data on smoking and nonsmoking. This strategy was based on the belief that information played a significant role in the promotion of nonsmoking.

The campaign primarily targeted young Minnesota women aged 20–29 years. In the early 1980s, this group was the largest single block of smokers (141,000 of 812,000 total smokers) in Minnesota. Men aged 20–29 years were the second largest block of smokers (110,000) in the state. Overall, among people aged 20–79 years, 390,000 women and 422,000 men were smokers in Minnesota.⁸(Bates no. 680581674)

Tobacco Industry’s Initial Response to the Minnesota Plan

The Tobacco Institute, the tobacco industry’s then-existing lobbying arm based in Washington, DC, characterized the Minnesota Plan as “a revolutionary attack on our industry.”¹⁰ The Tobacco Institute described the plan as “unnecessary, expensive and impractical”¹¹(Bates no. TIMN0140515) and claimed that “much of the underlying research for the plan is inaccurate.”¹¹(Bates no. TIMN0140510) The Institute used estimates from advertising and public relations firms to support its position that the Minnesota Department of Health’s estimated costs for the campaign were too low and far more taxpayer dollars would be needed to implement the plan’s recommendations. These cost estimates also were promulgated by Minnesota business and labor coalitions.¹¹

Finally, the tobacco industry sought to “identify and remove as supporters of the plan representatives from those groups with whom we have developed working relationships.”¹¹(Bates no. TIMN0140511) The tobacco industry mobilized its Tobacco Industry Labor Management Committee to identify contacts with major Minnesota labor unions and its lobbyists to persuade organized labor groups to withdraw their support of the Minnesota Plan.¹¹

The tobacco industry anticipated that the Minnesota Plan could have national

Shifting the Focus from Tobacco

The tobacco industry questioned the financial planning for the Minnesota Plan and worked to shift the debate away from health to “areas in which we have the most credible arguments, e.g., economics, government intervention, etc.”^a The industry^a held roundtable discussions with representatives from Minnesota businesses and labor, education, and police groups to

1. Determine the negative consequences of a plan such as the Minnesota campaign,
2. Mobilize voters to demonstrate that members of the public do not want further government intrusion in their lives,
3. Create an information campaign to convince Minnesota taxpayers that numerous national programs already addressed this issue (i.e., nonsmoking among youth), and
4. Indicate “that local efforts are duplicative, a waste of taxpayers’ money and unnecessary.”

^aTobacco Institute. [Public relations strategies to address the Minnesota Plan for nonsmoking and health]. Sep 1984. Tobacco Institute. Bates No. TIMN0140510/0525. <http://legacy.library.ucsf.edu/tid/nia92f00>.

repercussions¹² because antismoking advertising would compete with nationwide industry advertisements to discourage youth from smoking.^{11,13} Therefore, the industry introduced its own youth education campaign (“Helping Youth Decide” [HYD]) to draw attention away from the Minnesota campaign.¹³ This approach was to be implemented in four ways:

- Mailing copies of HYD brochures through the Tobacco Institute and the National Association of State Boards of Education (NASBE) to “state legislators, educators, and allies,”¹¹(Bates no. TIMN0140512) along with having the Tobacco Institute make field operation and lobbyist visits to those receiving HYD pamphlets
- Seeking the endorsement of the HYD program from state legislators and educators
- Arranging to have Tobacco Institute and NASBE spokespersons describe the merits of the HYD to state and local education organizations
- Publicizing “reaction to the program via ads in state and local media, including endorsements by Minnesotans, labor unions, national educators, etc.”¹¹(Bates no. TIMN0140513)

Implementing the Public Education Media Campaign

In May 1985, the Minnesota state legislature passed the Omnibus Nonsmoking and Disease Act (Omnibus Act), which outlined funding and administrative responsibilities to implement the activities detailed in the Minnesota Plan. The Omnibus Act included a 5¢ cigarette tax increase to fund both sewer construction (4¢) and public health programs (1¢), including tobacco control programs (1/4¢).^{14,15} It also authorized the commissioner of health to run a long-term public communications campaign to promote nonsmoking in Minnesota.¹⁶ The 1985 Omnibus Act generated about \$1.6 million/year (or 37¢ per capita/year) for nonsmoking programs during the first five years. A major objective of these funds was to reduce smoking among Minnesota youth by roughly a third, from 18% in 1986 to 13% in 1990.^{14,16,17}

Between 1985 and 1990, the Minnesota Department of Health ran a media campaign to promote nonsmoking among youth aged 8–18 years.^{14,16} In addition to television advertisements that aired during the first three years of the campaign, the Minnesota Department of Health expanded the campaign

and began to run radio advertisements during the 1988–89 biennium.¹⁷ However, during the 1991 fiscal year, the media budget was cut from its 1990 allocation of \$1.5 million to \$1 million. This decrease in funding translated to a 42% reduction in Minnesota Department of Health media placements. As a result, several target groups and venues were eliminated, including boys at risk for using smokeless tobacco and cable television advertisements targeting women and high school sport sponsorships.¹⁷

Long-Term Efforts Against the First Media Campaign

Beginning in 1988, the tobacco industry recruited new allies from several Minnesota business and labor organizations within specific legislative districts to build grassroots political opposition to the Minnesota Plan and its antismoking media campaign.¹⁸ Michael F. Brozek, Tobacco Institute regional vice president, reported

Our increasingly successful relationship with the Minnesota Grocers Association and our efforts in working with community groups (Iron Range Food Shelf Charities) are two new areas of real potential for the 1988 legislative year.

Never before has the tobacco industry embarked on such a detailed labor effort in the state of Minnesota. We have already met with officials of the Minnesota Teamsters Union, Minnesota AFSCME [American Federation of State, County and Municipal Employees] Organization and parties extremely close to leadership in the entire Minnesota labor movement and are receiving a positive response particularly in the areas of smoking restrictions and their effect on the collective bargaining process.¹⁸(Bates no. TIMN457503–7504)

In pursuing this strategy, the tobacco industry was neutralizing many of the

constituencies that the original TACNH was designed to recruit. Neither the Minnesota Department of Health nor tobacco control advocates were able to hold these constituencies after the tobacco industry pursued them. With these new allies, the tobacco industry targeted legislative districts of specific House and Senate leaders. According to Brozek, the allies used several strategies specifically targeting legislative districts “with an emphasis on business, social, labor and civic groups. Labor related interactions ... in legislators’ home districts.... Serious and accountable interaction with non-industry persons ‘aggrieved’ by punitive or restrictive actions on their working conditions.”¹⁸(Bates no. TIMN457499) Using these allies and continuing to frame tobacco control issues primarily as tax issues, the industry had a substantial impact on the long-term implementation of the Minnesota Plan and its media campaign.

Beyond outreach to allies, the tobacco industry strengthened its campaign contributions and lobbying budget after the start of the first media campaign in 1986.¹⁹ For example, it contributed \$21,815 to Governor Rudolph G. Perpich’s (D) reelection campaign during 1989–90, the largest contribution to the campaign (1990 was an election year in Minnesota).¹⁹ It previously contributed \$20,905 in 1987–88. On average, the tobacco industry spent about \$63,000 per year for lobbying during 1980–85 and more than three times as much while the first media campaign was in full swing (1987–92), averaging about \$230,000 annually.¹⁹

Tobacco Industry’s Success: Budget Cuts

The tobacco industry’s increased campaign contributions and lobbying expenditures appeared to have an effect in 1990 under Governor Perpich, when the legislature cut the tobacco control program’s budget from \$1.5 million to \$1 million.¹⁷

The governor used the state health department's successes in reducing the rate of smoking to recommend the cut to "meet the state budget shortfall and to pay for drug-prevention efforts."²⁰ In 1991, Governor Perpich cut the program's budget by nearly one-half million dollars. Assistant health commissioner Mick Finn responded to criticism by arguing that the state still would "spend \$1.1 million next year (i.e., 1991) on nonsmoking programs even if the \$473,000 cut goes through" and argued that "under budget circumstances it makes sense."²⁰ Governor Perpich's budget reduction for the tobacco control program²¹ turned out to be a precursor to further action against it.

During the 1990 gubernatorial race, Republican Arne H. Carlson defeated Democrat Perpich. From the 1989–90 biennium election cycle to the 1993–94 biennium election cycle, Carlson's campaign committee received nearly \$5,000 from tobacco industry contributions.¹⁹ During the 1993–94 election cycle, at least three Tobacco Institute contract lobbyists (Ronald A. Jerich, Thomas A. Kelm, and Allen M. Shofe) became fundraisers for Carlson's reelection campaign committee,²² and Kelm alone expected to raise at least \$10,000.²² In addition, in 1993, the tobacco industry spent more than \$250,000 lobbying against tobacco control measures in Minnesota. In 1994, Tom and Doug Kelm's firm, the chief tobacco industry contract lobbyists in Minnesota, received at least \$100,000.²³

Three years after his election, Governor Carlson eliminated the antismoking media campaign on the grounds that the state faced a fiscal crisis,¹⁹ although the Republican Governor Carlson and the Democratic Party–controlled legislature were debating the size of the state's reserve fund and possible tax rebates. A Minneapolis, Minnesota, *Star Tribune* article suggested that

Even by the Carlson administration's own calculations, the state will be sitting on a sizable nest egg at the end of the two-year budget cycle that runs until June 1995.... The more Carlson cuts DFL [Democratic Farm Labor Party] spending and diverts the money into the reserve, the larger the political weapon he would have at his disposal in 1994.²⁴

Health Advocates' Failure to Respond Effectively

From 1986 to 1989, while the tobacco control program was fully funded, the adult smoking prevalence rate in Minnesota dropped by a relative amount of 16.3%, while the rest of the United States experienced a relative decrease of 8.7%.²¹ The Centers for Disease Control and Prevention (CDC) concluded that while the Minnesota Plan, including the first state antismoking media campaign, was in place (1985–92), "the state's per capita tobacco consumption declined 26 percent, a steeper decline than the national average."²⁵ By comparison, after the program was dismantled (1993–97), per capita consumption in Minnesota increased 3.1%, while the national rate decreased.²⁵

Despite such correlations between the Minnesota Plan and lower rates of smoking, health groups appeared to lose confidence in justifying the first antismoking media campaign in the face of the fiscal crisis claims.^{26,27} According to Tsoukalas and colleagues,¹⁹ health advocates did not challenge the claim of a fiscal crisis. Rather, antitobacco interests felt that belief in a fiscal crisis was strong enough to preclude sufficient sympathetic support in the legislature to save the antismoking campaign.^{26,27} Tsoukalas and colleagues¹⁹ concluded that the campaign also had a very low priority in the Minnesota Department of Health, which seemed unwilling to fight for it in either the legislature or the administration,

and that health groups did little to press the department to give the program a higher priority. These factors enabled Governor Carlson and the legislature to eliminate the funds dedicated to the antismoking media campaign.

California

The California Tobacco Control Program was created in 1988 as a result of Proposition 99. This proposition was a voter initiative that increased the state excise tax on cigarettes by 25¢/pack and allocated 20% of the revenues to programs to reduce smoking.^{28,29} (The remainder of the money went to medical care, research on diseases related to tobacco, and environmental protection.)²⁹ The California Department of Health Services' Tobacco Control Section administered the program's media campaign with "the goal of reducing tobacco use in California by promoting a social norm of not accepting tobacco."³⁰ The media campaign included television, radio, print, billboard, and transit venue messages about the tobacco industry, secondhand smoke, addiction, smoking cessation, cigarette additives, smokeless tobacco, general health, pregnancy, and prevention among youth.³¹

In the early years of the program, under Republican Governor George Deukmejian, the media campaign was highly productive, with 113 advertisements produced in the first year. Importantly, in a radical departure from messages used in earlier media campaigns, substantial resources were invested in publicizing the tobacco industry's encouragement of smoking among the public and actions within the policymaking process to create an environment that would support the industry's ability to continue marketing its products with minimal interference by health authorities. The antitobacco campaign also was directed at nonsmokers to reinforce the nonsmoking position

with many messages about secondhand smoke. Cessation messages represented a small fraction of the total campaign.³¹ The campaign focused on the general population rather than only youth.³²

The media campaign's early success came as a result of several favorable conditions. These included toleration from the governor and active and enthusiastic support from the director of health services, Kenneth W. Kizer. First, although Governor Deukmejian had campaigned against Proposition 99, he believed that after the voters passed it, the proposition should be implemented.³³ Second, Governor Deukmejian delegated authority to administer the media campaign to Kizer and did not play any role in message development or advertising approval. Within the California Department of Health Services, Kizer was a strong supporter of the media campaign and was eager to see it make a significant difference in California.³³ He emphasized that the tobacco control program and the media campaign were a high priority of the department and worked to clear bureaucratic impediments to issuing contracts necessary to implement the campaign.³³

As a result, 59 days after Governor Deukmejian signed the implementing legislation for Proposition 99 (Assembly Bill [AB] 75), the California Department of Health Services released a request for proposals from advertising agencies seeking to create the media campaign (December 1, 1989). The proposals were due six weeks later, on January 10, 1990, and on January 26, 1990, the California Department of Health Services selected a Los Angeles advertising firm to develop the media campaign. The first antitobacco advertisements aired on April 10, 1990, only 65 days after the contract was signed.²⁹

In addition to the speed with which the media campaign was launched, the

content of the first advertisement also was important. Rather than conveying a health message, the advertising agency decided to directly address tobacco company practices. Paul Keye, the advertising agency principal, explained

The cigarette companies were never in any of our original thoughts or conversations with one another. You can't find the topic in our first work.... What happened was that—as we dug into each topic—there, right in the middle of everything were the Smokefolk, making their quaint, nonsensical, fraudulent arguments and—by sheer weight of wealth and power and privilege—getting away with it.... Frankly, the tobacco industry [angered us]. They insulted our intelligence.³⁴(Bates no. 520697106)

The first antitobacco advertisement aired was called “Industry Spokesman.”³⁵ It portrayed a smoke-filled boardroom filled with tobacco industry executives and the leader saying

Gentlemen, gentlemen. The tobacco industry has a very serious multibillion-dollar problem. We need more cigarette smokers. Pure and simple. Every day, 2,000 Americans stop smoking and another 1,110 also quit. Actually, technically they die.

That means that this business needs 3,000 fresh new volunteers every day. So, forget about all that cancer, heart disease, stroke stuff.

We're not in this for our health (script, as recorded).³⁵

The tobacco industry reacted quickly. On April 18, 1990, eight days after “Industry Spokesman” first aired, Kurt L. Malmgren, senior vice president of state activities for the Tobacco Institute, wrote to



From “Industry Spokesman” television advertisement.

Samuel D. Chilcote Jr., president of the Tobacco Institute, as follows

As previously reported, [the Tobacco Institute's national legal counsel] Covington & Burling and California legal counsel have been reviewing possible grounds for a legal attack on the ad program. Among the possible bases for suit that have been reviewed are that the ad campaign is an improper expenditure of funds under Prop 99 and AB 75, that it is defamatory, that it is deceptive advertising, and presents First Amendment concerns. Aside from tactical questions as to the desirability of pursuing any legal action, the considered judgment of counsel here and on the ground in California is that there is no basis for a suit which would have a realistic chance of success.

It is also our considered opinion that the industry should not attempt a ‘dollar-for-dollar’ response in the media. Our goal is to keep the advertisements—not the tobacco industry—at the center of the controversy. If the industry attempts to meet the Department of Health Services head on in the media, the controversy is likely to shift from the advertisements to the industry.³⁶(Bates no. 87700743)

The tobacco industry realized that a direct public attack on the media campaign would be counterproductive. One month later, in a memorandum to Roger L. Mozingo in the State Government Relations Division

of R.J. Reynolds, Terry Eagan from the Government Affairs Division of Philip Morris wrote

California's growing fiscal crisis has created funding problems that have caused both the Governor's office and the Legislature to scramble for money to maintain existing programs. The estimated revenue shortfall is now \$3.6 billion....

The tobacco industry has decided that the timing is excellent for an attempt to divert money from the anti-smoking media campaign into other programs that are doomed to suffer because of the current fiscal crisis....

Strategy sessions on this issue resulted in the conclusion that it is important that the tobacco industry not be identified as an instigator of any attempt to encourage special interests to seek re-direction of the media money to other programs. It is agreed that under no circumstances can we visibly participate in this process. The press, however, will assume, as they always do, that the industry is behind any 'conspiracy' to change existing funding patterns. We should be prepared for this.

Currently a host of groups interested in chasing the media money have surfaced. These groups include: the counties (from both urban and rural perspectives), the Black Health Network (walk-in clinics), the California Health Federation (clinics), the Department of Education (defending their existing tobacco revenue sources), the doctors, the hospitals, the dentists, and the ambulance operators. Literally dozens of other interest groups can be expected to surface when the money goes into play.³⁷(Bates no. 507640368-0369)

The tobacco industry would portray the state's fiscal crisis as an opportunity for third parties to pursue funds previously

earmarked for the media campaign, an approach that was used successfully in Minnesota in 1990.¹⁹

Although the tobacco industry was unable to remove funding for the media campaign, productivity declined from 113 campaign advertisements in 1990 to 6 in 1991.³¹

The media campaign then received an almost \$2 million increase in funding, from \$14.3 million in 1990-91 to \$16.0 million in 1991-92.³⁰ In contrast to the earlier removal of bureaucratic impediments to developing and implementing the media campaign, newly elected Republican Governor Pete Wilson hindered the campaign. Text in an April 1990 memorandum between two Philip Morris lobbyists in Washington, DC, specifically identified Governor Wilson (previously a U.S. Senator) as an ally. This was apparent despite the fact that Wilson had returned a campaign contribution check from tobacco industry executives:

Wilson is only sending about 16K of the 100K he collected. This 16K includes checks he received from either a tobacco company or anyone working directly for a tobacco company, i.e., Hamish Maxwell [President of Philip Morris], Mrs. Ehud, Bill Murray [Member of Philip Morris' Board of Directors 1987-1989].

Apparently, he has also done this with other "controversial" industries such as lumber, chemical and others. The decision to do this was Wilson's alone, and in the response to a wave of negative campaigning in California that not only attacks the candidates, but those who give to them as well.

You will be pleased to know that Pete [Wilson] called Hamish [Maxwell] to explain that he was doing this to protect Hamish as well as himself. You will also be pleased to know that Pete is still "pro-tobacco."³⁸(Bates no. 2072914862)

Health advocates, including the American Heart Association (AHA) and the American Nonsmokers' Rights Foundation, revealed this memorandum in a full-page advertisement as part of an aggressive public campaign to defend the California Tobacco Control Program. The advertisement ran in the *New York Times* on April 16, 1996, and later in the *Sacramento Bee* and the *Los Angeles Times*.²⁹

Governor Wilson's first attempt to eliminate the media campaign occurred on January 10, 1992, when he introduced his fiscal year (FY) 1992–93 budget in which current and future funding for the media campaign was suspended. Governor Wilson said the media campaign was of “secondary” significance³⁹ and had not been proven effective. Four days after the budget was introduced, results from the California Tobacco Survey conducted by the University of California, San Diego, were made available. The survey findings indicated a 17% relative decrease in the percentage of adult smokers in California since Proposition 99.⁴⁰

Governor Wilson's efforts to halt the media campaign continued. After the California Department of Health submitted the media contract for rebidding in 1991, the Wilson administration declined to sign the contract (personal communication from C. Stevens, head of Tobacco Education Media Campaign, to J. Ibrahim, 2002). On February 21, 1992, the American Lung Association (ALA) countered by filing a lawsuit against Governor Wilson and the director of the California Department of Health Services, Molly Coye. The lawsuit claimed that by preventing the advertising contract from being signed, Wilson and Coye were violating Proposition 99, which stated that the state would run an antitobacco media campaign.²⁹

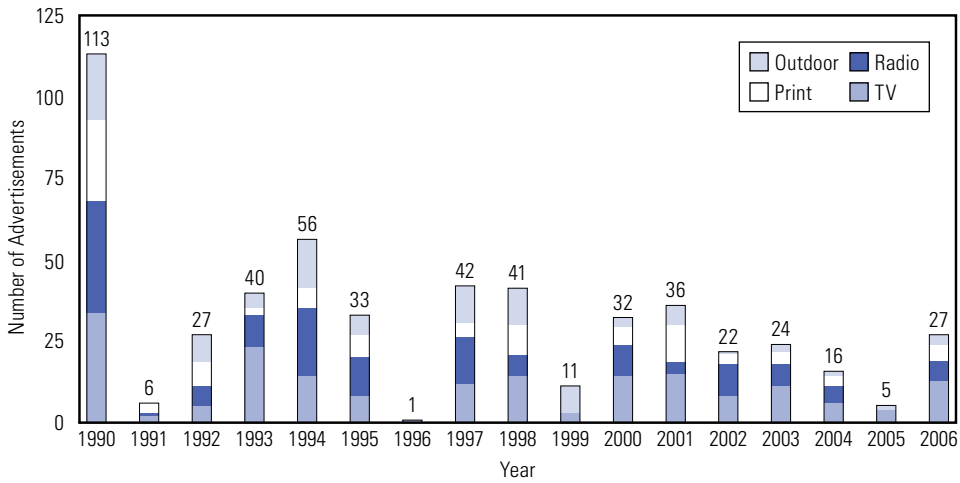
On April 24, 1992, Judge James T. Ford of the Sacramento Superior Court ruled that Governor Wilson did not have the authority to take funds appropriated for one purpose

and use them for another.²⁹ Following this decision, the California Department of Health Services contracted with the advertising agency on May 29, 1992.²⁹ In addition, the authorizing legislation, AB 75, required the advertising contract to be rebid every other year. Because the bidding process was delayed, the media campaign contract lapsed for six to nine months, during which time no new advertisements were produced (personal communication from C. Stevens to J. Ibrahim, 2002).

Governor Wilson also implemented a formal review process for the media campaign by the Health and Welfare Agency (which includes the California Department of Health Services) and the governor's office, further slowing the process. Once the campaign was reestablished, the program produced only 20 advertisements each year from the fall of 1992 through 1995 (figure 13.2).³¹ By the mid-1990s, the tobacco industry denormalization advertisements were disappearing.

In summer 1996, the California Department of Health Services, under the Wilson administration, prohibited the media campaign from using the following four terms in antitobacco messages: “tobacco industry,” “profit,” “nicotine addiction,” and “lies.”²⁹(p. 340) This new constraint on terminology coupled with new contract startup time resulted in the production of one advertisement in 1996, which focused on youth access to tobacco products (personal communication from C. Stevens to J. Ibrahim, 2002). The number of advertisements increased somewhat in the following two years and included several anti-industry advertisements.³¹

The weakening of the media campaign under Governor Wilson was seen by some as reaching beyond the number of advertisements to the number of cigarettes smoked. The reduced size and aggressiveness of the campaign was associated with a decrease in the rate of decline in cigarette

Figure 13.2 Total Number and Type of Advertisements for the California Tobacco Control Media Campaign, 1990–2006

Note. From California Department of Health Services, Tobacco Control.

consumption (and a reduction in the rate of decline in associated deaths from heart disease).⁴¹ As noted in chapter 12, this reduction in effectiveness after 1994 was associated with 840 million packs of cigarettes (worth about \$1.2 billion) smoked between 1994 and 1998 and an additional 15,000 deaths from heart disease. Potentially, the 840 million packs of cigarettes smoked and the 15,000 deaths could have been avoided if the program had remained as effective as it was between 1989 and 1994.^{29,41}

The results of a 1998 independent evaluation indicate that the media campaign increased young people's belief that the tobacco industry was working to make youth addicted to cigarettes. The Independent Evaluation Consortium recommended that the media campaign "should continue to educate the public, including youth, about the negative influence of tobacco advertising and promotions."^{42(p.xv)} A second evaluation found that almost all youth and adults were exposed to the media campaign in 1998, when funding was \$31.9 million, and that the exposure was significantly greater than in 1996,⁴³ when funding was \$12.2 million.⁴⁴

In 1998, exposure to campaign messages was associated with more negative attitudes toward the tobacco industry and more support among youth for policies restricting tobacco marketing.⁴² Youth had more beliefs about the negative consequences of smoking and fewer beliefs about the benefits of smoking.⁴² Despite funding cuts and toned-down messages, California's media campaign continued to positively influence youth, but not as effectively as in its initial years.

Governor Wilson's efforts to eliminate or scale down the media campaign continued until his last days in office, in the summer of 1998. At that time, he did not approve placement of produced advertisements, leaving them to newly elected Democratic Governor Gray Davis, who took office in January 1999 (personal communication from C. Stevens to J. Ibrahim, 2002). Following complaints from health advocates, Davis nominally reversed Wilson's ban on attacks on the tobacco industry. Nonetheless, only a few advertisements focused on the tobacco industry's actions, and Governor Davis let stand Wilson's process for approving advertisements.⁴⁵

Keeping a Strong Message Off the Air

In 1994, an advertisement called “Nicotine Soundbites” used footage of tobacco industry executives testifying in April 1994 at congressional hearings conducted by Rep. Henry Waxman (D-CA), stating that they did not believe nicotine was addictive. The industry reacted negatively. Legal counsel for R.J. Reynolds stated that the advertisement represented defamation of the executives and threatened to sue the California Department of Health Services.^{a,b} Initially, several television stations refused to run the advertisement because of its controversial nature. However, the advertisement aired in fall 1994, and California Department of Health Services director Kimberly Belshé publicly defended it. The television stations backed down and ran the advertisement.^b



Ultimately, however, the Wilson administration removed “Nicotine Soundbites” from television amid requests to keep it on the air from health advocates and the California Tobacco Education and Research Oversight Committee.^b The latter is the state-mandated independent oversight committee for the program. This reaction from television stations and the governor indicates the effectiveness of tobacco companies’ influence in limiting the broadcast of strong antitobacco messages.

^aBalbach, E. D., and S. A. Glantz. 1998. Tobacco control advocates must demand high-quality media campaigns: The California experience. *Tobacco Control* 7 (4): 397–408

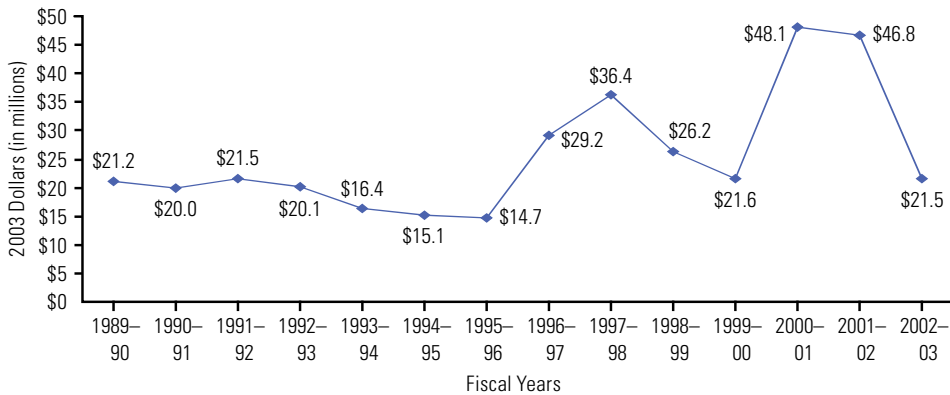
^bGlantz, S. A., and E. D. Balbach. 2000. *Tobacco war: Inside the California battles*. Berkeley: Univ. of California Press.

The media campaign’s budget decreased from \$23.3 million in 1998–99 to \$19.6 million in 1999–2000, due in part to declining revenues from Proposition 99 associated with lower cigarette consumption. Governor Davis did not attempt to cut revenues allocated to the media campaign, but he refused to use funds from the \$500 million the state received annually from the tobacco industry through the MSA to compensate for the declining purchasing power of the funds from the Proposition 99 tax on cigarettes. (The tax had been set in 1988 and was not indexed to inflation.) Figure 13.3 illustrates the trend in funding for the media campaign with annual budgets using adjusted 2003 dollars to compensate for inflation and allowing comparisons across time.

In March 2001, the AHA and Americans for Nonsmokers’ Rights launched a

lobbying and newspaper campaign to strengthen the California Tobacco Control Program, specifically the media campaign, to counter the effects of the tobacco industry’s marketing and promotion. Governor Davis increased the media campaign’s funding to \$45.3 million for FY 2000–2001 and FY 2001–2002, by releasing funds that had been tied up in litigation due to challenges brought by health groups against the diversion of funds from health education during the Wilson administration.^{46,47}

The augmented funding dwindled as Governor Davis withdrew the additional support in his 2002–2003 budget,⁴⁸ reducing the media campaign’s budget allocation to \$21.1 million. As a result of declining revenue from Proposition 99 and no new dedication of funds, the governor’s

Figure 13.3 Budget Allocations for the California Tobacco Control Media Program, 1989–2003

Note. From California Department of Health Services, Tobacco Control.

2003–2004 budget proposal reduced the media campaign budget to \$16.7 million.⁴⁹

After losing several lawsuits brought by ill smokers in California, R.J. Reynolds and Lorillard sued the state on April 1, 2003. The lawsuit claimed that the media campaign had violated the companies' First Amendment rights, interfered with their right to a fair trial, and tarnished their reputations.^{50,51} The case was dismissed on July 22, 2003. R.J. Reynolds and Lorillard appealed the ruling, and health groups responded. On February 12, 2004, attorneys for the AHA, the ALA, and the American Cancer Society (ACS) filed an *amicus curiae* brief (a brief filed with a court by someone who is not a party in the case) in support of the state. On September 28, 2004, the Ninth Circuit Court of Appeals rejected the tobacco companies' argument. The court stated, "A mere link between an excise tax and a government-sponsored advertising campaign, absent a claim that either the tax or the advertising is unconstitutional, does not violate the First Amendment."^{52(p.5)} The tobacco companies' other arguments were rejected as well.

In summary, strong and repeated political and legal interventions by health advocates

in California were required to keep the program effective. This was true even though voters' enactment of Proposition 99, which created the health education account and the media campaign, nominally protected the California Tobacco Control Program. These political and legal steps involved monitoring the budget process in both the administration and legislature and working to press the administration to produce high-quality advertisements in a timely manner. As in Minnesota, claims of budget limitations were the purported reasons for cutting or eliminating the program in California. Health groups successfully defended the program by rejecting these explanations and learning that they needed to monitor the bureaucratic procedures surrounding advertising message development and execution.

Arizona

Arizona provides an example of tobacco industry efforts to limit the scope of tobacco control from program inception. Encouraged by the experiences in California (1988) and Massachusetts (1992), voters in Arizona passed Proposition 200 on November 8, 1994, to increase the cigarette

The Massachusetts Tobacco Control Program

The Massachusetts Tobacco Control Program (MTCP) began after a 1992 ballot initiative raised the cigarette excise tax by 25¢ per pack to fund the program.^{a,b} The comprehensive tobacco control program, launched in October 1993, included a media campaign, workplace and community programs, cessation services, school-based education programs, and health professional education and assistance for tobacco intervention. For almost a decade, the MTCP was associated with a drop in per-capita adult cigarette consumption and smoking prevalence. From 1993 onward, per-capita consumption in Massachusetts showed a consistent annual decline of more than 4%, while in other U.S. states (except California), the downturn leveled off, decreasing by less than 1% a year. From 1992 to 1999, the prevalence of adult smoking in Massachusetts declined significantly each year (by 0.43 percentage points) compared with virtually no change in the comparison states (see chapter 12).^{b,c,d} In 2002, the program's funding was severely cut, a decision attributed to state budget crises. Although the MTCP was active, its funding was appropriated to fund other programs, so the program did not achieve the intended amount of funding.^a

The tobacco industry was working in Massachusetts to divert funding away from the program, but its response was less aggressive than that observed in California.^e Among attempts to divert tobacco tax money, the most public was Acting Governor Jane Swift's invocation of unilateral emergency "9C" powers in early 2002 to cut the MTCP by \$22 million. When she defended these cuts as necessary in the face of a state deficit, tobacco control advocates sued, arguing that the administration's action was unconstitutional in the context of a program with a dedicated revenue source.^f In the spring of 2002, the court ruled in favor of the Swift administration, ultimately leading to the removal of almost all MTCP funding. The 2005 fiscal year program budget was \$3.2 million, a 93% decrease from \$48 million at the start of 2002.^b Long-term tobacco industry lobbying (\$690,000 spent in Massachusetts in 2002),^g the budget crisis, lukewarm legislative support in the face of severe fiscal constraints, and the loss of the lawsuit against the Swift administration all appear to have contributed to the de-funding of the program. The state's innovative policy measures, such as the ban on tobacco advertising near schools and playgrounds and the tobacco product disclosure law, were legally challenged by the tobacco industry.^b

^aRitch, W. A., and M. E. Begay. 2001. Smoke and mirrors: How Massachusetts diverted millions in tobacco tax revenues. *Tobacco Control* 10 (4): 309–16.

^bKoh, H. K., C. M. Judge, H. Robbins, C. C. Celebucki, D. K. Walker, and G. N. Connolly. 2005. The first decade of the Massachusetts Tobacco Control Program. *Public Health Reports* 120 (5): 482–95.

^cBiener, L., J. E. Harris, and W. Hamilton. 2000. Impact of the Massachusetts tobacco control programme: Population based trend analysis. *British Medical Journal* 321 (7257): 351–54.

^dSmith, S. 2002. Tobacco foes hit cuts in budget. *Boston Globe*, October 12.

^eSiegel, M., and L. Biener. 1997. Evaluating the impact of statewide anti-tobacco campaigns: The Massachusetts and California Tobacco Control Programs. *Journal of Social Issues* 53 (1): 147–68.

^fAssociated Press. 2002. SJC backs Swift cut in antismoking programs. *Boston Globe*, June 15.

^gMassachusetts Secretary of the Commonwealth. Massachusetts Lobbyist and Employer Search System Database. <http://db.state.ma.us/sec/pre/search.asp>.

excise tax by 40¢/pack and dedicate 23% of the new revenues to a health education account for tobacco prevention and education programs.⁵³ Republican Governor John Fife Symington III and Senate President John Greene (R-Phoenix) were two main opponents to the creation of the

Arizona Tobacco Education and Prevention Program (AzTEPP).⁵³

After passage of Proposition 200 but before program implementation, both the governor and the senate president expressed their opinions that the initiative process

should not override public policymaking and that the legislature, not the public, should handle fiscal issues such as the tax proposed by Proposition 200.⁵⁴ In an April 1994 meeting with health advocates, Governor Symington and Senator Greene threatened retaliation by removing the groups' nonprofit status and by blocking future legislation proposed by the health advocates who spearheaded Proposition 200.⁵⁵⁻⁵⁷ These groups included the ACS, the AHA, the ALA, and the Arizona for a Healthy Future Coalition.

After failing to defeat Proposition 200, Governor Symington and Senator Greene worked to weaken AzTEPP through membership on the Tobacco Use Prevention Advisory Committee (TUPAC), the state commission overseeing Arizona's tobacco control program. House Bill (HB) 2275, the implementing legislation for Proposition 200,⁵⁸ required that the TUPAC be composed of the director of the Arizona Department of Health Services, two individuals appointed by the governor, four individuals appointed by the president of the senate, and four individuals appointed by the speaker of the house.

Four of the 11 TUPAC members had clear ties with the tobacco industry. Governor Symington's appointees were from the Arizona Retailers Association and Golden Eagle Distributors.⁵⁴ Senator Greene appointed Senator Gus Arzberger (D) and Senator Janice K. Brewer (R), both of whom were known among health advocates as supporters of the tobacco industry.⁵³ However, Speaker of the House Mark Killian (R-Mesa) was an ally of health advocates and had worked against bills containing preemption language related to tobacco control.^{59,60} Representative Killian selected Representatives Andrew W. Nichols (D-Summerhaven) and Sue Gerard (R-Phoenix). While Representative Gerard was a friend of Philip Morris lobbyist Rip Wilson, she was known within the public

health community as an ally of tobacco control efforts.⁵³ Representative Killian followed the recommendation of the Coalition for Tobacco-Free Arizona in selecting the two nonelected appointees to the TUPAC.⁵⁴

The legislature used HB 2275⁵⁸ as the vehicle to adjust the funding levels for AzTEPP from the estimated \$27 million and \$29 million in tobacco tax revenues for FY 1996 and FY 1997, respectively, to \$10 million for FY 1996 and \$15 million for FY 1997.⁵⁴ The remaining \$37 million intended for antitobacco education remained in a reserve account that could be used after July 1, 1997. The FY 1996 and FY 1997 spending caps were to remain in place for two years, at which point the program would receive the intended 23% of the tobacco tax revenues. Representative Gerard introduced several pieces of legislation to remove the caps. In April 1997, she successfully removed the caps and backfilled the missing funds for FY 1996 and FY 1997.⁵⁴ Also in 1997, Governor Symington waged an unsuccessful campaign to divert \$34.7 million from the tobacco control program.⁵⁴

The media campaign was implemented in December 1995. Under HB 2275,⁵⁸ the Arizona Department of Health Services was charged with authority for the campaign, which it significantly limited both in audience and message. The health services department determined that the media campaign should not address nicotine addiction and that the "target population of the media program during the first year of the contract shall be pre-adolescents and adolescents, pregnant women and their partners."^{61(p.5-1)}

This focus was not the most efficient use of funds for influencing populationwide smoking as only a small fraction of the Arizona population is pregnant at any given time (about 104 women per 1,000 women

according to U.S. data),⁶² and youth-focused advertising is unlikely to influence the majority of smokers who are adults.⁶³ Targeting adolescents and lacking discussion of nicotine addiction compromised the media campaign's effectiveness from the onset, in contrast with the California campaign's approach a few years earlier.

The first tobacco control expenditures were for contracts with the Phoenix Suns, a professional basketball team, and the Arizona Cardinals, a professional football team, to promote antitobacco education through players, team mascots, radio and television spots, and stadium billboards. After contract approval, attorney Steve Duffy represented the Tobacco Institute in filing a memorandum claiming that the contracts violated state policymaking and were illegal.⁵⁴ Protobacco members of the TUPAC said they had not been consulted on the contracts before signing. These issues slowed down the program and encouraged it to be cautious.

In 1998, under the administration of Governor Jane Dee Hull (R), the media campaign broadened its scope, particularly by addressing adult cessation in addition to pregnant women and children, in response to smokers' complaints that their taxes were not paying for services to help them.⁵³ Despite the early narrow focus of the campaign, Proposition 200 was associated with a decline in Arizona's tobacco use prevalence from an estimated 23.1% in 1996 to 18.3% in 1999,⁶⁴ although no data were available to compare that trend to other states not subject to the campaign.

In summary, the tobacco industry worked to weaken the media campaign by influencing the placement of tobacco-friendly representatives on TUPAC.⁵⁴ Hence, the efforts of health advocates in Arizona to create a tobacco control media campaign took place in an environment in which the tobacco industry made numerous attempts to prevent such progress.

Florida

In 1995, the attorney general of Florida, following the lead of the Minnesota attorney general, filed a lawsuit against the tobacco industry to cover the costs of treating Florida's Medicaid patients for illnesses related to tobacco, fund smoking cessation programs, restrict tobacco marketing, and fund an antitobacco education program.⁶⁵ The case was settled on August 25, 1997 (before the MSA). The tobacco industry agreed to pay \$11.3 billion to the state of Florida over 25 years and to provide \$200 million for a two-year Tobacco Pilot Program, "the elements of which shall be aimed specifically at the reduction of the use of Tobacco Products by persons under the age of 18 years."⁶⁶

Having learned a lesson in California, the tobacco industry sought to limit the scope of the tobacco control campaign aimed at youth by including language in the settlement stating, "The \$200 million amount payable by Settling Defendants in support of the Pilot Program shall be used only after approval by the Court and at the rate of approximately \$100 million per 12-month period for general enforcement, media, educational and other programs directed to the underage users or potential underage users of Tobacco Products."⁶⁶ The industry sought to prevent the tobacco control media campaign from negatively characterizing tobacco companies by including a "vilification clause" that stated that funds "shall not be directed against the tobacco companies or any particular tobacco company or companies or any particular brand of Tobacco Products."⁶⁶

Governor Lawton Chiles (D), who enthusiastically supported the lawsuit against the tobacco industry,⁶⁷ worked to create a Tobacco Pilot Program within the governor's office in 1998 in an effort to deter efforts by the tobacco companies or

other protobacco interests to undermine such an initiative.⁴⁷ As in the initial California program, this high priority in the administration cleared the bureaucratic way for quickly establishing an aggressive program.

The first step in the program's creation was the Governor's Teen Summit on Tobacco Education, attended by more than 600 youth. The result was the approval of four goals for the Tobacco Pilot Program: changing youth attitudes about tobacco use, empowering youth to work in their communities against tobacco use, reducing the availability of tobacco products to youth, and reducing youth exposure to secondhand smoke.⁴⁷ In June 1998, representatives of a newly formed group, Students Working Against Tobacco (SWAT), along with four at-large representatives from the community, met in St. Petersburg, Florida, to discuss the means of implementing the Tobacco Pilot Program. Following the four guidelines created at the governor's summit, the group decided on five program components: youth programs and community partnerships, education and training, marketing and communications, enforcement, and research and evaluation.⁴⁷

The marketing component was to focus on maintaining tobacco-free youth, informing youth of the risks of secondhand smoke and the addictive nature of tobacco, creating awareness of the Tobacco Pilot Program, linking popular athletes and teams with antitobacco messages, deglamorizing tobacco use, developing a communications network on the Internet, and demonstrating that peer pressure to use tobacco can be effectively countered.⁴⁷ An advertising firm in Miami, Florida, worked with youth to develop a campaign that would effectively speak to youth. The result was that youth clearly stated that they wanted the truth and facts and did not want to be manipulated by marketing by the tobacco industry.⁶⁸

Although prohibited by the vilification clause from directly attacking the tobacco industry,⁶⁶ the campaign adopted "truth" as its theme with the tagline "Their brand is lies. Our brand is Truth."⁴⁷ Who "they" were was purposefully left vague. Moreover, the campaign featured telephone calls asking tobacco industry spokespersons questions intended to embarrass them and directly attacked the tobacco industry's network, including advertising agencies and scientists who supported the tobacco industry.⁴⁷

The vilification clause was lifted in September 1998 when Texas settled its lawsuit against the tobacco industry without such restrictive language.⁶⁹ The Florida settlement contained a "most favored nation" clause indicating that more favorable terms in subsequent settlements would apply retroactively to Florida: "The terms of this Settlement Agreement will be revised so that the State of Florida will obtain treatment at least as relatively favorable as any such non-federal governmental entity."⁶⁶ Therefore, the vilification clause was removed from the Florida settlement.

Florida's "truth" campaign began in April 1998 with print and broadcast advertisements and expanded in June 1998 with billboard advertisements. In July 1998, the "Truth Train," filled with youth, toured the state for 13 days to build awareness of the campaign and to recruit new members for SWAT as well as to call for Hollywood to refuse to glamorize tobacco in the movies.⁶⁷ In September 1998, Florida State University released the results of a survey assessing youth awareness of the Florida "truth" campaign. Since the Florida "truth" campaign began, 57% of youth who were surveyed reported being aware of the campaign, 87% reported being aware of specific messages, and 47% believed that tobacco companies used deceptive practices in their advertising.⁷⁰

From 1988 to 1999, current smoking dropped from 18.5% to 15.0% among middle school students and from 27.4% to 25.2% among high school students.^{71,72} Over two years, prevalence among middle school students dropped further to 11.1% and among high school students dropped to 22.6%.⁷³

Despite this strong initial sign of success, Florida House General Appropriations Committee chair James E. King Jr. (R-Jacksonville) called for reduced program funding.⁷⁴ (King was among the top 25 recipients of tobacco industry campaign contributions during the 1997–98 election cycle.)⁴⁷ Claims of ineffectiveness were made despite the September evaluation⁷⁰ reporting broad exposure and awareness among youth and a spread of the belief that tobacco industry advertising was deceptive.

On December 11, 1998, Governor Chiles died suddenly of a heart attack, removing the Tobacco Pilot Program's primary champion. In January 1999, Jeb Bush (R) was sworn in as governor. Despite the program's success and popularity,^{73,75–77} Governor Bush proposed cutting its funding. His budget submitted to the legislature included \$61.5 million as opposed to the \$70.5 million allocated the previous year.⁷⁸ The Senate Budget Subcommittee on Health and Human Services proposed cutting the program to \$50 million.⁷⁹ The House Health and Human Services' budget panel for appropriations proposed eliminating the program, claiming that it was not working.⁸⁰ As noted earlier, the tobacco industry supported such funding cuts in Minnesota in the early 1990s.²⁰ Health advocates accepted Governor Bush's budget proposal.⁶⁷ However, the American Nonsmokers' Rights Foundation responded by running a newspaper campaign urging the public to hold Governor Bush accountable for "truth" campaign budget cuts.

In April 1999, the House and Senate agreed to give the Tobacco Pilot Program \$45.2 million

for 1999–2000, a 36% reduction from the previous year's \$70.5 million. In May 1999, Governor Jeb Bush cut the program further to \$38.7 million.⁶⁷ The Jeb Bush administration then disassembled the program by laying off staff members and youth workers and reassigning responsibilities to spread the program over several different administrative divisions. In essence, this was the end of the program.

In summary, the tobacco industry found some success in the limitations placed on the Florida media campaign from its inception. The antivivification clause was lifted in Florida when Texas settled its lawsuit with the tobacco companies,⁶⁹ but the Florida program's restriction to target only youth under 18 years⁶⁶ remained in place. Health advocates and officials effectively responded to this limitation by creating the cutting-edge "truth" campaign. Despite the campaign's documented success in reducing youth smoking,^{71–73} its funding was severely cut. In their analysis of events leading up to and during the Florida campaign, Glantz and colleagues concluded that the tobacco industry's efforts also benefited from financial donations to political allies who criticized the campaign's value, thus contributing to its eventual demise.^{47,67}

American Legacy Foundation

On November 23, 1998, attorneys general for the remaining 46 states, the District of Columbia, and five territories that had sued the tobacco industry over Medicaid costs related to smoking and other issues announced the Master Settlement Agreement.⁷ The MSA resolved the remaining state litigation against the tobacco industry, providing the states with money in perpetuity based on their estimated Medicaid costs due to smoking, cigarette sales, and inflation and imposing

Will Governor Jeb Bush protect our children from Big Tobacco? Here's how you can hold him accountable.

Florida won a \$13 billion court settlement last year from Big Tobacco to pay some of the public medical bills that tobacco disease and death cost Florida taxpayers. But Big Tobacco just won't quit...

Big Tobacco has slipped more than \$1.5 million to Florida's major political parties over the last ten years, two-thirds to the State Republican Party.

Thousands of dollars more have gone directly to state candidates and office-holders over in Tallahassee.

The objective, no matter what anybody says, is to influence public policy in Big Tobacco's favor. Case in point? Florida's pioneering "Truth" campaign.

This anti-tobacco effort designed by Florida teens for teens has "attitude." It says straight out what every adult knows: that Big Tobacco and its allies are lying to them.

That truthfulness is why the "Truth" campaign has worked so well.

Last year, in fact, the number of Florida teen smokers fell by 31,000. In the long run, that saves tens of thousands of lives and tens of millions in public health costs. Not bad for a bunch of teenagers.

Naturally, Big Tobacco detests the "Truth"...which may be why, this year, Tallahassee voted to cut the "Truth" campaign budget in half and slash its staff by 75 percent. (They took special care to fire the teens working on the campaign.)

The key public officials involved are identified on this page. Right now, the most important are Governor Bush and his Secretary of Health, Bob Brooks.

Governor Bush claims he supports the "Truth". But it was



his man Brooks who fired the campaign's director, broke up the program, and toned it down.

Maybe the politicians who cut back on the "Truth" really think they won't hurt our kids.

Or else they think you won't draw the connection between Big Tobacco's big money and how our public officials behave.

But we all know the truth when we see it. If Governor Bush wants to protect our kids from Big Tobacco, he should do the following:

- Put the anti-tobacco program back together and give it the same



Rep. Debra Bodenstine (D-Ft. Lauderdale) and House Speaker John Thrasher (R-Orange Park) have taken the lead in slaying the tobacco industry's dirty work by slaying the "Truth" campaign funding and Governor Bush is bringing them get away with it.

high profile former Governor Lawton Chiles did.

- Instruct the new campaign director, Debra Bodenstine, to keep anti-tobacco efforts tough and truthful.

- Bring back the hard-working, uncompromised teens fired by Brooks...and let them run their "Truth" campaign again without political interference.

- Finally, fight to get \$221 million for tobacco prevention efforts next year from Florida's \$13 billion Tobacco Settlement, and start telling the "Truth" to adults, too, as the U.S. Centers for Disease Control have recommended.

Start here. Start now. Mail the coupon, call toll-free, or e-mail Jeb Bush and Bob Brooks.

Big Tobacco can't stand the truth. But with your help, even big politicians can learn to like it.

Governor Bush:

Show the voters you have their interests at heart. Keep the anti-tobacco "Truth" campaign truthful and tough, and use your discretionary funds to save Florida taxpayers hundreds of millions down the road. These kids can teach Tallahassee a thing or two.

NAME _____
 ADDRESS _____
 CITY/STATE/ZIP _____

Mail to Governor Jeb Bush, The Capitol, Tallahassee, FL 32399
 Call his office at 850.488.4441 or fax: 850.487.0807 or
 e-mail: R.governor@fl.gov

Hold Governor Bush accountable!

I wondered what happened to that promising and extremely effective "Truth" campaign. Now that I know, keep me posted. Don't let up on Big Tobacco. Big money, or the big politicians. I'll contact Governor Bush.

NAME _____
 ADDRESS _____
 CITY/STATE/ZIP _____

Mail to American Nonsmokers' Rights Foundation
 P.O. Box 998, Berkeley, CA 94701
 Website: www.no-smoke.org

Sponsored by the American Nonsmokers' Rights Foundation, a national organization committed to local action, and Smoke-Free Kids, Inc.

Print advertisement from the American Nonsmokers' Rights Foundation urging the public to hold Governor Jeb Bush accountable for "truth" budget cuts.

some limitations on tobacco industry advertising to youth. A national public health foundation, later named the American Legacy Foundation, was established with \$250 million paid over 10 years. A national public education campaign was established with \$1.45 billion over the next five years. The attorneys general who negotiated the payments to the education fund agreed to a clause stating that the settling tobacco companies could end their payments to the public education fund if their aggregate market share dropped below 99.05% of the total domestic cigarette market, potentially ending funding for a substantial national tobacco control campaign after five years.⁷

The American Legacy Foundation's purposes were "to support (1) the study of and programs to reduce Youth Tobacco Product usage and Youth substance abuse in the States and (2) the study of and educational programs to prevent diseases associated with the use of Tobacco Products in the States."⁷ The tobacco industry pursued, and the attorneys general granted, several important restrictions in the MSA on Legacy's activities. These included no "political activities or lobbying, including, but not limited to, support of or opposition to candidates, ballot initiatives, referenda or other similar activities."⁷ This restriction was significant because it barred Legacy from supporting public advocacy for smokefree and other tobacco control policies that otherwise would have been permitted by a private foundation. As public policy interventions are the most effective way to reduce cigarette consumption,^{81,82} tobacco industry interests benefited from Legacy's restriction from pursuing them.

Equally important, the attorneys general agreed that funds from the education account would be used only for "public education and advertising regarding the addictiveness, health effects, and social costs related to the use of tobacco products and shall not be used for any personal

attack on, or vilification of, any person ... company, or governmental agency, whether individually or collectively."⁷⁷ This broad vilification clause constrained Legacy's use of advertising portraying the tobacco industry as deceptive. Even so, Legacy acted aggressively in adopting Florida's successful "truth" campaign. Although Florida's "truth" media campaign was waning because of decreased funding under the Jeb Bush administration,⁶⁷ Legacy turned the strategy into a national campaign. Continuing the course set in Florida, the national "truth" campaign effectively reduced smoking among teens^{77,83} and increased antitobacco attitudes and beliefs.⁸⁴ Between 1999 and 2002, youth smoking prevalence decreased from 25.3% to 18.0%, and 22% of this decline was attributed to the Legacy "truth" campaign.⁸³ (See chapter 12.)

Although Legacy was established as part of the national settlement with the tobacco companies, it is not exempt from actions brought by tobacco companies, particularly in areas subject to the MSA vilification clause.⁵¹ For example, on January 18, 2002, Lorillard gave Legacy 30-day notice (required under the terms of the MSA) that it would file suit against the foundation in Wake County, North Carolina, alleging that the Legacy "truth" antismoking advertising campaign violated the terms of the MSA through personal attacks and vilification of the company.⁵¹ In response, Legacy filed a preemptive suit against Lorillard in New Castle County, Delaware, on February 13, 2002,⁸⁵ arguing that, because it was not itself as an organization a signatory to the MSA, the terms of the MSA did not apply, and the 30-day notice was unnecessary.⁸⁵ With knowledge of the nature of Lorillard's complaints, Legacy asked the court for a declaratory judgment.

On January 31, 2003, after reviewing documents from both parties, the Delaware Chancery Court denied Legacy's motion for summary judgment, moving the case to

The Tobacco Industry and the Youth Smoking Message

While the American Legacy Foundation's media efforts were under way, the tobacco industry launched its own updated youth smoking prevention programs, which in the past had been thought to displace more effective tobacco control efforts.^a As noted earlier, in Minnesota in the mid-1980s, the tobacco industry introduced its youth campaign, "Helping Youth Decide," considered by some to be an attempt to delegitimize the utility and significance of the Minnesota Plan for Nonsmoking and Health.^{a,b} Similarly, in 1998 Philip Morris introduced its national "Think. Don't Smoke." campaign, later shown to be associated with an increase in youths' intention to smoke within the next year.^c This program was discontinued in 2002.^d From 1999, however, Philip Morris developed and ran a media campaign directed at parents, encouraging them to talk to their children about smoking.^d Lorillard also launched a youth smoking prevention program in 1999 called "Tobacco Is Whacko if You're a Teen." Chapter 12 discusses studies that have evaluated these campaigns.

^aLandman, A., P. M. Ling, and S. A. Glantz. 2002. Tobacco industry youth smoking prevention programs: Protecting the industry and hurting tobacco control. *American Journal of Public Health* 92 (6): 917–30.

^bMozingo, R. Confidential information on new TI program. 13 Aug 1984. Tobacco Institute. Bates No. TIMN0150840. <http://legacy.library.ucsf.edu/tid/poy82f00>.

^cFarrelly, M. C., C. G. Heaton, K. C. Davis, P. Messeri, J. C. Hersey, and M. L. Haviland. 2002. Getting to the truth: Evaluating national tobacco countermarketing campaigns. *American Journal of Public Health* 92 (6): 901–7.

^dFarrelly, M. C., J. Niederdeppe, and J. Yarsevich. 2003. Youth tobacco prevention mass media campaigns: Past, present, and future directions. *Tobacco Control* 12 Suppl. 1: i35–i47.

trial.⁴⁷ The court stated that Lorillard had the right to pursue legal action against Legacy to enforce the provisions of the MSA. The court ruled in favor of Legacy, finding that simply criticizing the tobacco industry did not amount to vilification. It also provided a clear definition of the term *vilification*, allowing Legacy to continue its "truth" campaign by ensuring that it continued to avoid the now-defined practice of vilification. Lorillard appealed to the Delaware Supreme Court, which upheld the lower court decision.⁸⁶

On March 21, 2003, Lorillard announced that it would place its share of MSA payments in escrow to prevent the funds from going to Legacy.⁸⁷ Following correspondence between Vermont Attorney General William H. Sorrell, chair of the Tobacco Committee of the National Association of Attorneys General, and Lorillard, the tobacco company reversed its decision and made its annual payments on time on March 31, 2003.⁸⁸ However, Lorillard

also revised its initial claim for damages against Legacy from \$1 to a complete return of the MSA payments made by Lorillard since 1999.⁸⁷ The implications of such action by Lorillard in the decision in the case against Legacy were significant. If Lorillard won, the decision could serve as a precedent for other tobacco company signatories to the MSA to collect their payments as well, thereby leading to Legacy's financial demise.

In June 2004, Lorillard dropped the claim that it was unjustly accused of adding urea to its cigarettes (the use of urea as a cigarette additive was the subject of a Legacy advertisement), stating, "We are not complaining that they [Legacy's "truth" campaign] are saying urea is in cigarettes. What we are complaining about is the implication that Lorillard puts the equivalent of dog urine in cigarettes or that Lorillard would consider doing something like that." (Personal communication from E. Vargyas, General Counsel, American Legacy

Foundation, to J. Ibrahim, 2004). Counsel for Lorillard indicated that the company had no intention of challenging the credibility of the comments about adding urea and that its focus was to challenge the vilification clause (personal communication from E. Vargyas to J. Ibrahim, 2004). On August 22, 2005, Judge Stephen P. Lamb ruled against Lorillard, stating that Legacy’s “truth” advertisements did not violate the MSA.⁵¹

Summary

In the past, the tobacco industry has worked to influence tobacco control media campaigns and diminish their impact.^{37,89} This chapter examined four primary strategies employed by the tobacco industry: preventing the creation of media campaigns, de-funding media campaigns through efforts such as claims of a fiscal crisis, weakening the message or limiting the audience of a campaign, and claiming that tobacco control efforts duplicate the tobacco industry’s own youth smoking prevention programs.

Tobacco industry strategies constantly evolve and adapt, as discussed further in chapter 6, making it more difficult for the public to differentiate between goodwill efforts from the tobacco companies to prevent smoking by youth and diversionary tactics to prevent meaningful efforts to reduce tobacco consumption. The benefits of tobacco control media campaigns can be reinforced among the public and elected officials where supported by the evidence, and health advocates can anticipate the nature of the above-mentioned counterefforts that could diminish the effectiveness of their campaigns.

Conclusions

1. Tobacco industry efforts to impede tobacco control media campaigns include attempts to prevent or reduce their funding. Examples include opposition to a tobacco tax increase intended to fund media campaigns in California and claims that a “budget crisis” precluded spending on tobacco control media campaigns in Minnesota.
2. Efforts to weaken the messages or reduce the size of the target audience in tobacco control media campaigns include restricting the scope of Arizona’s Proposition 200 initiative to address specific topics such as nicotine addiction and to target only children and pregnant women and, in the American Legacy Foundation’s “truth” campaign, disallowing public policy advocacy and vilification of the tobacco industry.
3. The tobacco industry has cited its own media campaigns—such as “Helping Youth Decide,” “Think. Don’t Smoke,” and “Tobacco Is Whacko if You’re a Teen”—to argue that government-funded campaigns duplicate these efforts and waste taxpayer dollars. This strategy was seen first in Minnesota and leading up to and following the 1998 signing of the Master Settlement Agreement.
4. Increasing consumer awareness of tobacco industry activities to counteract public-health-sponsored campaigns designed to reduce tobacco use can be an important component of effective media interventions.

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Tobacco Industry Media Efforts to Defeat State Tobacco Control Ballot Initiatives and Referenda

Ballot initiatives that allow voters to enact new legislation, and referenda that allow voters to approve or disapprove legislation enacted by legislatures, are effective means of promulgating tobacco control legislation. This chapter examines the tobacco industry's use of media to counter these ballot measures in a sample of the 42 state-level tobacco measures voted on from 1988 to 2006. An analysis of selected tobacco industry media campaigns demonstrated several primary themes—that these measures would create unfair tax increases or divert funds from intended objectives, impinge on personal choice, or constitute wasteful government spending. Despite these efforts, voters ultimately passed 28 tobacco control initiatives and referenda and defeated 4 tobacco industry-sponsored initiatives, yielding a 76% success rate for tobacco control advocates. The following campaigns are discussed:

- *California's Proposition 99, a 1988 initiative increasing the tobacco tax by 25¢ per pack to fund antitobacco health education, research, health care, and related programs*
- *Massachusetts's Question 1, a 1999 initiative to increase tobacco taxes by 25¢ per pack for a health protection fund to pay for tobacco education, cessation, and prevention programs*
- *Oklahoma's State Question 713, a 2004 referendum to increase the tobacco tax by 4¢ per cigarette to fund health care and tobacco cessation programs*
- *Montana's Initiative 149, a 2004 ballot measure increasing a variety of tobacco taxes to fund health care, prescription drug, nursing home, and other programs*
- *Colorado's Amendment 35, a 2004 initiative to raise cigarette taxes by 64¢ a pack to fund health care and tobacco education and cessation programs*
- *California's Proposition 86, a 2006 initiative to raise cigarette taxes by \$2.60 a pack to fund health programs, children's health insurance coverage, and tobacco use prevention programs*
- *Missouri's Amendment 3, a 2006 initiative to raise taxes by 4¢ per cigarette and 20% on all other tobacco products to fund health care and tobacco use prevention programs*

Introduction

This chapter examines the use of initiatives and referenda to pass antitobacco legislation by direct vote. It focuses on state initiatives and referenda in which voters were voting only on a tobacco tax increase. It also explores the tobacco industry's use of media in its attempts to prevent such legislation, covering ballot measures taking place from 1988 to 2006. The years 1988 to 2006 were chosen for this study because they provide a suitable duration of time to counter any potential bias caused by short-term changes in an examination of modern state tobacco initiative and referendum trends that started in 1988 with California's groundbreaking Proposition 99.

Initiatives are a direct vote by the people on legislation, while referenda refer to direct votes by the people to approve or disapprove legislation enacted by legislatures.¹ Both represent means for tobacco control advocates to bypass protobacco constituencies in state legislatures and enact legislation directly by popular support.

In the latter part of the 19th century, a very strong agrarian and labor populist movement, particularly so in the American Midwest and the South, arose to challenge the concentrated political power and abusive practices of monopolistic corporations in a variety of economic sectors.²⁻⁷ The populist movement proposed several significant reforms such as a progressive income tax, public ownership of railroads, and direct votes of the people to approve or disapprove legislation.^{4,8,9} The preamble to the 1892 Omaha Platform of the Populist Party clearly stated the primary reason for these proposals (including the call for a direct vote by the people):

The conditions which surround us best justify our cooperation: we meet in the midst of a nation brought to the verge of moral, political, and material ruin. Corruption dominates the ballot-box, the

legislatures, the Congress, and touches even the ermine of the bench. The people are demoralized; most of the States have been compelled to isolate the voters at the polling places to prevent universal intimidation and bribery. The newspapers are largely subsidized or muzzled, public opinion silenced, business prostrated, homes covered with mortgages, labor impoverished, and the land concentrating in the hands of the capitalists. The urban workmen are denied the right to organization for self-protection, imported pauperized labor beats down their wages, a hireling standing army, unrecognized by our laws, is established to shoot them down, and they are rapidly degenerating into European conditions. The fruits of the toil of millions are badly stolen to build up colossal fortunes for a few, unprecedented in the history of mankind; and the possessors of these, in turn, despise the Republic and endanger liberty.⁸

Although this strong current of agrarian and labor protest subsided by 1896, the movement continued to promote direct votes by the people.¹ Entrenched large corporations opposed legislation allowing a direct vote by the people. However, in 1898, South Dakota became the first state to enact initiative legislation (table 14.1),⁹ quickly followed by 19 mostly western and southern states from 1900 to 1918. Since 1918, only four states have enacted some form of state initiative and/or referendum. In 2005, 18 states allowed voters to enact by initiative a constitutional amendment, 21 allowed enactment via a state statute, and 27 states allowed some form of initiative and/or referendum (tables 14.1 and 14.2).

The populists' call for a direct vote of the people—to bypass the stranglehold of powerful corporate interests, such as the oil and railroad industries, over state legislatures—is as salient today as it was more than a century ago.⁹⁻¹¹ From 1988 to 2006, direct referendum and initiative votes by the people for state antitobacco legislation—which would bypass the influence of the

Table 14.1 U.S. States in 2005 with Statewide Initiatives and Referenda

State	Date adopted	Initiative	Referenda
South Dakota	1898/1972/1988	Yes	Yes
Utah	1900/1917	Yes	Yes
Oregon	1902	Yes	Yes
Nevada	1908	Yes	Yes
Montana	1904/1972	Yes	No
Oklahoma	1907	Yes	Yes
Missouri	1908	Yes	Yes
Michigan	1908	Yes	Yes
Maine	1908	Yes	Yes
Arkansas	1910	Yes	Yes
Kentucky	1910	No	Yes
Arizona	1911	Yes	Yes
California	1911	Yes	Yes
New Mexico	1911	No	Yes
Idaho	1912	Yes	Yes
Colorado	1912	Yes	Yes
Nebraska	1912	Yes	Yes
Washington	1912	Yes	Yes
Ohio	1912	Yes	Yes
Mississippi	1914/1992	Yes	No
North Dakota	1914	Yes	Yes
Maryland	1915	No	Yes
Massachusetts	1918	Yes	Yes
Alaska	1956	Yes	Yes
Wyoming	1968	Yes	Yes
Illinois	1970	Yes	No
Florida	1972	Yes	No
Total		24	23

Note. NA = not applicable. From University of Southern California. Initiative and Referendum Institute. 2004. States with direct and indirect initiative amendments: Direct and indirect initiative statutes and popular referendum. <http://www.iandrinstitute.org>.

tobacco industry in state legislatures—occurred 42 times in 17 states (including four protobacco industry-sponsored initiatives) (table 14.3).^{12,13} Tobacco industry interests frequently used media channels to attempt to sway public opinion against these ballot measures. Despite these efforts, the success of many of these initiatives demonstrates how, through direct votes, antitobacco advocates can undertake initiative and referendum efforts to bypass state legislatures and enact vigorous antitobacco programs.

Criticisms of State Initiatives and Referenda

Critics argue that direct votes of the people in policy areas (such as state antitobacco legislation) violate a founding principle in the establishment of the U.S. Constitution that the United States is a republican form of government.^{14,15} Rather than governance

Table 14.2 U.S. States in 2005 by Type of Initiative Allowed

State	Date adopted	Initiative to adopt state constitutional amendment	Initiative to adopt state statute
South Dakota	1898/1972/1988	Yes	Yes
Utah	1900/1917	No	Yes
Oregon	1902	Yes	Yes
Nevada	1908	Yes	Yes
Montana	1904/1972	Yes	Yes
Oklahoma	1907	Yes	Yes
Missouri	1908	Yes	Yes
Michigan	1908	Yes	Yes
Maine	1908	No	Yes
Arkansas	1910	Yes	Yes
Kentucky	NA	No	No
Arizona	1911	Yes	Yes
California	1911	Yes	Yes
New Mexico	NA	No	No
Idaho	1912	No	Yes
Colorado	1912	Yes	Yes
Nebraska	1912	Yes	Yes
Washington	1912	No	Yes
Ohio	1912	Yes	Yes
Mississippi	1914/1992	Yes	No
North Dakota	1914	Yes	Yes
Maryland	NA	No	No
Massachusetts	1918	Yes	Yes
Alaska	1956	No	Yes
Wyoming	1968	No	Yes
Illinois	1970	Yes	No
Florida	1972	Yes	No
Total		18	21

Note. NA = not applicable. From University of Southern California. Initiative and Referendum Institute. 2004. States with direct and indirect initiative amendments: Direct and indirect initiative statutes and popular referendum. <http://www.iandrinstitute.org>.

by the people through direct votes on legislation, a republican form of government means that representatives chosen through elections govern the people.

In addition, critics of direct votes by the people often indicate that initiatives and referenda are poorly written.^{14,15} This argument overlaps the first argument

because the job of elected officials in a republican form of government is to write intelligent and effective legislation for the public good. This often does not occur with ad hoc initiatives and referenda. Moreover, critics charge that if the initiatives or referenda are “locked in” as a state constitutional amendment, then such poorly written legislation diminishes the public

Table 14.3 Tobacco Control State Initiatives and Referenda from 1988 to 2006

State	Year	Measure type	Measure number	Subject matter	Passed?
California	1988	Initiative	Proposition 99	Tax increase	Yes
Montana	1990	Initiative	I-115	Tax increase	No
Massachusetts	1992	Initiative	Question 1	Tax increase	Yes
Arizona	1994	Initiative	Proposition 200	Tax increase	Yes
California	1994	Initiative	Proposition 186	Tax increase	No
California ^a	1994	Initiative	Proposition 188	Preemption of local clean indoor air regulations	No
Colorado	1994	Initiative	Amendment 1	Tax increase	No
Michigan	1994	Referendum	Proposal A	General tax increase that included tobacco tax increase	Yes
Arizona	1996	Initiative	Proposition 200	Tax increase	Yes
Oregon	1996	Initiative	Measure 44	Tax increase	Yes
California	1998	Initiative	Proposition 10	Tax increase	Yes
Arizona	2000	Initiative	Proposition 200	Tax increase	Yes
Arizona	2000	Initiative	Proposition 204	MSA funding for health care	Yes
Arkansas	2000	Initiative	Act 1	MSA funding for university facilities	Yes
Montana	2000	Referendum	C-35	MSA funding for health care and tobacco control	Yes
Oklahoma	2000	Referendum	State Question 692	Creates tobacco settlement trust fund	Yes
Oregon	2000	Initiative	Measure 4	MSA funding for health care	No
Oregon	2000	Referendum	Measure 89	MSA funding for health, housing, and transportation	No
Utah	2000	Referendum	Proposition 2	Creates tobacco settlement trust fund	Yes
Washington	2001	Initiative	Measure 773	Tax increase	Yes
Arizona	2002	Referendum	Proposition 303	Tax increase	Yes
Florida	2002	Initiative	Amendment 6	Smoke-free worksites and public places	Yes
Michigan	2002	Initiative	Proposal 02-4	MSA funding for health care and tobacco control	No
Missouri	2002	Initiative	Proposition A	Tax increase	No
Montana	2002	Initiative	I-146	MSA funding for state tobacco prevention program	Yes
Oklahoma	2002	Referendum	State Question 701	Modifies tobacco trust fund expenditures	No
Oregon	2002	Referendum	Measure 15	Bonds for public education and earthquake repairs paid by tobacco settlement funds	Yes
Oregon	2002	Referendum	Measure 16	Bonds for emergency services and earthquake repairs paid by tobacco settlement funds	Yes
Colorado	2004	Initiative	Amendment 35	Tax increase	Yes
Oklahoma	2004	Referendum	State Question 713	Tax increase	Yes

Table 14.3 Tobacco Control State Initiatives and Referenda from 1988 to 2006 (continued)

State	Year	Measure type	Measure number	Subject matter	Passed?
Montana	2004	Initiative	I-149	Tax increase	Yes
Arizona	2006	Initiative	Proposition 201	Smoke-free worksites and public places	Yes
Arizona	2006	Initiative	Proposition 203	Tax increase	Yes
Arizona ^a	2006	Initiative	Proposition 206	Smoke-free worksite and public places	No
Florida	2006	Initiative	Amendment 4	MSA funding for state tobacco prevention and cessation programs	Yes
Nevada ^a	2006	Initiative	Question 4	Smoke-free worksites and public places	No
Nevada	2006	Initiative	Question 5	Smoke-free worksites and public places	Yes
Ohio ^a	2006	Initiative	Issue 4	Smoke-free worksites and public places	No
Ohio	2006	Initiative	Issue 5	Smoke-free worksites and public places	Yes
South Dakota	2006	Initiative	Measure 2	Tax increase	Yes
California	2006	Initiative	Proposition 86	Tax increase	No
Missouri	2006	Initiative	Amendment 3	Tax increase	No

Note: MSA = Master Settlement Agreement. From National Conference of State Legislatures. 2004. Initiatives and referenda: Tobacco. <http://www.ncsl.org/ncsldb/elect98/irsch.cfm>. University of Southern California. Initiative and Referendum Institute. 2007. States with direct and indirect initiative amendments: Direct and indirect initiative statutes and popular referendum. <http://www.iandrinstitute.org>.

^aIn these four states, voters rejected tobacco industry-sponsored ballot initiatives that were much weaker than legislation supported by health groups: Proposition 188 in California, Proposition 206 in Arizona, Question 4 in Arizona, Question 4 in Nevada, and Issue 4 in Ohio.

good. This is particularly true, as many critics argue, if voters are not “competent” to make informed decisions regarding complicated public policy issues.^{14,15}

Yet another criticism of direct voting by the people is that initiatives and referenda have become a tool of well-financed and powerful special interests, and these special interests dominate the process.^{14,15} Syndicated columnist David Broder strongly argued for this position in *Democracy Derailed: The Initiative Movement and the Power of Money*.¹⁴ This trend, according to critics such as Broder, is contrary to the original intent of populist reformers—to bypass special-interest-dominated state legislatures and directly enact needed reforms that benefit average citizens.

These debates are particularly relevant to tobacco-tax initiatives and referenda in which tobacco control advocates, and in some cases the tobacco companies, attempted to bypass opposing interests in the legislatures and sought direct mandate from the voters. This chapter focuses on how the tobacco industry, using various forms of often expensive media communication approaches (most campaigns now are media based), has attempted since 1988 to frame campaigns to defeat state initiatives and referenda run by health and antitobacco reformers.¹⁶ The remainder of this chapter will explore this question using seven case studies of initiatives and referenda to increase tobacco taxes among the 20 tobacco tax initiatives introduced between 1988 and 2006.

Tobacco Control Initiatives: A Theoretical Perspective

In 1960, Schattschneider^a provided an early examination in the field of political science and public policy of the connection between political mobilization of bias by groups and the public framing of an issue to effectively oppose or support public policies. This occurs, for instance, when the tobacco industry engages in media advertising to influence state tobacco tax initiative and referendum votes in its favor. Schattschneider argued that powerful interests, such as the tobacco industry, usually prefer to conduct policymaking in private because less public exposure means their policy goals usually are approved with the least political resistance. At the same time, an open and public struggle, as can occur with state initiatives and referenda, by ordinary citizens and organizations such as health groups with fewer political resources often can make the political process more competitive.

Theories expanding on Schattschneider's mobilization of bias theory, such as Stone's theory of causal stories in the policy process, have analyzed the function of political symbols and images in depicting problems and causal stories that are enacted into public policies.^{b,c,d} According to Stone and others, symbols and images (including numerical) through media messages and arguments tell a particular story of what an interest group, such as the tobacco industry, supports in a manner that resonates with and can be easily understood by other people.^{b,c,d,e}

^aSchattschneider, E. E. 1960. *The semisovereign people*. New York: Holt, Rinehart, and Winston.

^bStone, D. 1989. Causal stories and the formation of policy agendas. *Political Science Quarterly* 104 (2): 281–300.

^cCobb, R., and M. H. Ross. 1997. Agenda setting and the denial of agenda access: Key concepts. In *Cultural strategies of agenda denial: Avoidance, attack, and redefinition*, ed. R. Cobb and M. H. Ross. Lawrence: Univ. of Kansas Press.

^dStone, D. 1997. *Policy paradox: The art of political decision making*. New York: W. W. Norton.

^eBirkland, T. 2001. *An introduction to the policy process*. Armonk, NY: M. E. Sharpe.

General Role of Media in State Initiatives and Referenda

Support can be mobilized through framing (a way to define a problem and suggest a solution¹⁷) a message for or against state initiatives and referenda, such as those for tobacco tax increases. As some scholars have argued, the side that can purchase more media exposure in key markets can significantly influence the outcome of these elections.⁹ The use of media messages is a very important avenue to potentially reach and sway large numbers of voters.⁹

Opinion polls and focus groups are conducted in the beginning stage of many modern and professionally run

direct democracy campaigns, often even before the language of the proposal has been written.¹⁸ This is done to identify which media themes might undermine the appeal of an initiative or referendum to voters and which media themes might enhance voters' support for the initiative or referendum.¹⁸

These polls and focus group findings also are an important research tool in crafting the language of the initiative or referendum.¹⁸ Opponents of initiatives or referenda, particularly wealthy ones such as the tobacco industry, almost always conduct their own polls and focus groups to develop media themes to sway voters to oppose tobacco control initiatives or referenda.^{10,19} As the direct democracy campaign nears the actual election, many groups also use tracking polls to gauge

sentiment for or against the measure and to determine if particular media arguments should be changed to sway key groups of voters. The remainder of this chapter analyzes this conflict between health advocates and the tobacco industry over causal stories to frame the debate about state tobacco initiatives and referenda from 1988 to 2006.

Methods

This section examines the general success of the tobacco industry in all state tobacco initiatives and referenda, descriptively analyzing and tallying which state direct votes were in favor of tobacco control and which favored the tobacco industry from 1988 to 2006. It also provides specific and detailed analyses of how the tobacco industry mobilized against initiatives and referenda that solely raised tobacco taxes on statewide ballots during the same period.

A total of 42 state tobacco control initiatives and referenda were held from 1988 to 2006 (including four tobacco industry-sponsored initiatives in four states) (table 14.3). These initiatives and referenda occurred in 16 states, with Arizona (8), California (5), Oregon (5), Montana (4), and Oklahoma (3) accounting for 25 (60%) of the 42 campaigns.

Measures dealing only with tobacco taxes represented 20 (48%) of the 42 state tobacco control initiatives and referenda held from 1988 to 2006 (table 14.3). This large number of tobacco tax measures provides sufficient experience to document how the tobacco industry used media to mobilize voters in initiatives and referenda promoting tobacco control or weakening tobacco control. Eight initiatives and referenda (19%) centered on Master Settlement Agreement (MSA) funding allocations for health care, tobacco control, and university facilities. Eight initiatives

(19%) proposed limits on smoking in worksites and public places, two referenda (4.8%) focused on bonds for public works repaid with tobacco settlement funds, two referenda (4.8%) created tobacco settlement trust funds, one referendum (2.4%) aimed to modify tobacco trust fund expenditures, and one referendum (2.4%) imposed tax increases from various revenue sources. Four of the smoking restriction initiatives (9.5%)—California's 1994 Proposition 188, Arizona's 2006 Proposition 206, Nevada's 2006 Question 4, and Ohio's 2006 Issue 4—were weak tobacco industry measures defeated by the voters.²⁰

The 18-year time span from 1988 to 2006 provides a sufficiently long period to observe general and ongoing tobacco industry arguments against state tobacco tax initiatives and referenda. In addition to examining general trends, this chapter provides in-depth discussions of some state initiatives and referenda from earlier and later portions of this 18-year period. These discussions demonstrate the consistency of the arguments generated in the context of state campaigns on increasing tobacco taxes. Two of the earliest case examples presented are tobacco tax increase initiatives in 1988 in California (Proposition 99) and in 1992 in Massachusetts (Question 1). These cases are contrasted with five later state tobacco tax initiatives and referenda to understand if the tobacco industry changed its media themes over time. The three direct votes in 2004 were two initiatives in Colorado (Amendment 35) and Montana (Initiative 149) and one referendum in Oklahoma (State Question 713). In 2006, direct tobacco tax votes in which media were used took place in California (Proposition 86) and Missouri (Amendment 3). In 2006, the industry did not run a statewide media campaign in South Dakota (e-mail communication from Jennifer Staley, American Cancer Society in South Dakota to M. Givel, 2007).

In the analysis presented below, the term *media* includes all known electronic media and print political advertising sources that the tobacco industry and its surrogates used to try to defeat tobacco tax-increase initiatives and referenda. All known media spots were examined, analyzed, and coded by summarizing the type of media used and the major theme(s) used in each media spot. All media advertisements were analyzed and themes were identified on the basis of careful examination by Michael Givel. These themes then were analyzed, as a whole, to determine if the tobacco industry had a consistent general argument or causal story against tobacco tax increases. State, rather than local, initiatives and referenda were examined because of the broader impact of these measures on all citizens of a state. This chapter treats each state and each advertisement as equivalent for the purposes of ascertaining and comparing the degree to which a theme appears in the campaign advertisements. The chapter does not review whether certain advertisements were shown repeatedly in highly visible venues (and thus viewed by large audiences).

State Tobacco Control Initiatives and Referenda*

As mentioned above, from 1988 to 2006 there were 42 state tobacco control initiatives (including 4 tobacco industry initiatives) and referenda (table 14.3). Voters in states that allow initiatives and referenda voted to enact 28 tobacco control initiatives and referenda and to defeat 4 protobacco initiatives. In sum, voters during this period voted for protobacco control measures and

against the tobacco industry in 32 (76%) of 42 initiatives and referenda. Clearly, tobacco control advocates have been quite successful when it comes to statewide tobacco-related initiatives and referenda that have bypassed state legislatures.^{19,21,22}

Tobacco Industry Opposition to State Tobacco Tax Initiatives and Referenda

California's Proposition 99

One of the earliest state tobacco tax direct democracy measures, Proposition 99, was voted on in 1988 in California. Proposition 99 was an initiative that increased the tobacco tax by 25¢ per pack to fund antitobacco health education, indigent hospital care, environmental and conservation programs, antitobacco research, and an unallocated account to consist of 25% of the funding that the legislature could distribute for any of the other programs.¹⁹ The voters enacted Proposition 99, which the tobacco industry vigorously opposed, by a margin of 58% to 42%.¹⁹ The tobacco industry viewed Proposition 99 as a huge threat to its sales and profits in the large California market and devoted significant political and media resources to defeat the initiative.¹⁹ By election day, the tobacco industry had spent \$21.4 million to defeat Proposition 99 compared with \$1.6 million spent by health and environmental advocates to enact the initiative.¹⁹

The tobacco industry's media campaign to defeat Proposition 99 included six

**Editors' note:* Michigan's Proposal A (1994) was materially different from the other 41 initiatives and referenda, which focused exclusively on tobacco. Michigan's Proposal A affected many types of taxes, including tobacco excise taxes, sales taxes, income taxes, and business-related taxes. A summary of Proposal A appears as an appendix to this monograph.

radio and television advertisements in 1988 (table 14.4). The primary themes of the industry's advertisements opposing Proposition 99 included arguments that the funds would go to promoters of the proposition rather than to health care, the tax would be unfair to working families, and the tax would increase crime and smuggling in California. However, the combined effect of the increase in tobacco prices due to the tax and the antitobacco program associated with Proposition 99 has led to a significant decline in mortality from heart and lung diseases in California.^{23,24}

Massachusetts's Question 1

Another early state tobacco initiative to increase tobacco taxes modeled after California's Proposition 99 was voted on in 1992 in Massachusetts.²¹ Question 1 proposed to increase the state tobacco tax by 25¢ per pack to fund a Health Protection Fund to pay for tobacco education, cessation, and prevention programs.^{13,21} The measure, vigorously opposed by the tobacco industry, passed, with 54.4% voting yes and 45.6% voting no.¹³ By the time of the election, the tobacco industry had spent \$7.1 million to defeat Question 1 compared with \$1.0 million spent by health advocates to enact the initiative.^{25,26}

The tobacco industry's media campaign to defeat Question 1 included five television advertisements in 1992 (table 14.5). The campaign's primary themes suggested that the measure would restrict personal choice to smoke, discriminate against smokers, provide funding that would not be spent primarily on health care programs, reduce economic growth, and impose an unfair tax increase.

Oklahoma's State Question 713

State Question 713, voted on in 2004, was an Oklahoma referendum to increase the tobacco tax by 4¢ per cigarette to fund health care and tobacco use cessation programs.^{13,27,28} The measure passed, with 53.4% voting yes and 46.6% voting no.²⁹ Despite early widespread public support for the measure, the tobacco industry engaged in a significant mobilization effort to defeat the measure.²⁸ By election day, the tobacco industry had spent \$1.7 million to defeat State Question 713 compared with \$809,000 spent by health advocates to enact the referendum.³⁰

The tobacco industry's campaign to defeat State Question 713 included two television advertisements and a direct mailer in 2004 (table 14.6). The campaign's primary themes were that the measure would create an unfair tax increase, be a tax cut for the

Table 14.4 1988 Tobacco Industry Advertisements Opposing California's Proposition 99

Media	Titles	Anti-Proposition 99 advertisement themes
Radio	Driving Woman	Health research funding would be diverted to promoters of proposition and unfair tax
Radio	Morning Couple	Health research funding would be diverted to promoters of proposition and unfair tax
Radio	Elderly Man	Health research funding would be diverted to promoters of proposition
Radio	Golf Clubs	Funding would be diverted to doctors and medical industry who promote the proposition
Television	Do You Realize?	Would divert millions of dollars to doctors and medical industry and unfair tax
Television	State By State	Would increase crime and smuggling

Table 14.5 1992 Tobacco Industry Advertisements Opposing Massachusetts’s Question 1

Media	Titles	Anti-Question 1 advertisement themes
Television	Tolerance	Would restrict personal choice and discriminates against smokers
Television	501 Warning	Health care funding would be diverted and unfair tax
Television	Look at the Language	Health care funding would be diverted and unfair tax
Television	Flood 2	Health care funding would be diverted, unfair tax, and would not support economic growth
Television	Closely	Health care funding would be diverted

Table 14.6 2004 Tobacco Industry Advertisements Opposing Oklahoma’s State Question 713

Media	Titles	Anti-State Question 713 advertisement themes
Television	200 Million Tax Increase	Health care money would be diverted, unfair tax increase, and tax cut for rich
Television	Old Tricks	Health care money would be diverted, unfair tax increase, and tax cut for rich
Mailer	What Else Aren’t They Telling Us?	Health care money would be diverted to Native Americans in form of “kickback” and unfair tax increase

rich, create higher taxes for the poor, and not pay for health care, with funding being diverted to Native Americans in the form of a “kickback” and to other projects.

Montana’s Initiative 149

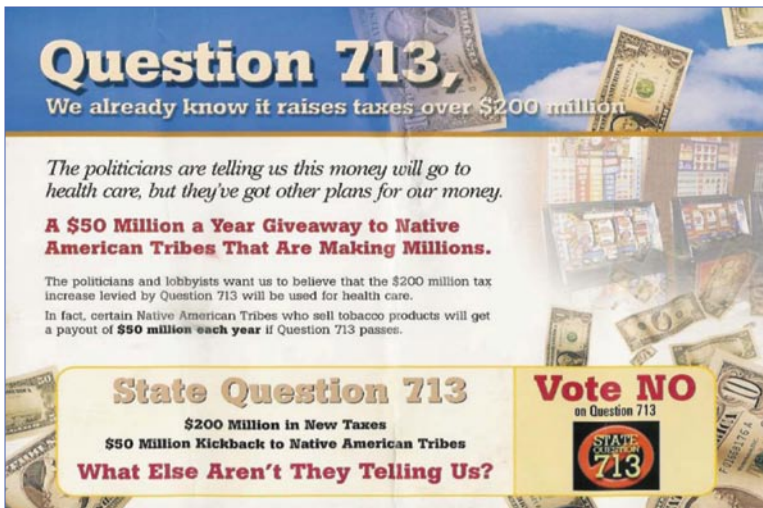
In 2004, Montana’s Initiative 149 proposed to raise tobacco taxes from 70¢ to \$1.70 per pack of cigarettes, from 35¢ to 85¢ per ounce for moist snuff, and from 25% to 50% of the wholesale price for all other tobacco products. The tax increase was proposed to fund health care, a prescription drug program, nursing homes, and other general state government programs.¹³ The measure passed, with 63.3% voting yes and 36.7% voting no.³¹ Given the early and large public support for the measure, the tobacco industry decided not to devote significant political and media resources to sway voter opinion against the initiative. By the day of the election, the tobacco industry had spent \$104,000 to defeat Initiative 149 compared with \$414,000 spent by health advocates to enact the initiative (e-mail communication from M. Jackson, Program & Data Technician, Office of

Political Practices, State of Montana, to M. Givel, 2005).

The tobacco industry’s campaign to defeat Initiative 149 included a direct mailer and a newspaper advertisement in 2004. This media approach was lower profile than the high-profile ongoing television advertisements used in California, Massachusetts, and Oklahoma. The primary themes of the tobacco industry’s media campaign (table 14.7) to defeat Initiative 149 were that the measure would increase “big government,” significantly increase taxes, unfairly discriminate against smokers, cause illegal smuggling and crime, and would not solve Montana’s budget problems.

Colorado’s Amendment 35

Also in 2004, Colorado’s Amendment 35 proposed to raise tobacco taxes on cigarettes by 64¢ a pack to fund health care and tobacco education and cessation programs.¹³ The initiative passed, with 61.4% voting yes and 38.6% voting no.³² Because of early and large public support for



Advertisement from the Oklahoma Vote No on Question 713 campaign



Advertisement from Montana veterans, taxpayers, and tobacco retailers, wholesalers, and manufacturers against Initiative 149 campaign

the measure, the tobacco industry decided not to oppose the initiative. By election day, the tobacco industry had spent \$112,000 to defeat Amendment 35 compared with \$2.03 million spent by health advocates to enact the initiative.³³

The tobacco industry's campaign to defeat Amendment 35 included two direct mailers in 2004. This media approach, again, was lower profile than the high-profile television advertisements used in 2004 in California, Massachusetts, and Oklahoma.

The primary themes of the media campaign to defeat Amendment 35 were that the measure would create an unfair tax increase, discriminate against smokers, lead to wasteful government spending, and cause economic hardship (table 14.8).

California's Proposition 86

In 2006, California's Proposition 86 proposed to increase tobacco taxes on cigarettes by \$2.60 per pack to fund new health services, health insurance for children, and

Table 14.7 2004 Tobacco Industry Advertisements Opposing Montana’s Initiative 149

Media	Titles	Anti-Initiative 149 advertisement themes
Mailer	Vote No on Initiative 149	Would create big government and an unfair tax increase and discriminate against smokers
Newspaper advertisement	Another Tobacco Tax Hike? Consider the Consequences	Unfair tax, would cause crime and smuggling, discriminates against smokers, and would not solve state budget problems

Table 14.8 2004 Tobacco Industry Advertisements Opposing Colorado’s Amendment 35

Media	Titles	Anti-Amendment 35 advertisement themes
Mailer	The Facts on Constitutional Amendment 35	Unfair tax, would discriminate against smokers, lead to wasteful government spending, and cause economic hardship
Mailer	Vote No on Constitutional Amendment 35	Unfair tax, would discriminate against smokers, lead to wasteful government spending, and cause economic hardship

expanded tobacco prevention programs.³⁴ The initiative failed, with 48% voting yes and 52% voting no.³⁴ By election day, the tobacco industry had spent \$66.3 million to defeat Proposition 86 compared with \$16.2 million spent by health groups to enact the initiative.³⁵ The tobacco industry’s campaign to defeat Proposition 86 included 12 television advertisements. The primary themes of the media campaign were that the measure would create an unfair tax increase, lead to wasteful government spending, divert tobacco control funding to hospital interests, cause crime and smuggling, and allow hospitals to waive antitrust laws and escape civil and criminal penalties (table 14.9).

Missouri’s Amendment 3

In 2006, Missouri’s Amendment 3 proposed to increase tobacco taxes on cigarettes by 4¢ each and 20% of a manufacturer’s invoice price, before discounts, to fund new health services and expand tobacco prevention programs.³⁶ The initiative failed, with 49% voting yes and 51% voting no.³⁷ By election day, the tobacco industry had spent \$5.3 million to defeat Amendment 3 compared with \$6.7 million spent by health groups to enact the initiative.³⁸

The tobacco industry’s campaign to defeat Amendment 3 included two television and two radio advertisements. The primary themes of the media campaign were that the measure would create an unfair tax increase and divert funding to state programs not related to tobacco control (table 14.10).

Results

Table 14.11 tallies the numbers of times a tobacco industry theme appeared in the early initiatives in California in 1988 and Massachusetts in 1992 to defeat tobacco tax measures. The most widely used themes were that the measures would divert funds from the stated purpose of the proposal such as health care or antitobacco programs and would impose an unfair tax increase. These were followed by several other themes, including that the measure would discriminate against smokers, increase crime and smuggling, hurt economic growth, and restrict adults’ personal choice to use tobacco. When assessed as a whole, these themes formed two major parts of an overall frame of the campaign. The first part of the frame was that the government had no right

14. Tobacco Industry Media Efforts

Table 14.9 2006 Tobacco Industry Advertisements Opposing California’s Proposition 86

Media	Titles	Anti-Proposition 86 advertisement themes
Television	LaDonna White	Unfair tax, tobacco control money would be diverted, and lead to wasteful government spending
Television	Mark Kogan	Unfair tax, tobacco control money would be diverted, and lead to wasteful government spending
Television	Ralph Di Libero	Tobacco control money would be diverted and would cause crime and smuggling
Television	A Lot	Tobacco control money would be diverted and lead to wasteful government spending
Television	Woman in Car	Tobacco control money would be diverted and lead to wasteful government spending
Television	Newspapers Say	Tobacco control money would be diverted to hospital interests and would allow hospitals to waive anti-trust laws
Television	Patricia Austin	Unfair tax and tobacco control money would be diverted to hospital interests
Television	I Thought	Unfair tax, tobacco control money would be diverted to hospital interests, and lead to wasteful government spending
Television	At First	Unfair tax and tobacco control money would be diverted to hospital interests
Television	I Liked The Idea	Tobacco control money would be diverted to hospital interests and would allow hospitals to waive anti-trust laws
Television	No Why	Tobacco control money would be diverted to hospital interests, would allow hospitals to waive anti-trust laws, and would allow hospitals to escape civil and criminal penalties
Television	Two Billion	Unfair tax and tobacco control money would be diverted to hospital interests

Table 14.10 2006 Tobacco Industry Advertisements Opposing Missouri’s Amendment 3

Media	Titles	Anti-Amendment 35 advertisement themes
Radio	Follow the Money	Unfair tax and would divert funds to politicians
Radio	Experienced	Unfair tax and would divert funds to politicians
Television	Lockbox	Diverts funds to politicians
Television	Settlement Player	Diverts funds to politicians

Table 14.11 Number of Times Tobacco Industry Advertising Themes Were Used to Oppose California and Massachusetts Tobacco Tax Initiatives in 1988 and 1992

Advertisement themes	Totals
Would divert funds from stated purpose of the program	9
Unfair tax increase	6
Would discriminate against smokers	1
Would hurt economic growth	1
Would increase crime, including smuggling	1
Would restrict personal choice by adults to use tobacco	1

Table 14.12 Number of Times Tobacco Industry Advertising Themes Were Used to Oppose 2004 Colorado, Montana, and Oklahoma Initiatives and Referenda and 2006 California and Missouri Initiatives

Advertisement themes	Totals
Would divert funds from stated purpose of the program	19
Unfair tax increase	15
Would increase big and wasteful government	7
Would discriminate against smokers	4
Would increase crime, including smuggling	3
Tax cut for the rich	2
Would hurt economic growth	2
Would not solve state budget problems	1
Would restrict personal choice to use tobacco	1
Would waive anti-trust laws	1

to “unfairly” target smokers. The second part was that tobacco tax initiatives were inappropriate because the government is unable (compared with the market) to solve societal problems.

A numerical summary of the three ballot measures in Colorado, Montana, and Oklahoma in 2004 and in California and Missouri in 2006 indicates the predominant themes were that these measures would divert funds from the stated purpose of the measure and impose an unfair tax increase (table 14.12). This was followed by a subtheme that the measure would increase big and wasteful government. Less numerous themes included that these measures would discriminate against smokers, increase crime, be a tax cut for the rich, and impede economic growth. Again, when assessed as a whole, these themes in the later campaigns were identical to the themes used in the early state tobacco tax initiatives. The tobacco industry’s frame to oppose the initiative was that state governments had no right to “unfairly” target smokers with tobacco tax initiatives and the initiatives were inappropriate because of the government’s inability to solve societal problems.

Summary

State initiatives and referenda are an effective way to implement tobacco control legislation in general and tobacco tax increases in particular. State initiatives and referenda, such as California’s Proposition 99, also have significantly decreased tobacco use.²⁴ The success of these measures makes them an important tool for tobacco control advocates in states that permit them. This is particularly true for legislation that cannot be effectively passed by using the regular state legislative process.

Despite the tobacco industry’s media campaigns, its efforts have failed for 32 (76%) of 42 state initiatives and referenda from 1988 to 2006. The industry’s media campaigns and the frames used in the campaigns generally are ineffective regardless of which theme is used. The range of ballot measures profiled here shows that media efforts and expenditures by the tobacco industry vary and are influenced by perceptions of the level of popular support for the measures. Moreover, state tobacco tax initiatives and referenda frequently have succeeded, even

in situations in which the tobacco industry spent considerably more than initiative proponents. These results indicate that the fundamental frames that the tobacco industry uses have had limited success in connecting with voters, compared with the benefits conveyed by these measures.

Conclusions

1. Within those states that allow these processes, ballot initiatives and referenda have served as an effective tool for enacting tobacco control legislation by direct vote. Tobacco industry interests frequently have used media channels (such as radio, television, print media, and direct mail) to defeat these ballot measures.
2. Despite the tobacco industry's media efforts, it has generally not prevailed, losing in 32 (76%) of 42 state initiatives and referenda from 1988 to 2006. Given the industry's lack of success in
3. defeating tobacco control state initiatives and referenda at the state level, holding tobacco control initiatives or referenda is an important, though expensive, option if a state legislature has blocked tobacco control legislation.

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Future Directions

Most formal research into media and tobacco dates back little more than four decades, and numerous areas remain open for further study. This final part explores possible directions for future studies of the relationships among the media, tobacco industry interests, and tobacco control efforts and their interaction as components of a system.

This part first outlines forward trends in tobacco promotion, including point-of-sale marketing, packaging, entertainment media, and public relations, and examines the future of tobacco control efforts from the perspectives of news and media advocacy and media interventions. Calling for more research on how tobacco-related disparities related to socioeconomic and other factors may be exacerbated or mitigated by communications for and against tobacco, this monograph can serve as a foundation for progressive research and tobacco control practice in years to come as efforts continue to address the major cause of preventable death in the United States.

15

Future Directions

Mass media have been used both to encourage the growth of tobacco use over past decades and to contribute to tobacco control efforts, and today the media remain a key factor in reducing the public health burden of tobacco. This concluding chapter examines areas for future research and action based on the findings of this monograph across two fundamental areas of interest:

- *The role of media in tobacco promotion, including marketing practices such as price discounting, point-of-purchase displays, and cigarette packaging; depictions of tobacco use in entertainment media; and the public relations efforts of the tobacco industry, as well as measures to counteract tobacco promotion*
- *The impact of media as a vehicle for tobacco control efforts, including media advocacy, understanding the effects of tobacco-related news coverage, paid promotional campaigns for prevention and cessation, corrective advertising designed to counter tobacco industry claims, and the potential for better use of alternative channels such as online media, as well as measures to counteract tobacco promotion, such as the World Health Organization's Framework Convention on Tobacco Control*

To further inform tobacco control policy and program decisions, more research attention should be paid to the inherently dynamic interplay between the forces driving tobacco promotion and tobacco control.

Introduction

During the past four decades, great strides have been made in understanding how tobacco promotion increases the likelihood of tobacco use and how tobacco control media interventions can reduce tobacco use. A fundamental theme of the work reviewed here is the great agility of tobacco companies in using a variety of communication channels, strategies, and rhetorical devices to continue to sell tobacco products, frame the public debate on effects of tobacco use, and influence key stakeholders. These stakeholders include the media, policymakers, activists, scientists, and other opinion leaders. The evidence presented in this volume illustrates the ability of tobacco companies to anticipate, or at least keep in step with, tobacco control policies and limits on tobacco promotion and evolve their strategies accordingly. When one channel has closed or become limited, tobacco companies have nimbly switched to different channels to promote tobacco products and protobacco ideas.

This volume offers important lessons in how the media could be harnessed to further reduce tobacco use in the United States, and these lessons have implications for other nations seeking to achieve the same aim. Despite this extensive body of work, a considerable amount of research remains to be done, partly because the relationship between tobacco promotion and tobacco control is dynamic: Action in one area produces change in another. As long as tobacco companies are able to develop new tobacco marketing strategies to circumvent tobacco control measures, the need for monitoring, research, and policy advisement continues.

More broadly, the need for research continues as the communications environment becomes ever more complex. A growing range of communication

channels and information-delivery systems provides increasing opportunities for tobacco companies to target communications to consumers, sometimes with little oversight from policymakers, regulators, or those working in tobacco control. The fragmentation of audiences across this proliferation of channels also means that those working to stem tobacco use must consider a bewildering number and variety of communication channels to run campaigns and deliver antitobacco messages. Limited funds and resources are further strained, and efforts to monitor tobacco promotion become more complex.

The growing socioeconomic disparity in tobacco use is another important trend with implications for study of tobacco-related media communications. In general, tobacco users are more likely to be among the groups that are disproportionately deprived in social and economic areas.¹ At the same time, increasing globalization, proliferation of communication channels, and movement across global borders mean that nations with weaker tobacco control efforts, usually low-income countries, are most susceptible to the effects of tobacco marketing.

A more vigorous, systematic, and empirical research agenda can further understanding of how mass communications contribute to tobacco promotion and tobacco control. Against this background, this final chapter discusses future directions for such media and communications research.

Future Directions to Address Tobacco Promotion

A major conclusion of this volume is that cigarettes are one of the most heavily promoted products in the United States. Expenditures in 2005 were \$13.5 billion (in 2006 dollars) (\$37 million per day

on average) for cigarette advertising and promotion. The information on tobacco marketing in the chapters of this volume plainly demonstrates the evolution of these practices in response to imposed tobacco marketing restrictions. In general, there is abundant evidence that tobacco companies failed to adhere to voluntary agreements on tobacco marketing (see chapter 3). However, once one avenue for tobacco marketing is closed by an imposed restriction, the attention of the tobacco companies shifts to alternative media to generate exposure to tobacco brands. For this reason, partial restrictions on tobacco marketing have limited effectiveness in reducing tobacco use and consumption (see chapter 7). Only comprehensive restrictions can achieve this aim.

Because restrictions were imposed on tobacco marketing through television, radio, and billboard advertising, alternative avenues for tobacco marketing have emerged in the United States. First, the tobacco industry has seen a huge shift in marketing expenditures toward the point of purchase (POP, see chapter 4). Second, cigarette packaging has assumed a more significant role in communicating the brand image of tobacco products (see chapter 4). Third, sponsorship of events by tobacco companies, to promote both tobacco brands and corporate image, has increased substantially (see chapters 4 and 6). Depiction of smoking in movies, including use of cigarette brands, has also become more prevalent and is a risk factor for youth smoking (see chapter 10).

Price Discounts

More than 70% of tobacco industry expenditures on advertising and promotions are used to provide price discounts (see chapter 4). Research is needed to increase understanding of the ways in which these price discounts interact with other promotional strategies to influence tobacco

use. Research has provided convincing evidence that the tobacco industry has modified marketing strategies in step with the extent of tobacco control. For example, cigarette sales promoting price discounts to add value (e.g., “Buy one pack, get one pack free”) are more likely in states with higher amounts of tobacco control funding and higher cigarette taxes.² To the extent that such marketing strategies undermine the benefits of tobacco control programs and policies such as cigarette tax increases, these findings are considerable cause for concern and underline the importance of developing effective policy limits on tobacco marketing.

Point-of-Purchase Tobacco Marketing

At the POP, in addition to tobacco promotions, the tobacco industry also relies on optimal placement of cigarettes near the cash register for maximum exposure. As detailed in chapters 4 and 7, research demonstrates that the placement of tobacco in convenience stores beside candy and everyday consumer goods increases the sense of “friendly familiarity” with tobacco, increases youth perceptions of high smoking prevalence, and may increase the likelihood that youth will initiate smoking.

In countries where restrictions on tobacco marketing are more extensive than in the United States, the POP environment has seen the emergence of ever-larger advertising signage and huge power walls of cigarette-packaging displays provided by tobacco companies (see chapter 3). These kinds of POP strategies have yet to fully evolve in the United States. In countries such as Australia and Canada where POP tobacco advertising and promotions were eliminated, policies to remove tobacco from the line of sight are beginning to be implemented.³

Research on the POP environment that could further inform the field includes studies on the relationship between exposure

to POP tobacco promotions and advertising and youth smoking attitudes and behavior. Especially important are studies with longitudinal or time-series designs. Studies that use eye-tracking methods⁴ could help to ascertain what kinds of POP advertising and display configurations are most attractive to youth. In addition, studies could assess the effect of POP advertising and packaging displays on the urge to buy cigarettes among adults attempting to quit smoking and among recent quitters. Exit surveys of store customers, population surveys, self-completion diary studies, qualitative studies, and experimental studies of the urge to smoke in smokers randomly assigned to view photographs of POP displays might further examine (1) the extent to which POP strategies influence regular smokers or persons experimenting with smoking or (2) whether some subgroups, such as low-income smokers or young adults, may be most responsive to POP marketing practices for tobacco sales, as suggested in a cross-sectional study by White and colleagues.⁵ Brain-imaging studies may also be helpful to gauge the levels of neurological arousal evoked by various POP configurations (see “Need for Emotionally Evocative Advertising” later in this chapter).

Beyond individual outcomes, more studies are needed on POP marketing strategies, restrictions on them, and cigarette sales data, which primarily reflect adult smoking. Studies of cigarette sales data might analyze sales volume data from convenience store or supermarket scanners. Only one relatively small-scale study of cigarette sales data at the retail level has been performed.⁶

Cigarette Packaging

The tobacco industry has placed a much greater reliance on cigarette packaging as a form of marketing as traditional avenues for promoting tobacco use became unavailable (see chapter 4). Cigarette packaging is designed to create and reinforce brand

imagery and, because of the increasing importance of the POP in tobacco marketing, to promote greater salience of the brand family in POP retail displays. Cigarette packaging is all the more important because, unlike other consumer-product packaging that is discarded after purchase, cigarette packs are taken out and may be displayed whenever a cigarette is smoked.

Research on perceptions about popular cigarettes, including those that appear to communicate reduced harm, could provide helpful information on youth perceptions and misperceptions of particular brands. Youth-oriented education and advocacy that have sought to publicize tobacco industry marketing approaches might focus on how tobacco companies use packaging to entice young consumers to their brands. Adult smokers might also benefit by better understanding how tobacco companies seek to reassure them about health concerns through clever cigarette packaging (see “Corrective Advertising About Tobacco Industry Product Claims” later in this chapter).

Additional areas for future research include the following:

- Exploring how packaging and price work in concert to drive brand selection, especially among low-income consumers
- Studying the extent to which the design of cigarette packs elicits physiological responses that may lead to cognitive, affective, and attitudinal outcomes
- Understanding how tobacco companies have worked to design packaging that obscures or minimizes required health warnings or labeling information about the constituents of tobacco products or cigarette smoke
- Examining the effectiveness of tobacco company statements about health or packaged messages such as Philip Morris’s “onserts”⁷ in communicating health risks

The United States lags behind nations that have introduced graphic pictorial health warnings on tobacco products.⁸ Government-mandated pictorial warnings have been shown to garner greater attention and to communicate risks more effectively than do written health warnings.^{9–12} Studies comparing U.S. health-warning statements on cigarette packs with those in other countries would add to the evidence base for stronger warnings for U.S. smokers.

Entertainment Media

Youth are frequently exposed to depictions of smoking in entertainment media (see chapter 10). The prevalence of smoking is overrepresented in movies, and identifiable cigarette brands appear in about one-third of movies. Smokers in movies are more likely than smokers in real life to be affluent and white. Experimental studies demonstrate that depiction of smoking in movies enhances the perception that smoking is normal and desirable and increases intentions to smoke. The association between exposure to depiction of smoking in movies and youth smoking initiation lends weight to the justification for efforts to reduce movie depictions of cigarette smoking and youth exposure to them (see chapter 10). Proposals for action have focused on the individual, family, and societal levels, including improving the media literacy of youth; encouraging greater parental responsibility for restricting youth viewing of R-rated movies, which depict smoking more commonly; and placing an R rating on movies featuring tobacco use.

Although clear and consistent evidence indicates that exposure to smoking in movies increases the likelihood of youth smoking initiation, research has yet to determine the role smoking in movies plays (1) in the transition from experimental to regular smoking in youth and young adults, (2) in prompting relapse among

former smokers, or (3) in making it more difficult for smokers to quit. Descriptive studies suggest that the effects of adolescent exposure to smoking in movies can be decreased (1) by motivating parents to restrict access to such movies or (2) by teaching adolescents to evaluate smoking in movies with more skepticism through training in media literacy.¹³ However, no published intervention studies have evaluated these hypotheses.

Tobacco exposure in online media remains an area for further study (see chapters 4 and 10). YouTube,¹⁴ the free video-sharing Internet site, has hosted advertisements by the Office of National Drug Control Policy¹⁵ as well as protobacco material.¹⁶ The extent to which tobacco is promoted on other Web sites for social networking is also a topic for future research.

Video games are emerging as a prime medium for marketing products to youth.¹⁷ Only limited research has assessed the extent and effects of tobacco use in video games (see chapters 4 and 10).¹⁸ More research attention could be paid to (1) tracking tobacco involvement in video games over time, (2) the reasons for tobacco involvement (e.g., paid promotions or tobacco use by game designers), and (3) the effects of video-game tobacco use and cigarette brand identification on smoking-related attitudes, intentions, and behaviors of consumers.

Tobacco Company Public Relations Strategies

Because of the tobacco industry's history of concerns about corporate image and the investment of significant resources to remedy those concerns (see chapter 6), its use of the media for public relations warrants scrutiny. This issue is particularly important because corporate-image and industry-sponsored campaigns to prevent youth smoking may engender

sympathy for tobacco companies,^{19,20} and favorable attitudes toward the tobacco industry are related to increased likelihood of youth smoking initiation.²¹ These industry campaigns could also dampen motivation to quit smoking or undermine support for tobacco control policies. One possible direction is for the Federal Trade Commission (FTC) or another governmental agency to monitor the tobacco companies' annual expenditures for advertising and promoting corporate brands as the FTC does for cigarette and smokeless tobacco advertising and promotion.

Future research could measure public opinion about tobacco companies, public support for tobacco control policies, and their relationship with exposure to corporate advertising, including tobacco company-sponsored ads for prevention of youth smoking and Web-based messages on smoking cessation from tobacco manufacturers. Research could also examine the link between exposure to corporate-image campaigns and adult smokers' intentions and behaviors related to quitting smoking. Evidence indicates that shaping a positive or negative corporate reputation directly affects consumers' responses to a company's brand advertising.^{22,23} Research is needed to assess more directly the role of corporate-image advertising in opposing more restrictive laws and regulations as well as possible intermediate effects. For example, researchers might study the views of leaders of societal opinion or media gatekeepers (e.g., newspaper editors or columnists) and relate corporate-image campaigns to these gatekeepers' attitudes about the tobacco industry and strength of support for tobacco control policies and tobacco control funding.

Media campaigns for prevention of youth smoking that are sponsored by tobacco companies have a face-value message that tobacco companies do not want youth to smoke. Statements against self-interest tend to increase the

perceived trustworthiness of the source of the statement.²⁴ Thus, these media campaigns serve as a highly effective public relations tool for the tobacco industry. Because peer-reviewed, population-based research has convincingly demonstrated that these campaigns have negligible or adverse outcomes on youth smoking,^{20,25} tobacco company-sponsored media campaigns on preventing smoking or promoting smoking cessation require careful scrutiny. As part of a broader approach to media literacy, tobacco control programs might create ads that highlight the ineffectiveness of the industry's ads in prevention of youth smoking and emphasize their public relations value to the industry in an effort to educate the community about the purpose of public relations.

Additional research is needed to understand for which audiences and under what circumstances exposure to such messages dilutes or undermines the demonstrated beneficial effects of media campaigns sponsored by the public health community. For example, population subgroups with lower socioeconomic status (SES), which have the highest prevalence of smoking in industrialized countries, may have more difficulty sorting through complex health messages²⁶ and reconciling conflicting messages. Research is needed to assess the effects of corporate-image campaigns and tobacco company-sponsored smoking prevention campaigns on smoking-related attitudes and behaviors among adults in different SES subgroups. States with high levels of exposure to media campaigns on tobacco control, especially ads featuring the manipulative nature of tobacco companies, may be more protected from the adverse effects of campaigns sponsored by the tobacco industry. A cross-sectional study by Hersey and colleagues²⁷ suggests this conclusion, but longitudinal research and time-series studies could be undertaken to more thoroughly examine this important question.

The global impact of these types of public relations activities is another important area for future study. In the United States, the extent of mass-media advertising paid for by tobacco companies is far greater than in any other country. This advertising has introduced a unique aspect to the ever more cluttered media environment that is not present to the same extent in any other country, so lessons learned in the United States may not apply worldwide. Future research could examine how multinational tobacco companies use public relations advertising to manage corporate image in other markets and could compare the behaviors and reputations of the tobacco industry in the United States with those in other countries.

Issues in Cross-National Tobacco Promotion and Tobacco Control

The World Health Organization's Framework Convention on Tobacco Control (FCTC)²⁸ directs countries to undertake a comprehensive ban on all tobacco advertising, promotion, and sponsorship. Article 13 of the FCTC recognizes that some countries may be unable to impose a comprehensive ban because of constitutional principles and should therefore apply restrictions to tobacco marketing practices that are consistent with their legal environments (see sidebar on the FCTC in chapter 8).

However, Article 13 also includes several references to the need to eliminate cross-border advertising. Tobacco advertising and promotion may cross national borders through international print media, especially magazines; direct broadcast satellite linked to domestic receiving dishes; paid product placement in movies and video games; and the World Wide Web and other Internet-based communication channels. To control cross-border advertising under the FCTC, Kenyon and Liberman²⁹ recommend a multilayered approach

including formal law and regulation, monitoring and enforcement practices, education, and international cooperation. An FCTC guideline and protocol on cross-border advertising, promotion, and sponsorship is in development.³⁰ Article 13 of the FCTC seeks to curtail protobacco cues in the environment so prohealth messages can be communicated with fewer encumbrances. Finally, Article 11 of the FCTC imposes measures to ensure that tobacco product packaging and labeling do not create erroneous impressions about tobacco products. As of April 2008, the United States had not become a party to the FCTC, although 154 other countries had done so.

The continuing ability of tobacco companies to overcome limits placed on tobacco marketing, as well as the globalization of tobacco promotion, means that many tobacco marketing strategies originating in the United States have adverse consequences for other nations. At the same time, First Amendment issues (see chapter 8) complicate options for limiting tobacco marketing in the United States. Progress on these issues could be greatly facilitated by convening a panel including lawyers and experts in first amendment law, media and marketing experts, and tobacco control experts to outline how the industry might evolve its marketing tactics. Areas to address might include POP advertising and displays of cigarette packs; use of cigarette brands and tobacco company names in sponsorships; magazine advertising; and use of color, imagery, and brand slogans in cigarette packaging. Some research has been conducted on consumer response to "plain packaging" (e.g., black and white, text only).^{31,32} However, more research is needed to assess the potential impact of plain packaging on smoking-related attitudes and behaviors, including the effects across sociodemographic groups. Researchers could also examine implications of tobacco marketing in the United States that extend

beyond U.S. borders, such as the influence of the Marlboro brand.

In summary, tobacco marketing is still pervasive in the United States, and it frequently exposes millions of youth and smokers who want to quit smoking to images and cues designed to promote tobacco use. It is important to recognize that tobacco control efforts occur within this environment of heavy tobacco advertising and promotional activity. The aggressiveness of tobacco industry marketing varies according to the level of tobacco control effort,^{2,33} and the tobacco industry lobbies to undermine the creation, extent, and targeting of media campaigns for tobacco control (see chapter 13). This dynamic relationship between tobacco industry efforts and tobacco control efforts indicates that the balance between these countervailing forces will determine the success of tobacco control efforts.

Future Directions for Media Strategies in Tobacco Control

News Coverage and Media Advocacy

Despite general acceptance that news coverage can influence public perceptions and shape behaviors, tobacco control researchers have paid only limited attention to news coverage as a potentially important exposure variable related to changing smoking-related attitudes and behaviors in the population (see chapter 9). Although media advocacy efforts are commonly used in tobacco control, studies exploring change in volume and framing of tobacco-related news coverage in relation to those efforts are still uncommon. Research might usefully investigate the news production process to determine the issues and frames (ways of presenting arguments) that engage news

directors, reporters, and editorial staff. This investigation should be conducted in a way that could lead to greater appreciation of the complexities of tobacco control and effective remedies. The research could explore how journalists use controversial or scientifically suspect sources to provide balance in their stories and could include exploration of journalists' own knowledge and attitudes relevant to tobacco issues. Research can also help to identify underlying common frames that are communicated to audiences in news coverage. Although case studies may provide insights into new or unusual issues, closer examination of more general tendencies in news reporting is likely to be more instructive and generalizable across jurisdictions.

Studies of Audience Response to Tobacco-Related News Media Messages

Although studies of audience response to paid antitobacco media campaigns are common, little attention has been given to how news is interpreted by key population groups, including smokers in general, low-SES groups, and community opinion leaders or policymakers. Tobacco control programs usually pretest antitobacco ads to hone and improve various elements of these paid communications, but pretesting is rarely done to guide and improve media advocacy efforts. Years ago, to improve their advocacy efforts, tobacco companies used continuous tracking to study audience responses to particular spokespeople and arguments put forth in news debates.³⁴ Tobacco control practitioners could conduct similar pretests to select and refine ways of communicating to lay audiences and to more informed audiences of policymakers, especially for complex or controversial tobacco control issues. Nelson and colleagues³⁵ pointed out that a large, knowledge-generating research establishment focuses on identifying

risk factors, but a very small knowledge-use research establishment focuses on translating scientific knowledge into policy and practice. Thus, knowledge is lacking on how tobacco control evidence is disseminated and used through various media channels. Consequently, this field is ripe for research attention. This issue is particularly important for media advocacy pertaining to complex or potentially confusing issues in tobacco control, such as harm reduction strategies for smoking cessation.

News Media Effects on Tobacco Policies and Smoking in the Population

Researchers need to better understand the impact of news coverage on the likelihood of change in tobacco control policies and individual smoking behavior. Quantitative research in this area is uncommon. The application of complex statistical methods, such as multilevel analysis, time-series analysis, and event history analysis, may offer great promise for separating the effects of news coverage from those of other determinants of change in tobacco policy.³⁶ The 50 states and the District of Columbia and thousands of U.S. counties and cities exhibit huge variation across time and place in the extent to which audiences are exposed to news about tobacco, in the extent to which tobacco control policies have been implemented, and in smoking behavior. This diversity offers a potentially rich research environment in which to assess linkages between news coverage and both policy and behavioral outcomes.

Furthermore, most studies examined only the volume of news coverage without attention to news coverage about particular tobacco control topics or perspectives. Agenda-setting research and framing studies suggest that some kinds of news coverage may be more influential than others, so future research could examine effects of both the volume and content of news coverage on policy and behavioral change.

Studies linking news coverage on tobacco issues to attempts at smoking cessation are sorely needed. No published research is available on the extent to which news coverage about tobacco, favorable or unfavorable, might enhance or undermine effects of paid antitobacco advertising campaigns. It is important to identify best practices for cost-effective paid media campaigns. For jurisdictions with limited funding for tobacco control, such information can be helpful for guiding advocacy efforts to achieve “earned media” (i.e., unpaid coverage) as a substitute for paid antitobacco media campaigns.

For practical reasons, most research involving news media has focused on newspaper coverage of tobacco, but the changing landscape of news and “infotainment” media—encompassing television, radio, the Internet, and short message service or text messaging—also deserves attention as a subject for study. Social inequalities in news media consumption may contribute to observed disparities in smoking behavior (see chapter 2). Local broadcast and cable television news may have broader reach across the community than do newspapers as a source of news and information. Groups with lower SES may pay less attention to health-related topics in the news media or may be more likely to discount such information in favor of their social network’s dominant opinions, or other factors may apply. However, high levels of media coverage of tobacco issues may attenuate disparities in beliefs about tobacco and health.^{1,37} Such findings and possibilities underline the importance of media advocacy efforts as a timely area for future research.

Media Interventions for Tobacco Control

Paid mass media campaigns for tobacco control play an important role in a comprehensive tobacco control strategy.

Aside from preventing smoking uptake and motivating smoking cessation, such campaigns can be key in directing smokers to smoking cessation services such as quitlines or Web-based cessation programs. Media campaigns can also set the agenda for the passage of stronger tobacco control policies by increasing the knowledge of consumers, opinion leaders, and policymakers about tobacco control issues, including the ways in which smoking can lead to adverse health consequences, the difficulty of quitting smoking, the availability of cessation treatments, and the need for improved environmental supports to maximize the likelihood of long-term abstinence. Environmental supports include higher tobacco taxes, more comprehensive smoke-free policies, and broader restrictions on tobacco marketing. Mass media campaigns should be considered as a key component of any national or state tobacco control program.

The research based on paid mass media campaigns provides strong evidence that such campaigns decrease youth smoking uptake and prompt smoking cessation among adults (see chapter 12). Considerably more studies have been concerned with youth smoking rather than adult smoking as an outcome, possibly reflecting greater societal concern with and political palatability for tobacco control efforts directed at youth rather than adults. For two reasons, tobacco control efforts need strategies that can prompt and support adult smoking cessation. First, adult smoking patterns set the normative environment for youth smoking. Second, smoking cessation rates for adults have a much greater impact than do rates of smoking initiation for youth on short-term trends in smoking prevalence in the general population. Reduction in the prevalence of adult smoking will have the greatest impact on reducing the enormous toll of smoking-related morbidity and mortality in the near future.³⁸ Before the 2008 launch of the “EX” campaign by the National Alliance for

Tobacco Cessation (<http://www.thenatc.org/>), no national media campaign in the United States sponsored by the public health community had been broadcast to encourage adult smoking cessation since the late 1960s, when the Fairness Doctrine required television stations to air large numbers of antismoking advertisements to counterbalance cigarette commercials (see chapters 11–13). State tobacco control programs increasingly directed media campaigns to adults rather than to youth during 1999–2003,³⁹ when state funding for tobacco control increased. However, little information exists about campaign targeting in the years since then when state funding for tobacco control generally declined.

Campaigns directed at adult smoking can be expected to influence youth smoking. A campaign that successfully reduces smoking among adults reduces youth exposure to adult-smoker role models (including parents)⁴⁰ and can modify perceived rates of adult smoking.^{41,42} Both exposure to adult smokers and perceived rates of adult smoking can be predictors of smoking initiation among youth. In addition, if adult smoking seems less desirable, motivation to use tobacco as a signifier of adulthood may decrease. Finally, most adolescents identify with and aspire to be treated as adults,⁴⁰ increasing the likelihood that they will attend to messages crafted for adults. Thus, campaigns directed at adults can produce a two-for-one effect by favorably influencing adults and youth (see chapter 11).

Nonetheless, much more research is needed on the effects of media campaigns in prompting smoking cessation attempts and in encouraging and supporting cessation. This research should consider the role campaigns can have in sustaining abstinence from smoking and preventing relapse to smoking, by providing a timely reminder and reinforcement for not smoking. Examination of the extent to which media campaigns might reduce daily cigarette consumption

among smokers would also have value. Further scrutiny of the population subgroups most influenced by adult-focused smoking cessation campaigns is particularly important. For example, the predominantly adult-focused media campaigns in California, along with other tobacco control policies such as comprehensive smoke-free policies, were followed by substantial declines in the prevalence of smoking, but young adults rather than middle-aged or older adults were most responsible for driving these changes.⁴³

In the United States, pharmaceutical companies advertise products such as nicotine replacement therapies, bupropion, and varenicline to help people quit smoking (see chapter 11). This marketing is likely to enhance awareness of options for smoking cessation, but the effects of such campaigns on behaviors are unclear. Open questions include whether emphasis on the difficulty of quitting smoking in these ads could result in reduced self-efficacy for cessation among subgroups of smokers or, conversely, could lead smokers to feel they could use pharmaceutical aids to quit smoking at any time, thereby reducing the sense of urgency to quit smoking as soon as possible.⁴⁴ Other questions revolve around which subgroups of smokers benefit most when these marketing campaigns prompt smokers to use pharmaceutical aids and attempt to quit smoking in greater numbers. For example, would these campaigns be more likely to influence middle- and upper-class audiences than those from lower socioeconomic groups, thereby increasing the disparity in smoking prevalence between the groups? More research is needed in these areas.

Mass Media Campaign Expenditures

How Much Audience Exposure Is Needed?

Research to build a stronger evidence base to guide media buying for tobacco control campaigns is overdue. Three frequently asked questions among personnel in

tobacco control programs are how much advertising to buy, over what duration, and what kinds of ads work best in preventing smoking initiation and prompting cessation. Limited research data are available to determine the optimal reach and frequency for campaigns. The risk is that some campaigns may be underexposing or overexposing target audiences. Advertising theory suggests lack of a dose-response relationship between exposure and impact but, instead, a nonlinear relationship in which increasing advertising exposure begins to exert diminishing marginal effects on the target behavior, that is, an advertising response function⁴⁵ (see also “Economic Issues in Tobacco Advertising” in chapter 7).

Research is needed to identify the point at which increments of advertising exposure yield ever-smaller increments in attitude or behavior change. In addition, tobacco control programs would greatly benefit from knowledge of the circumstances in which this optimal level of exposure increases or decreases according to the presence or absence of tobacco control policies, such as tax increases or smoke-free policies. Such policies can provide additional structural inducements or supports for preventing smoking initiation or prompting cessation. Research methods might relate changing weekly advertising doses, as measured by gross ratings points, for example, to outcomes such as weekly calls to telephone quitlines, weekly cigarette sales, or weekly measures of smokers’ intentions to quit smoking or change smoking behaviors, as estimated by population-tracking surveys.

Further research could help tobacco control programs make the most of advertising dollars. For example, advertising research reveals that the effects of advertising linger over the days and weeks after the broadcasting ends,⁴⁶ but relatively little is known about the rate at which these advertising effects decay in relation to tobacco control. People may recall

antitobacco ads, especially memorable ads, long after they are discontinued, but the decay of behavioral effects, which are the most important outcome, have rarely been the subject of study. Advertising research suggests that behavioral effects of antitobacco advertising would decay relatively quickly. Collecting this kind of information in evaluations of antitobacco media campaigns could help to guide tobacco control programs in buying media more efficiently, for example, in pulses or bursts, also known as flights, rather than as a continuous purchase.

Context for Advertising Exposure

Relatively little is known about the factors that might maximize exposure to and processing of antitobacco advertising messages in the context of communitywide campaigns. For example, might placement of ads in particular types of television programs lead to better processing of the intended messages? Some types of programs such as comedies⁴⁷ or narratives⁴⁸ may limit the potential of media campaign advertising by exposing smokers when they are in a less-than-receptive frame of mind or mood. Experimental research in which audiences watch television programs, some embedded with antitobacco ads, might be one way to study effects of program placement. In addition, fruitful research methods might be interviews of television audiences immediately after exposure to a broadcast ad⁴⁷ or examination of the relative efficiency of various kinds of ads in different television programs in generating calls to telephone quitlines.⁴⁹ Such research could assist program planners in developing a strategy for purchasing advertising that favors particular types of television programs.

As indicated in chapter 2, engagement with mass media campaigns does not occur in a context free of interpersonal networks. Much advertising is viewed or heard in the presence of another person, but even viewed alone, it may still be the subject of

later conversations among work colleagues or other social groups. As shown by theory and evidence, interpersonal communication may be prompted by exposure to antitobacco advertising and may mediate, reinforce, or dampen campaign effects.⁵⁰ Discussion prompted by exposure to antitobacco advertising might empower viewers with information they feel compelled to share with others or allow them to broach a previously difficult-to-raise topic, such as the need for a family member or friend to try to quit smoking. Further research would be useful on the kinds of advertisements and circumstances under which ad-elicited interpersonal discussions reinforce or undermine campaign goals.^{25,47,51-53}

Differences in Population Subgroups and Effects of Campaigns

Aside from age (youth versus adults), a limited number of studies have compared the effects of mass media campaigns on population subgroups such as race, ethnicity, and SES. Patterns of exposure to advertising have varied among smokers in different SES groups (chapter 2). Smokers are more likely than nonsmokers to be heavy users of television and radio and less likely to read magazines and newspapers or to have Internet access.⁵⁴ Some have criticized media campaigns as resonating with middle-class preoccupations over healthy lifestyles while bypassing poor, less-educated smokers and thereby exacerbating inequalities in smoking behavior. Few research studies have addressed these issues.

However, one study of calls to telephone quitlines during periods of media campaign activity suggests that responsiveness to antitobacco advertising is relatively equal across SES subgroups, compared with periods of no media campaign activity.⁵⁵ Additional research is needed to assess effects on alternative and additional behavioral outcomes, such as population survey responses of smokers in different SES groups or cigarette sales in neighborhoods

of different SES. Such research would be helpful in determining which population subgroups had the greatest positive effects from media campaigns or whether effects were relatively equal.

Greater Role for Recycling or Sharing Effective Antitobacco Advertisements

Tobacco control programs are sometimes hesitant to use ads created by other tobacco control programs; they prefer to create a particular style of ads and branding. Fees to actors to recycle existing ads can be high, but compared with the time, cost, and difficulty of creating effective ads from scratch, recycling of ads that performed well elsewhere, with appropriate pretesting and rebadging, could be more widely adopted. This practice could increase the cost-effectiveness of funding allocated to antitobacco advertising by minimizing the need for development of ads. The Media Campaign Resource Center at the Office on Smoking and Health, Centers for Disease Control and Prevention,⁵⁶ provides online access to ads developed by tobacco control programs. This resource provides a starting point for tobacco control programs wanting to recycle or adapt existing ads. An additional improvement would be for the Office on Smoking and Health, on the basis of research, to recommend ads that are likely to be most effective. Sharing development costs of ads across tobacco control programs is another strategy that could achieve this goal.

Media Campaign Content

Need for Emotionally Evocative Advertising

Much research has been performed on appraisal, recall, and processing of messages from different kinds of antitobacco ads in an effort to identify common elements that might be more successful (see chapter 11). Numerous studies have shown consistently that advertising with strong negative messages about health consequences perform better on target audience appraisals and indicators of message processing

(e.g., recall of the ad, thinking more about the ad, or discussing the ad) than do other forms of advertising (e.g., humorous or emotionally neutral ads). Such emotionally evocative ads might feature the negative health consequences of smoking or the ways in which the tobacco industry has been shown to mislead the public about health effects, addiction, or marketing to youth. However, few *population-based* studies have directly compared the impact of these message types on smoking outcomes such as intention to smoke and smoking behavior. Further research is needed to determine whether the more proximal indicators of superior performance (e.g., appraisal, recall, and discussion about advertising) translate into population effects on actual smoking behavior.

A continuing challenge for tobacco control programs is to create ads that permit smokers to gain fresh insights into the risks posed by smoking and the benefits of quitting smoking. Although effective with their target audiences, emotionally evocative advertising messages are less palatable to the persons or groups funding tobacco control than are emotionally neutral or “feel good” messages. A key task for persons who disseminate research is to ensure that those who fund tobacco control efforts understand why investment in particular kinds of campaigns is likely to yield the best outcomes. Much is yet to be learned about other elements of ads that might increase the likelihood audiences will attend to and process intended messages about tobacco (see chapter 11).

Research results suggest that narrative ads, which tell a story about a real person, and storylines that elicit emotional responses or help people identify with the characters, might reduce the target audience’s tendency to argue against the intended message of the ad.^{57,58} Future research might focus on the extent to which different types of antismoking messages influence psychological outcomes beyond overt

beliefs and attitudes about smoking. Such outcomes might be accessibility of attitudes about smoking, implicit attitudes about smoking, or unconscious activation of goals, behavior, or both. Each of these outcomes could affect smoking cessation or the potential to be influenced by advertising.

Findings in one study suggest that measuring the response to antismoking advertising needs to address more than whether attitudes are positive or negative. For example, the accessibility of an attitude is a key factor in the influence of that attitude on behavior.⁵⁹ Although research suggests that more accessible attitudes are more likely to predict behavior,^{60,61} it is unknown whether particular types of messages are more likely to increase the accessibility of antismoking attitudes. The strength of the association between antismoking attitudes and the self might also be a predictor of behavior change. Evidence from the broader field of advertising research suggests that advertising is more effective if it encourages the viewer to relate the information in the message to self and past experiences.⁶² This self-referencing response might enhance the effectiveness of antismoking messages, and some kinds of ads (e.g., personal testimonial or narrative messages) might be more likely to encourage this kind of response.

Other evidence suggests that simply measuring the supposed antecedents of behavior change (e.g., ad recall, attitudes, or intentions) is not enough to predict behavior because behavior can be influenced without conscious awareness. Consumers have been influenced by advertising without explicit recall, and researchers suggest that purchasing behavior is based on knowledge about a product rather than what is explicitly recalled about an ad.⁶³ Antismoking messages, even when not explicitly recalled, might serve to shift smokers' implicit attitudes toward those of nonsmokers.^{64,65} Social psychological research has also shown that changes in

intentions are not necessary for an effect on behavior.⁶⁶ Some behaviors can be driven by nonconscious goals, which can be automatically activated without conscious awareness. Because this process does not rely on conscious decision making, it is less likely to be influenced by cognitive reactance or biases that may arise in response to antismoking ads. Antismoking messages might influence smokers' behavior by using models to prime the goal to quit smoking. Future studies might consider which types of messages are most likely to have an effect at this implicit level.

In a new line of research, investigators are beginning to examine physiological responses (e.g., heart rate and skin conductance) to exposure to tobacco control ads that vary in the strength of the argument and the sensation value of the message.⁶⁷ Such physiological responses are being compared with self-reported responses to determine whether they might be more discriminating measures of advertising-induced attention and arousal and whether they might predict ultimate behavioral response. In the broader field of neuromarketing, scientists are beginning to experiment with using functional magnetic resonance imaging to study patterns of brain responses to different ads and branded products.^{68,69}

Research would be useful for identifying the extent to which different kinds of advertising messages reach and influence all smoker subgroups, including those with different race and ethnicity and those of lower SES. Examination of dose effects for different kinds of campaign messages would also be instructive for media buyers, because some kinds of advertising messages may not require as frequent repetition as others to generate desired outcomes.

Corrective Advertising About Tobacco Industry Product Claims

In recent years, a variety of potential reduced-exposure tobacco products such as Eclipse

and Advance have been introduced into the marketplace. Several studies show that ads promoting these products increased smokers' beliefs that they pose lower health risks than conventional cigarettes and reduced smokers' interest in quitting smoking (see chapter 11). Past experience surrounding promotion of low-tar cigarettes (chapters 3–5 and 11) showed the tobacco industry to be adept at designing misleading messages about smoking risks. Depending on the extent to which potential reduced-exposure products become more widely promoted and used, a future communications challenge will be to ensure that consumers assess risk more closely aligned to the scientific evidence about the actual risks these products may pose. Proposals from the public health community that entertain a harm-reduction perspective for tobacco control, if implemented, could critically change the future communications environment for tobacco control.⁷⁰ Research on risk trade-offs among smokers, decision making under uncertainty, and careful pretesting of proposed harm-reduction messages will be crucial for guiding the development of media communications on tobacco control that clarify rather than confuse public understanding.

Alternative Channels for Media Communications in Tobacco Control

Changing Face of Television

Nearly all of the published research on media messages promoting tobacco control has involved television because it is by far the most widely used medium. Several research studies assessed the effects of screening ads before movies to protect audiences against portrayals of smoking in movies (see chapter 10). Research on tobacco control campaigns that use other media channels such as radio, print, and billboard messages is rare. Because these media require less investment, they may be a useful adjunct to or substitute for televised media campaigns in jurisdictions where tobacco

control funding is poor. Additional research on the effects of antitobacco campaigns using these channels of communications would be useful. In general, however, television advertising is needed to carry the volume of message required to ensure adequate population exposure, so tobacco control programs need sufficient resources to conduct televised media campaigns. However, the number of cable channels has grown, requiring greater scrutiny of which television channels and which programs are watched by smokers and by youth, including those of lower SES,⁷¹ to ensure delivery of an adequate dose of campaign messages.

Studies of media use suggest that, far from abandoning television, audiences are using multiple media sources.^{26,71} Digital technologies such as TiVo enable viewers to edit out standard television ads from recorded television programs, but it is unclear how often this happens in practice. The likely beneficiaries of any move away from television advertising are the Internet, product placement in television shows, and video-on-demand advertising. This situation reinforces the urgency for research to monitor and understand the effects of smoking-related messages embedded in these communication channels.

Online Media

Online media hold great promise for mass delivery of smoking cessation advice and support because they are four times more commonly used by smokers seeking help to quit smoking than are dedicated telephone quitlines.⁷² However, most sources of Web-based help lack evidence-based content, despite research evidence showing that interactive, tailored, Web-based expert-systems programs can significantly increase rates of smoking cessation (see chapter 11). Because maintaining these Web-based systems can be inexpensive once they are established, they may provide highly efficient assistance to the majority of smokers who prefer not to use “formal” sources of help

to quit smoking. A challenge for tobacco control programs is the considerable costs to set up and program these expert systems, suggesting that sharing of existing systems across programs might make good financial sense. The upfront investment required to cross the chasm between research prototype evaluation and real-world online product availability could be taken on by for-profit companies or large nongovernmental organizations. Per-participant fees and fee scales based on population size are two possible ways to recoup costs. A limited amount of research suggests that such intervention options might be an advantage to groups of lower SES (see chapter 11). Present rates of access to and use of the Internet by these groups are much lower than for other groups. Thus, there is a long way to go before equality might prevail.⁷³ However, this situation may change as content-management systems and the tailoring of application frameworks are further developed and implemented.

Rapidly changing technologies have created many new program and research opportunities in the field of new media. The video-sharing Web site YouTube has hosted antitobacco ads, achieving additional exposure among visitors to the site and prompting people to comment and/or send the Internet link to others in their network. A video tribute to a person's mother who died of lung cancer, entitled "Thanks Tobacco, You Killed My Mom," was posted on April 13, 2007, on YouTube.⁷⁴ By June 18, 2007, the video had been viewed over 10,000 times. One visitor to the site wrote, "Powerful stuff. I smoked for 17 years before quitting three weeks ago, and was having a bad day today. I went looking for a reminder of why I quit smoking.... Wow, my urge to smoke just vanished as I watched this. Sorry for your loss."

A Pew survey in October–November 2006 found that 55% of U.S. youth aged 12 to 17 who use the Internet have accessed social

networking sites such as MySpace or Facebook,⁷⁵ where a user can create a profile and build a personal network to connect to other users. For example, the American Legacy Foundation launched "new truth" profile pages (InfectTruth) on popular Internet social networking sites such as MySpace, Hi5, Bebo, Piczo, and Xanga, a community of online diaries and journals⁷⁶ to offer a "truth-like" take on the harms of tobacco and tools to help teens share the information with one another. Unpublished preliminary results indicate that during a typical campaign using television, radio, print, and traditional online banners, traffic to Legacy's www.thetruth.com Web site⁷⁷ reached approximately 30,000–40,000 unique visitors a week. With the addition of the social networking sites, traffic on Legacy's "truth" Web site increased to 50,000–60,000 unique visitors a week.⁷⁸

Research is needed to determine the extent to which such sites can communicate desired messages to promote smoking prevention and their effects on youth. In addition, research would be helpful in ascertaining (1) the effects of online chat rooms and sharing of online quitting-relevant images and messages among smokers trying to quit and (2) how personal organizers and text messaging might benefit cessation attempts by providing reminders and prompts to avoid smoking.⁷⁹ These personal communication vehicles could also help to assess responses to media messages such as antismoking advertisements.

Conclusions

All tobacco control strategies, including media interventions, operate in the context of some level of tobacco promotion and therefore need to counter varying degrees of tobacco marketing. The tobacco industry has weathered restrictions on tobacco marketing in the United States, and tobacco promotion remains pervasive and effective

in encouraging tobacco use. History has demonstrated that when limits are placed on tobacco promotion, the industry resists and then evolves new strategies to effectively reach current and potential smokers with media messages that promote its products. Similarly, when media interventions appear to be effective in reducing tobacco use, they often are challenged or countered by the tobacco industry. Understanding this dynamic relationship between tobacco promotion and tobacco control is critical in conceptualizing and designing relevant research that contributes to the evidence base for tobacco control.

Monitoring tobacco industry activities in the changing media environment is a key research task for the future. Continuing industry activities include efforts to work around new restrictions on tobacco marketing and to create new marketing strategies. In tobacco control, improving

the evidence base for efficient use of the media and selecting and refining messages and channels to reach and influence current and potential smokers are key goals for the research agenda.

As implied throughout this chapter, research must be seen as a means toward achieving progress in tobacco control, rather than as an end in itself. Evidence is sufficient to conclude that tobacco marketing and tobacco use in movies encourage youth smoking initiation. Decisions about further restricting tobacco promotion, mounting adequately funded and effective media campaigns for tobacco control, and funding further research are made in a political environment. Reducing the enormous toll of tobacco-related illness and premature death in the United States will depend on the extent to which research, such as that summarized in this monograph, informs tobacco control policy and program decisions.

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Michigan's Proposal A

Chapter 14 reviews media efforts by the tobacco industry to defeat state tobacco control ballot initiatives and referenda. That chapter presents the outcomes of 42 state tobacco initiatives and referenda held from 1988 to 2006, and provides an analysis of industry media campaigns used in seven initiatives and referenda that proposed increases in tobacco taxes.

Michigan's Proposal A (1994) was materially different from the other 41 initiatives and referenda, which focused exclusively on tobacco. Proposal A affected many types of taxes, including tobacco excise taxes, sales taxes, income taxes, and business-related taxes. This appendix presents a summary of Proposal A because of several compelling features of this campaign: (1) when approved by the voters, Proposal A resulted in the largest cigarette tax increase in the history of the nation (50¢ per pack), giving Michigan the highest state cigarette tax rate in the country at that time (75¢ per pack); (2) the tobacco industry was the major funder of the anti-Proposal A coalition, allowing it to conduct an intense media campaign; and (3) Proposal A proponents, in their own media communications, focused on the industry's involvement in the opposition campaign. It should be noted that many states approved larger cigarette tax increases in later years, including several that have adopted increases of \$1.00 or more per pack since 2005.

In July 1993, the Michigan state legislature eliminated local school property taxes, thereby reducing annual funding for the state's public schools by almost \$7 billion. That action grew out of several concerns: (1) property taxes were too high (Michigan had the eighth highest property tax burden in the country); (2) property assessments were increasing too quickly; and (3) geographic differences in the revenue from property taxes—which were the chief source of funds for the public school system—were creating significant disparities in per-pupil funding across school districts.¹

To fill the new funding gap for the public school system, the legislature voted on December 24, 1993, to offer the voters two alternative revenue proposals through a ballot referendum identified as Proposal A. This measure was placed on the ballot in a special election to be held on March 15, 1994. If voters approved Proposal A (called the “ballot plan”), the state constitution would be amended to increase the state sales tax from 4.0% to 6.0%, increase the state cigarette tax from 25¢ to 75¢ per pack, limit future property assessment increases, and reduce the state income tax rate from 4.6% to 4.4%. Defeat of the ballot measure would automatically put into effect the alternative plan (called the “statutory plan”), which included an increase in the income tax from 4.6% to 6.0%, an increase in the state cigarette tax from 25¢ to 40¢ per pack, and an increase in the single business tax rate. The two proposals had other differential effects on tax policy. However, both options imposed an identical ad valorem tax on tobacco products other than cigarettes (cigars, non-cigarette smoking tobacco, and smokeless tobacco) at 16.0% of the wholesale price.² The ballot plan included a provision earmarking 6% of total tobacco tax revenues (about \$35 million) to “improving the quality of health care of the residents of this state.” The statutory plan did not include a health earmark.

From the standpoint of tobacco, the variance between the ballot plan and the statutory plan was the cigarette tax differential of 35¢ per pack and the 6% health earmark in the ballot plan (assuming that some of the earmarked revenue might be allocated to tobacco control). Those differences were enough to drive the tobacco industry into the camp opposing Proposal A, whose most prominent members were the Michigan Education Association (MEA), a teachers' union; other labor unions; the Michigan Municipal League; and the League of Women Voters. Supporters of the ballot plan included Governor John Engler, business interests, utilities, and many health organizations motivated to support the measure because of its larger cigarette tax increase.

Tobacco companies provided the main financial backing for the opposition coalition, named “Michigan Citizens for Fair Taxes.” Before disclosures of campaign contributions were required, Proposal A supporters reported that they had learned from industry sources that

... the Tobacco Institute has been authorized by the tobacco companies to spend upwards of \$4 million over the next four weeks in a campaign of deceit and distortion unprecedented in Michigan. That is as much money in four weeks as both Michigan gubernatorial candidates are allowed to spend during an entire general election campaign.... In opposing Proposal A, the tobacco lobbyists from outside our state are threatening the health of Michigan's residents and our state's economy.³



Direct mail brochure from the Michigan Citizens for Fair Taxes campaign (here and next page)

Walker Merriman, vice president of the Tobacco Institute, stated that the tobacco lobby's contributions to the anti-Proposal A campaign will be

... whatever we have that we think is appropriate. Pick a number. \$100 or \$100 million. I don't think anyone should reasonably expect us to tip our hand.⁴

The first required disclosure of campaign contributions indicated that \$3,965,731 had been donated through February 27, 1994, to defeat Proposal A. Of this amount, 86% came from tobacco interests, including \$1,783,018 from the Tobacco Institute, \$1,244,396 from R.J. Reynolds, \$150,089 from Lorillard, and \$140,149 from American Tobacco Company. Donations in support of the measure, on the other hand, amounted to \$1.063 million.^{5,6}

A later disclosure indicated that "contributions from tobacco companies and lobbying groups made up most of the \$5 million raised by the Michigan Citizens for Fair Taxes,"

B E W A R E . :

Before you let Governor Engler take you for a ride with Proposal A, take a long look at what he's selling you.

Because no matter what Engler and his politicians promise you, Proposal A is a *lemon*—a public schools disaster waiting to happen. And we'll pay dearly for it.

HIDDEN DEFECTS
Remember the "Lottery money for schools" scam? Politicians promised Lottery money would only go to schools, but the money ended up in some general fund that the politicians control. They lied, and we ended up with **less**.

Well, it's happening all over again with Proposal A—only **worse**.

LESS \$\$ FOR SCHOOLS
Even *before* we get a chance to vote on Proposal A, Engler's already begun to cut a *billion dollars* from school funding by giving away *huge* tax breaks to the special interests to buy their political support.

more state funds for their schools if Proposal A *fails*. The difference between a "yes" and a "no" vote could mean millions of dollars for many school districts.

MORE \$\$ FOR SPECIAL INTERESTS
The only guarantee we have with Proposal A is that it will raise the sales tax a record 50%—a tax that forces working families to pay **more** taxes for education, while Engler, his wealthy friends, and his special interests pay **less**.

NO GUARANTEES
Proposal A has so many hidden defects that we'll be lucky if we go three years before crashing into **another** school funding crisis.

Don't let it happen. Next Tuesday, go into the voting booth and demand better. Tell Engler you want **better** schools for your money, **not worse**.



ENGLER TAKES \$1 BILLION FROM SCHOOLS AND GIVES IT TO THE SPECIAL INTERESTS

John Engler has already begun to cut \$1.2 billion from Proposal A's school funding by cutting deals with his special interests: \$265 million in tax breaks to the realtors, \$20 million to farmers, \$300 million to auto dealers. Proposal A also slashes \$592 million from the state budget—money that won't go to schools. And even Engler admits that his new Keno game won't raise the \$100 million for schools that he claims.

In fact, Proposal A will never guarantee enough money to improve our schools. Every school district in the state will have





VOTE "NO" on A

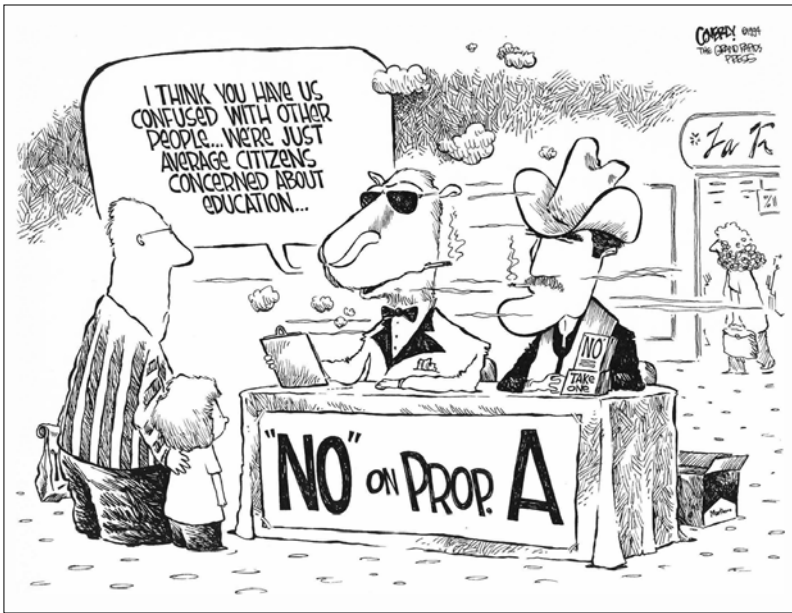
IT'S UNFAIR TO YOU.
IT'S BAD FOR OUR KIDS.

including \$2.2 million from the Tobacco Institute, \$1.3 million from R.J. Reynolds, and \$302,609 from American Tobacco Company. About \$4.4 million was spent by this group on television advertising.⁷

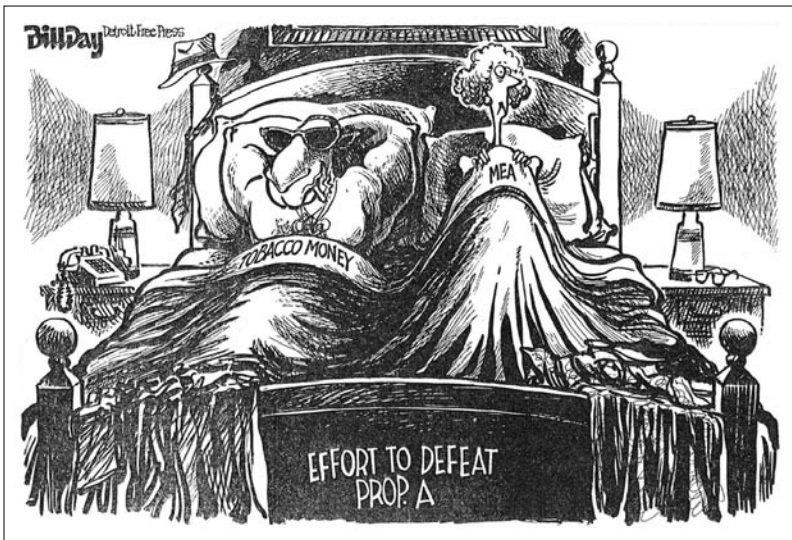
Proposal A opponents used aggressive media advocacy, particularly toward the end of the campaign, including television and radio advertisements and direct mail. Even though tobacco industry donations covered most of the opposition's campaign expenditures, their media messages ignored the cigarette tax differential. Instead, they focused on the unfairness of a sales tax increase and other nontobacco issues. However, one argument from the tobacco industry's media archive—that tobacco taxes are "regressive" (disproportionately affecting the poor)—was applied to the proposed sales tax increase.

Opposition forces sent at least five different direct mail pieces to households throughout the state in the two weeks leading up to the vote. The cover of one large, four-page color brochure showed a photograph of a school bus, with an image of Governor Engler superimposed on the front grille above the headline, "Better look under the hood." Inside the brochure was a photograph of a demolished school bus—an image that disturbed and offended many parents whose children ride school buses—under another headline, "Proposal A is a disaster for our kids." The accompanying text argued that passing Proposal A would benefit "special interests"—an ironic claim in light of the fact that most of the opposition's expenditures were underwritten by the tobacco industry.

Another direct mail brochure featured photographs of senior citizens "held hostage." It claimed that "Proposal A hurts working people and seniors most, who pay a higher percentage of income in sales taxes—an especially cruel burden for seniors with fixed incomes."



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Proposal A supporters had much less funding in their political coffers. However, they were able to garner a substantial amount of earned media through press releases, press conferences, “town hall” meetings, newspaper op-ed columns and letters to the editor, and media interviews. They also purchased time on radio stations.⁸ A key message in their paid and unpaid media communications was the role of the tobacco companies in funding the opposition campaign. On a television program in Traverse City, for example, Governor Engler held up an empty Marlboro package and said,



Reproduced with permission of The Detroit News.

Joe Camel is the only thing that stands in the way of our being successful on March 15. We are not going to let cigarette companies come in here and bankroll the whole campaign, blow a lot smoke about what proposal A is or isn't, all in an effort to protect the manufacture of cigarettes in North Carolina and Kentucky.⁹

The role of the tobacco lobby in funding the anti-Proposal A campaign was covered extensively by the media in its news and editorial pages. For example, at least eight editorial cartoons on the subject were published in major newspapers during the three-month campaign—two in the *Detroit Free Press* (March 9 and 10, 1994), three in the *Detroit News* (February 23, March 10, and March 17, 1994), and three in the *Grand Rapids Press* (March 4, 13, and 15, 1994). The theme of teachers and tobacco interests as “strange bedfellows” was featured in one of these cartoons and in editorial commentary:

Allied against the March 15 school finance ballot plan are quintessential strange bedfellows—those who teach kids good habits and those who sell bad ones. The Michigan Education Association (MEA) wants to help kids. The tobacco industry wants to hook them.¹⁰

In the end, voters approved Proposal A by a huge margin—69% to 31%—giving Michigan the highest cigarette tax rate among all 50 states. After the vote, Chris Christoff, a political writer for the *Detroit Free Press*, noted that the campaign against the referendum “was criticized for its misleading advertisements and its highly negative tone.”¹¹ William Ballenger, editor of the newsletter *Inside Michigan Politics*, said that “In terms of truthfulness, the anti-Proposal A campaign is right down there in the quagmire, the worst I’ve seen going back 25 years.”¹² Craig Ruff, president of an independent, Lansing-based consulting firm,

attributed the passage of Proposal A—at least in part—to the tobacco industry's role in the opposition campaign:

The opponent's misuse of their war chest to fight the ballot question can be described only as highway robbery, and the tobacco industry got stung. The campaign against Proposal A set new and anything but laudable standards for purposeful misinformation. Political strategies have underestimated voters before, but never on this scale. The stockholders of the tobacco companies ought to sue for recovery; rarely have millions of bucks been so misspent. How many computers in Michigan classrooms could those North Carolina millions have bought?¹³

After passage of Proposal A, the state legislature adopted legislation creating the Healthy Michigan Fund, into which were placed the earmarked revenues from tobacco taxes. About \$4 million from this fund were appropriated annually for tobacco control programs, although that amount has been reduced in recent years. Because of large disparities in cigarette tax rates between Michigan and other states (especially Indiana, a neighbor state, whose cigarette tax was 15.5¢ per pack at the time), another \$1 million from the fund was allocated for law enforcement efforts to interdict interstate cigarette smuggling.

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