

Department of Health and Human Services

**OFFICE OF
INSPECTOR GENERAL**

**YOUTH AND ALCOHOL:
SUMMARY OF RESEARCH
ALCOHOL ADVERTISING'S EFFECT ON YOUTH**



**Richard P. Kusserow
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This report is one in a series of reports on youth and alcohol. Related reports include: "Youth and Alcohol: A National Survey--Drinking Habits, Access, Attitudes, and Knowledge," OEI-09-91-00652; "Youth and Alcohol: A National Survey--Do They Know What They're Drinking?" OEI-09-91-00653; "Youth and Alcohol: Laws and Enforcement--Is the 21-Year-Old Drinking Age a Myth?" OEI-09-91-00650; "Youth and Alcohol: Laws and Enforcement--Compendium of State Laws," OEI-09-91-00655; and "Youth and Alcohol: Controlling Alcohol Advertising that Appeals to Youth," OEI-09-91-00654.

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INTRODUCTION

PURPOSE

This inspection reviewed the research on the effects of alcohol advertising on youth.

BACKGROUND

In response to public health concerns and the adverse health consequences of alcohol abuse, Surgeon General Antonia Novello requested that the Office of Inspector General (OIG) review and describe the research that has been conducted on the effects of alcohol advertising on youth. These concerns mirror one of Department of Health and Human Services Secretary Louis Sullivan's goals which is to reduce the prevalence of alcohol problems among children and youth. This report is one in a series prepared by the OIG related to youth and alcohol.

In a related study on youth and alcohol, the OIG found that more than 10 million 7th through 12th grade students drank alcohol in the past year and 6.9 million are able to walk into a store and buy alcohol.¹ Thus, students not only have access to alcohol, but also represent a group of consumers who are potentially open to suggestions from alcohol advertisements.

Controversy surrounds alcoholic beverage advertising, its effects on youth, and the extent to which it should be regulated. Citizen groups, industry spokesmen, and researchers disagree about the effects of advertising on consumption and attitudes. Debate also centers around the First Amendment rights of advertisers versus public health concerns.

Current Policy Regarding Alcohol Advertising

Alcoholic beverage regulation varies according to type of beverage. The three main types of alcoholic beverages are distilled spirits (also known as liquor), malt beverages, and wine. Regulation of these alcoholic beverages lies primarily with the Federal Bureau of Alcohol, Tobacco, and Firearms (BATF). Labeling of wine beverages with less than 7 percent alcohol by volume is under the jurisdiction of the Food and Drug Administration.

Current regulations governing alcoholic beverage advertising in the United States consist of Federal Trade Commission and BATF regulations as well as voluntary standards developed by broadcasters and the alcoholic beverage industry. Distilled spirits companies observe a voluntary ban of television and radio advertising. The beer industry's voluntary guidelines disallow the portrayal or encouragement of

¹U.S. Department of Health and Human Services, OIG-OEI, Youth and Alcohol: A National Survey--Drinking Habits, Access, Attitudes, and Knowledge, OEI-09-91-00652, June 1991.

underage drinking and discourage ads that link drinking with education.² By adopting these and other self-regulating standards, alcoholic beverage advertisers have avoided active government-imposed restrictions.

Research on Alcohol Advertising and Consumption

Research on the effects of alcohol advertising has produced conflicting findings on advertising's effect on consumption. While studies have not consistently shown that advertising increases adult alcohol consumption, some researchers believe that exposure to alcohol advertising affects youth's attitudes about alcohol's role in society. Researchers have not reached consensus on the interpretations of these findings.

Current research on alcohol advertising and youth includes surveys that rely on self-reported consumption and some experimental research. Content analyses provide information about the images and themes used in alcohol ads, many of which youth find attractive. Other studies on alcohol advertising use experiments with adult consumption, case studies on alcohol advertising bans and restrictions, and econometric analyses that compare advertising expenditures with aggregate alcohol sales.

This report describes research on the effects of alcohol advertising on youth. Appendix A provides an annotated bibliography of recent literature regarding alcohol advertising and its effects.

METHODOLOGY

We collected and reviewed post-1975 research on the effects of alcohol advertising on youth. We identified these studies through (1) library literature research and (2) interviews with public interest groups, industry organizations, government agencies, and research groups. Discussions focused on the groups' perspectives on alcohol advertising and the available research that supports their viewpoints about the effects of advertising on youth. In this inspection, we did not validate the methodologies of the research.

²Beer Institute, Brewing Industry Advertising Guidelines, December 1984.

SUMMARY OF RESEARCH FINDINGS

EFFECTS OF ALCOHOL ADVERTISING AND MEDIA PORTRAYALS OF ALCOHOL ON YOUTH ATTITUDES

Among elementary school children, exposure to beer commercials is related to beliefs about beer drinking and expectations to drink as an adult. Wallack et al. (1990) interviewed a probability sample of 468 5th and 6th grade students from a suburban school district to obtain self-reports on television viewing, attention to beer commercials, and beliefs about beer. Children were shown still photographs of currently televised alcohol advertisements and asked whether they recognize the advertisements. Children recognizing three or more commercials are three times more likely than those who recognize one or no commercials to believe that beer use is "cool" or "macho." The most frequent viewers of televised sporting events, which broadcast several beer commercials during an event, are 56 percent more likely than non-viewers to have a stronger expectation to drink as an adult.

Teenagers with high exposure to alcohol advertisements are more likely to think it is okay for teens to drink. Atkin and Block (1981) found this relationship as a result of a seven phase research project. In this project, Atkin and Block surveyed a non-probability sample of 1,227 people 12 to 22 years old about their exposure to alcohol ads, attitudes, and behaviors concerning alcohol. Thirty-two percent of youth with high exposure to alcohol advertising believe it is okay for teenagers to get drunk while only 20 percent of the low exposure group hold this belief.

Adolescents heavily exposed to alcohol commercials show a positive attitude toward drinking. Neuendorf (1985) surveyed 100 adolescents (aged 10 to 14) and found that youth who are heavy television viewers are more likely to think that "all people who drink are happy" and "you have to drink to have fun at a sporting event."

Fifth and sixth grade boys who viewed a television show where the main characters drank were more likely to agree that the good things about alcohol are more important than the bad things. In an experiment with 43 5th and 6th grade children, Kotch et al. (1986) surveyed children's attitudes about alcohol after exposing them to 1 of 2 conditions. They either saw (1) a video with the main characters drinking alcohol or (2) the same video with the alcohol scenes cut. Children were specifically asked to "think of all the good and bad things that might happen to you if you drank alcoholic beverages," then to identify "which are more important to you," the good, the bad, or are the good and bad things equal. The only effects on attitude were among boys who saw the video with the main characters drinking.

Children shown a television program with alcohol scenes are more likely to choose an alcoholic beverage as an appropriate drink for adults. Rychtarik et al. (1983) studied 75 children 8 to 11 years old, selected from an outpatient waiting room. They exposed the children to one of three conditions: (1) 5 minutes of a television program with alcohol scenes, (2) the same 5 minutes with the alcohol scenes cut, or (3) no television at all. The children were then asked to select a glass with whiskey or water to serve pictured adults and children. Children who saw the alcohol scenes were more likely to offer the alcoholic drink to a pictured adult than the children who were not exposed to alcohol on television.

EFFECTS OF ALCOHOL ADVERTISING ON YOUTH CONSUMPTION

Alcohol advertising is associated with drinking behavior during adolescence. Atkin and Block (1981) analyzed a non-probability sample of 1,227 12- to 22-year-olds about their exposure to alcohol advertising and drinking behavior. Twelve- to 18-year-olds highly exposed to advertising report consuming more drinks per evening and drinking heavily more days per week. Adolescents highly exposed to alcohol advertisements were also more likely to think they will drink alcohol in the future. Atkin and Block's study correlated self-reports of exposure and consumption. The findings cannot show a causal relationship between ads and drinking. Strickland (1984) has criticized this body of work for its non-random sampling procedures and lack of coding stringency.

Exposure to alcohol advertising is related to heavy drinking, problem drinking, and hazardous drinking. Atkin et al. (1983) used data from the same sample of 1,227 12- to 22-year-olds to focus on the influence of alcohol advertising on heavy drinking, defined as drinking 5 or more drinks at a time. Youth with high exposure to alcohol advertising are twice as likely as those less exposed to say they have at least five or six drinks at a time at least once per week. Respondents highly exposed to advertising are significantly more likely to admit to problem drinking.

Atkin et al. (1983) also found hazardous drinking is more common among youth who are exposed to more alcohol advertising. Among those with high exposure to alcohol advertising, 39 percent have driven after drinking in the past month, compared to 25 percent of those with low exposure.

In a survey of 1,650 7th, 9th, and 11th grade students in a metropolitan area, Strickland (1981, 1982, 1983) found that exposure to advertisements has a slight correlation with youth consumption. Age, orientation toward advertising, and peers are some of the factors that influence consumption the most.

Strickland's findings (1983) are consistent with prior research on adolescent development that younger teens watch more television, and therefore more advertisements, than older teens. However, older teens consume more alcohol than younger teens. These differences confound measurement of the relationship between advertising exposure and consumption.

Orientations or predispositions to advertising may contribute to advertising's influence. Strickland (1982) found that youth who watch advertisements to find out what kind of people use the products and want to be like those people are more likely to have alcohol advertising affect their alcohol consumption.

However, Strickland (1983) found peers are a more important influence than alcohol advertising on youth alcohol consumption. Peers introduce each other to and reinforce certain behaviors, such as alcohol use. There is a substantial relationship between the proportion of the respondent's close friends who drink and indications of alcohol use and abuse.

ADVERTISING IMAGES AND THEMES ATTRACTIVE TO YOUTH

Youth may be influenced by celebrity endorsements and young models. Data from Atkin and Block's non-probability sample of 1,227 12- through 22-year-olds show that celebrity endorsements, sexual themes, and young models in alcohol advertisements impress adolescents. Adolescents were most impressed with celebrities and young models in alcohol advertisements. Moreover, the adolescents were more likely than adults to perceive the models as under 21 years old. Atkin and Block report that advertisements with sexual themes appeal to adolescents.

Lieberman and Orlandi (1987) report that sixth grade students recall sports figures, celebrities, and young models in alcohol advertisements. A study of 2,766 6th grade students in New York City asked students to recall and identify the people in an alcohol advertisement. Sports figures and celebrities were the two most frequently mentioned types of people. The students also recalled young models. While the majority responded that the models were "young adults," 6.9 percent of the students thought that the models were "teens" or "kids."

Among a sample of 10- to 14-year-olds, humor and famous personalities lead the list of reasons why an advertisement is their favorite. Neuendorf (1985) asked a sample of 100 adolescents to name their favorite television commercial and give the reason for this choice. Twenty percent of the adolescents selected a wine or beer commercial as their favorite.

Adolescents are aware and appreciative of alcohol advertising. Aitken et al. (1988) studied a quota sample of 433 adolescents between the ages of 10 and 17 in Glasgow, Scotland. Three demographic controls--age, social class, and sex--determined the sample quotas. Sixty-five percent of the young people surveyed could name a specific alcohol advertisement that they like. Most adolescents respond positively to television advertisements for alcohol and do not think the advertisements are boring. According to the respondents, a good advertisement would be humorous, bright, and colorful, with lively action, music, and style.

Aitken also found adolescents who have drunk alcohol are more aware and appreciative of alcohol advertisements than are adolescents who do not drink. Those who have drunk alcohol were more adept at recognizing and identifying brand imagery in commercials. They also appreciated the music, action, and style in advertisements more than adolescents who have never drunk alcohol.

In the OIG survey of junior and senior high school students, we found students like ads that feature attractive people and make drinking look like fun. Thirty-nine percent of students mentioned something they like about alcohol ads. Students like ads that:

- ▶ spotlight attractive models;
- ▶ make drinking look like fun;
- ▶ are in attractive, exotic settings;
- ▶ make the product look good; and
- ▶ are humorous.

Several students also described specific ads they like. For example, one student said, "I like the one where they climb the rocks. When they're on top, they break the rocks and it turns into a bottle of Miller Genuine Draft."

STUDIES ON THE EFFECTS OF ALCOHOL ADVERTISING ON ADULTS

Much of the research on alcohol advertising concerns the relationship between exposure to alcohol advertisements and adult drinking behavior. Often, the results of these studies, which find no effects of advertising on adult drinking behavior, are used to counter allegations that alcohol advertising affects youth attitudes and behavior. The methodologies associated with several types of studies preclude examination of the effect of alcohol advertisements on youth. Types of studies that do not focus on youth drinking are (1) experimental studies regarding alcohol consumption, (2) case studies on alcohol advertising bans and restrictions, and (3) econometric analyses that compare advertising expenditures with aggregate sales.³

Experimental studies that measure actual alcohol consumption under controlled circumstances do not focus on under-age youth for legal and ethical reasons. These experimental studies observe the drinking behavior of people in a controlled setting in response to alcohol advertisement exposure. The studies vary in their methodologies and conclusions, but most do not show that alcohol advertising exposure leads to increased alcohol consumption among adults. As an example, one experimental study

³Citations for the research referred to in this section are in the Appendix.

monitored the alcohol consumption of male college students of legal age while watching sports programs with either many, few, or no advertisements for alcohol. The researchers found advertisements affected the timing but not the overall quantity of respondents' drinking.⁴

Case studies of alcohol advertising bans and restrictions provide no information about youth. These studies compare sales volume figures and measures of aggregate alcohol use, such as alcohol-related morbidity rates, between States or between periods directly before and after implementation of a ban or other restriction on alcohol advertising. The use of aggregate data of the population prevents the examination of a ban's effect on youth consumption of alcohol. Case studies also evaluate the short-term rather than the cumulative effects of advertising on consumption. Generally, these case studies have found no effects of bans or restrictions of alcohol advertising on per capita consumption. For example, researchers who studied a 14-month partial ban of alcohol advertising in British Columbia found no effect on beer, wine, or spirits consumption.⁵

Econometric analyses compare advertising expenditures with alcohol sales volume. They are similar to case studies because information about youth drinking cannot be separated from the aggregate data. These econometric analyses have failed to show that alcohol consumption increases with increased spending on advertising. Advertising expenditures for beer, for example, rose relative to inflation since 1980. Since the early 1980s, however, beer consumption has leveled off and even declined somewhat.⁶ Also, it is difficult to determine whether advertising levels affect sales levels or vice versa. Sales may affect advertising, since advertising budgets are often a fixed percentage of the sales volume. Furthermore, alcohol advertisements may only affect the consumption of specific brands without increasing the overall consumption.

⁴Kohn, P.M. and Smart, R.G., "The Impact of Television Advertising on Alcohol Consumption: An Experiment," Journal of Studies on Alcohol, v. 45, 1984, pp. 295-301.

⁵Smart, R.G. and Cutler, R.E., "The Alcohol Advertising Ban in British Columbia: Problems and Effects on Beverage Consumption," British Journal of Addiction, v. 71, 1976, pp. 13-21.

⁶Beer Sales and Population, 1970-1989: State Reports Compiled by Beer Institute and U.S. Department of Commerce, Bureau of Census. Beer Inflation Adjusted Advertising Expenditures 1970-1989: Leading National Advertisers and Broadcast Advertisers Reports, Radio Expenditure Reports and R.S. Weinberg & Associates, Advertising Cost Index.

APPENDIX

ANNOTATED BIBLIOGRAPHY

EFFECTS OF ALCOHOL ADVERTISING ON YOUTH ATTITUDES

Atkin, C., and M. Block, "Content and Effects of Alcohol Advertising," prepared for BATF, Pub. No. PB82-123142, Springfield, Va.: National Technical Information Service, 1981.

Researchers use a non-random sample composed of a diverse array of individuals. The questionnaire asks for self reports of exposure to alcohol ads, attitudes, and behaviors concerning alcohol. Advertising appears to be associated with drinking behavior during the adolescent years.

Atkin, C., and M. Block, "A Reply to Strickland," Journal of Studies on Alcohol, v. 45, 1984, pp. 93-100.

Researchers defend their previous study against criticisms by Strickland (1984). They claim few people seem to be astounded or even surprised by the results, which reinforce conventional wisdom and popular assumptions.

Neuendorf, K., "Alcohol Advertising and Media Portrayals," Journal of the Institute for Socioeconomic Studies, v. 10, 1985, pp. 67-78.

Neuendorf surveys a sample of 100 10 to 14 year old respondents. The study finds that heavy television viewers are more likely to believe drinking is linked to happiness and fun. Also, 20 percent of respondents choose a wine or beer commercial as their favorite.

Singer, D.G., "Alcohol, Television, and Teenagers," Pediatrics, v. 76, 1985, pp. 668-674.

Singer reviews studies on alcohol use among children and adolescents and on the effects of media and advertising. A community-based campaign, supported by schools and parents, may be able to counteract the impact of the media on children and adolescents.

Strickland, D.E., "Content and Effects of Alcohol Advertising: Comment on NTIS Pub. No. PB82-123142," Journal of Studies on Alcohol, v. 45, 1984, pp. 87-93.

Strickland criticizes Atkin and Block's study on effects of alcohol advertising. Strickland finds weaknesses in their sampling and coding procedures, their measures of advertising exposure, and their definitions for categories of advertising content.

Wallack, L.M., D. Cassady and J. Grube, "T.V. Beer Commercials and Children: Exposure, Attention, Beliefs, and Expectations About Drinking as an Adult," AAA Foundation for Traffic Safety, Fall 1990.

Researchers study the effects of televised beer commercials on 5th and 6th graders. They find a correlation between their attention to beer commercials and their beliefs about the social and ritual aspects of beer drinking and the expectation to drink as an adult.

EFFECTS OF MEDIA PORTRAYALS OF ALCOHOL ON YOUTH ATTITUDES

Kotch, J.B., M.L. Coulter, and A. Lipsitz, "Does Televised Drinking Influence Children's Attitudes Toward Alcohol?" Addictive Behaviors, v. 11, 1986, pp. 67-70.

Fifth and sixth grade children watch videotaped television programs with drinking of alcoholic beverages by the principal characters. Boys who watch the film with drinking are significantly more likely to respond that the good things about alcohol are more important than the bad things.

Rychtarik, R.G., J.A. Fairbank, C.M. Allen, D.W. Foy, and R.S. Drabman, "Alcohol Use in Television Programming: Effects on Children's Behavior," Addictive Behaviors, v. 8, 1983, pp. 19-22.

Researchers ask children who have watched a television program with alcohol scenes to serve either "whiskey" or "water" to pictured adults and children. Results indicate that subjects who view televised drinking are significantly more likely to choose alcoholic beverages for pictured adults but not for children.

EFFECTS OF ALCOHOL ADVERTISING ON YOUTH CONSUMPTION

Atkin, C. and M. Block, "Content and Effects of Alcohol Advertising," prepared for BATF, Pub. No. PB82-123142, Springfield, Va.: National Technical Information Service, 1981.

Researchers use a non-random sample composed of a diverse array of individuals. The questionnaire asks for self reports of exposure to alcohol ads, attitudes, and behaviors concerning alcohol. Advertising appears to be associated with drinking behavior during the adolescent years.

Atkin, C., K. Neuendorf, and S. McDermott, "The Role of Alcohol Advertising in Excessive and Hazardous Drinking," Journal of Drug Education, v. 13, no. 4, 1983, pp. 313-325.

Researchers conduct a nationwide survey of youth ages 12 to 22 about exposure to alcohol advertising and its effects on consumption and drinking in hazardous contexts. Alcohol advertising appears to contribute to certain forms of problem drinking.

Strickland, D.E., "Advertising Exposure, Alcohol Consumption and Misuse of Alcohol," In Grant, Plant, and Williams (Eds.) Economics and Alcohol: Consumption and Controls, 1983, p. 201-221.

Strickland reviews the research on the proposed link between advertising and consumption. There have been few systematic studies of the effects of alcohol advertising on the consumption and abuse of alcohol. Strickland analyzes the effects of televised alcoholic beverage advertising on alcohol consumption among students in 7th, 9th, and 11th grade. The influence of differential peer association is almost twice that of the mass media effect.

Strickland, D.E., "The Advertising Regulation Issue: Some Empirical Evidence Concerning Advertising Exposure and Teenage Consumption Patterns," Paper presented at the conference on Control Issues in Alcohol Abuse Prevention, Charleston, South Carolina, September 1981.

Strickland analyzes the effects of televised alcohol beverage advertising on alcohol consumption among students in 7th, 9th, and 11th grade. Both advertising exposure and differential peer association have effects on consumption. The interpersonal influence measured here is almost twice that of the mass media effect.

Strickland, D.E., "Alcohol Advertising: Orientation and Influence," Journal of Advertising, v. 1, 1982, pp. 307-319.

Strickland analyzes the effects of televised alcohol beverage advertising on alcohol consumption among students in 7th, 9th, and 11th grades. Exposure to advertising affects the consumption level of only those teens holding high social utility and high vicarious utility orientations to advertising.

ANALYSES OF ADVERTISING IMAGES AND THEMES ATTRACTIVE TO YOUTH

Aitken, P.P., D.R. Eadie, D.S. Leathar, R.E.J. McNeill, and A.C. Scott, "Television Advertisements for Alcoholic Drinks Do Reinforce Under-age Drinking," British Journal of Addiction, v. 83, 1988, pp. 1399-1419.

Researchers interview children 10 to 17 years old in Scotland about their recall and recognition of alcohol advertising and what they find attractive about it. Children are much more aware and appreciative of alcohol advertising than adults realize.

Breed, W. and J.R. De Foe, "Drinking and Smoking on Television, 1950-1982," Journal of Public Health Policy, v. 5, 1984, pp. 257-270.

Researchers study effects of representations of drinking and smoking on television in four periods between 1950-1982. Dramas and situation comedies show a steady drop in the use of cigarettes, while the use of alcohol shows an increase.

Breed, W., J.R. De Foe, and L.M. Wallack, "Drinking in the Mass Media: A Nine-Year Project," Journal of Drug Issues, v. 14, 1984, pp. 655-664.

Researchers use stratified random samples from television, magazines, daily newspapers, college newspapers, and comic books to analyze the content of alcohol ads. Many appearances of alcohol were minor, yet their frequency was considerable.

Breed, W., L.M. Wallack, and J. Grube, "Alcohol Advertising in College Newspapers: A 7-Year Follow-up," Journal of American College Health, v. 38, May 1990, pp. 255-262.

Researchers compare the frequency and nature of alcohol ads in a 1984-85 sample of college newspapers with the results of a 1977-78 study. On average, the 1984-85 sample shows less national alcohol advertising. Fewer ads ridicule education, feature athletes, or show group drinking. More ads feature fantasy themes. Alcohol industry sponsorship of campus activities increased.

De Foe, J.R., and W. Breed, "The Problem of Alcohol Advertisements in College Newspapers," Journal of the American College Health Association, v. 27, 1979, pp. 195-199.

Researchers review 32 college newspapers selected at random from a list of the 400 largest campuses. Alcohol advertisements make up approximately one-half of all national advertising.

De Foe, J.R., and W. Breed, "Youth and Alcohol in Television Stories, With Suggestions to the Industry for Alternative Portrayals," Adolescence, v. XXIII, no. 91, Fall 1988, pp. 533-550.

Researchers describe scenes from prime-time television programs from 1976-77 that involve youth and drinking. They find several television portrayals of alcohol issues to have educational value and suggest such portrayals for television producers, writers, and directors to consider.

Finn, T.A., and D.E. Strickland, "A Content Analysis of Beverage Alcohol Advertising," Journal of Studies on Alcohol, v. 43, 1982, pp. 964-988.

Researchers monitor periods of televised alcohol beverage advertisements during the 1979-80 television season. They base the expected concentrations of alcohol commercials on Broadcast Advertisers Reports. Ads with sociability and conviviality themes (camaraderie, relaxation, and humor) occur the most often.

Lieberman, L.R., and M.A. Orlandi, "Alcohol Advertising and Adolescent Drinking," Alcohol Health and Research World, v. 12, no. 1, 1987, pp. 30-43.

Researchers survey 6th graders in New York City to gain insight into the specific aspects of advertisements that children observe and recall. Alcohol advertising is one of several influences that can predispose adolescents to feel positively toward drinking.

Small, M.A., "Alcohol Portrayal in the Mass Media," Alcohol Health and Research World, Fall 1980, pp. 30-34.

Small reviews research on the portrayal of alcohol use on television. Findings do not reveal any consistencies among methodologies, and approaches have produced different conclusions.

Strickland, D.E., T.A. Finn, and M.D. Lambert, "A Content Analysis of Beverage Alcohol Advertising," Journal of Studies on Alcohol, v. 42, 1982, pp. 655-682.

Researchers analyze themes and appeals, techniques of presentation, and use of human models. They use a structural analysis of beverage alcohol advertising, broken down by type of beverage, liquor marketers, and magazines, in 42 national magazines of 1978. Appeals to quality of product, process, or ingredients are the most common themes in alcohol ads.

Strickland, D.E. and D.J. Pittman, "Advertising and Alcohol Abuse: A Critique of Breed and DeFoe's 'Risk and Alcohol Lifestyle Advertising.'"

Strickland's and Pittman's major criticisms of Breed and DeFoe are (1) Breed and DeFoe do not differentiate legitimate moderate consumption from abusive consumption, (2) both heavy drinkers and abstinent youth have images of drinkers as more sociable than non-drinkers, and (3) many other factors influence drinking.

U.S. Department of Health and Human Services, OIG-OEI, Youth and Alcohol: A National Survey--Drinking Habits, Access, Attitudes, and Knowledge, OEI-09-91-00652, June 1991.

The Office of Inspector General (OIG) uses a multi-stage, random sample of 956 7th through 12th grade students. The survey asks about students' alcohol consumption, ability to obtain alcohol, and knowledge and perceptions about alcohol-related areas. The OIG finds that students like various aspects of alcohol ads.

EXPERIMENTAL STUDIES ON ADULT CONSUMPTION

Dorn, N., and N. South, "Alcohol and the Media: A Review and Critique of the 'Effects' Model," International Quarterly of Community Health Education, v. 3, 1982-1983, pp. 183-193.

Researchers review empirical material bearing upon whether alcohol advertising has effects on the general level of consumption. The current model looking at the effects on general consumption is too limited a framework for the development of research.

Kohn, P.M. and R.G. Smart, "The Impact of Television Advertising on Alcohol Consumption: An Experiment," Journal of Studies on Alcohol, v. 45, no. 4, 1984, pp. 295-301.

Researchers measure the effects of alcohol advertising on the beer consumption of college men. Exposure to the first few commercials increases consumption; however, continued exposure does not.

Kohn, P.M. and R.G. Smart, "Wine, Women, Suspiciousness and Advertising," Journal of Studies on Alcohol, v. 48, no. 2, 1987, pp. 161-166.

Researchers expose college women to wine commercials during a soap opera episode ostensibly to evaluate the appeal of the program to college women. Women exposed to nine wine commercials consume more wine than those exposed to three. Several women are suspicious of the research design.

Kohn, P.M., R.G. Smart, and A.C. Ogborne, "Effects of Two Kinds of Alcohol Advertising on Subsequent Consumption," Journal of Advertising, v. 13, no. 1, 1984, pp. 34-39.

Researchers experiment with drinkers ages 19 to 45 to measure the effects of lifestyle and tombstone advertising on alcohol consumption. They find no evidence that either lifestyle or tombstone advertising has any impact, immediate, or delayed, on any category of alcohol consumption.

McCarty, D., and J. Ewing, "Alcohol Consumption While Viewing Alcoholic Beverage Advertising," The International Journal of the Addictions, v. 18, no. 7, 1983, pp. 1011-1018.

Researchers measure the effects of alcohol advertising on adult consumption when subjects have had a drink before viewing commercials. The results suggest that advertising may influence individuals who have been drinking.

Sobell, L.C., M.B. Sobell, D.M. Riley, R. Klajner, G.L. Leo, D. Pavan, and A. Cancilla, "Effect of Television Programming and Advertising on Alcohol Consumption in Normal Drinkers," Journal of Studies on Alcohol, v. 47, 1986, pp. 333-340.

Researchers examine the effects of exposure to television programs with alcohol scenes and beer commercials on the behavior of normal drinkers. They find no effects of this exposure on consumption.

Sterling, C.H., "A Review of Literature on the Scope, Content, and Impact of Television and Radio Advertising of Wine and Beer Products 1975-1984," prepared for National Association of Broadcasters, 1984.

Sterling reviews research on alcohol advertising's effects. Sterling concludes that rhetoric abounds while specific and supportable research findings of any type are not available.

Toneatto, T., L.C. Sobell, G.L. Leo, and M.B. Sobell, "Effects of Alcohol Cues in Television Programs and Commercials on the Urge to Consume Alcohol," Paper presented at the Annual Meeting of the Association for Advancement of Behavior Therapy, Washington, D.C., November 1989.

Researchers study alcohol abusers' ability to resist the urge to drink heavily after exposure to alcohol cues in television programs and commercials. They find no effects of this exposure on consumption.

CASE STUDIES ON ADVERTISING BANS AND RESTRICTIONS

Hoadley, J.F., B.C. Fuchs, and H.D. Holder, "The Effect of Alcohol Beverage Restrictions on Consumption: A 25-Year Longitudinal Analysis," American Journal on Drug and Alcohol Abuse, v. 10, no. 3, 1984, pp. 375-401.

Researchers analyze the impact of State regulation and control measures on per capita distilled spirits consumption using the 25-year period 1955-1980. The effectiveness of State alcoholic beverage controls in holding down consumption is largely unproven.

Ogborne, A.C., and R.G. Smart, "Will Restrictions on Alcohol Advertising Reduce Alcohol Consumption?" British Journal of Addiction, v. 75, 1980, pp. 293-296.

Researchers analyze the relationships between advertising restrictions and consumption and alcoholism rates in different States in the U.S. and between two Canadian provinces. Relationships are very weak and not statistically significant.

Smart, R.G., "Does Alcohol Advertising Affect Overall Consumption? A Review of Empirical Studies," Journal of Studies on Alcohol, v. 49, no. 4, 1988, pp. 314-323.

Smart's review of the research indicates that: (1) advertising bans do not reduce alcohol sales, (2) total advertising expenditures have no reliable correlation with sales of alcoholic beverages, and (3) experimental studies typically show no effect of advertising on actual consumption.

Smart, R.G. and R.E. Cutler, "The Alcohol Advertising Ban in British Columbia: Problems and Effects on Beverage Consumption," British Journal of Addiction, v. 71, 1976, pp. 13-21.

Researchers study a ban on advertising of alcoholic beverages for 14 months in British Columbia. They find no decrease in per capita alcohol consumption. The researchers acknowledge the difficulties assessing effects of a short-term ban.

Van Iwaarden, T., "Advertising, Alcohol Consumption and Policy Alternatives," In Grant, Plant, & Williams (Eds.) Economics and Alcohol: Consumption and Controls, 1983, pp. 223-237.

Van Iwaarden discusses the market share theory of advertising and examines the merits and disadvantages of a ban on alcohol advertising.

ECONOMETRIC STUDIES OF ADVERTISING AND CONSUMPTION

The Advertising Association, "The Relationship Between Advertising and Alcohol Misuse," Submission to the Ministerial Group, December 16, 1987.

This review of studies on the effects of alcohol advertising on per capita consumption concludes advertising does not have an effect.

Duffy, M.H., "Measuring the Contribution of Advertising to Growth in Demand: An Economic-Accounting Framework," International Journal of Advertising, v. 8, 1989, pp. 95-110.

Duffy explains the marked differences over the years of growth rates of consumption of beer, spirits, and wine in the United Kingdom, using an econometric model of alcoholic drink demand. Advertising's role is barely measurable in an absolute sense and unimportant in comparison with the effect of income.

Franke, G., and G.B. Wilcox, "Alcoholic Beverage Advertising and Consumption in the United States, 1964-1984," Journal of Advertising, v. 16, no. 3, 1987, pp. 22-30.

Researchers examine alcohol industry advertising expenditures in network and spot television, network radio, magazines, newspaper supplements, and outdoor media. They find no evidence of a significant relationship between total advertising and per capita consumption of beer. They find positive significant relationships with per capita consumption of wine and distilled spirits.

Lee, B. and V. Tremblay, "Advertising and the U.S. Market Demand for Beer," Department of Economics, Oregon State University, May 24, 1990, forthcoming in Applied Economics.

Researchers examine U.S. annual beer consumption from 1953 through 1983. The most important determinants of beer market demand are the price of beer and substitutes, demographics, and the advent of light beer. Although advertising is likely to affect market shares, results do not show a significant effect on market demand for beer.

Shoup, H., "Comments of Harold A. Shoup, Executive Vice President, American Association of Advertising Agencies," The ACA Research Quarterly, v. 1, no. 4, 1990, pp. 13-14.

Shoup explains advertising has two objectives: (1) to introduce products and services and (2) to protect or increase a marketer's brand share in an increasingly competitive marketplace. Alcohol advertising does not lead to increased consumption.

Smart, R.G., "Socio-economic, Lifestyle, and Availability Factors in the Stabilization of Alcohol Consumption in Canada," Canadian Journal of Public Health, v. 78, 1987, pp. 176-180.

Smart finds that between 1975-83, Canadian per capita alcohol consumption declined slightly after a long period of increased consumption in spite of increases in alcohol availability and advertising budgets.

Treml, V.G., "Production and Consumption of Alcoholic Beverages in the USSR: A Statistical Study," Journal of Studies on Alcohol, v. 36, no. 3, 1975, pp. 285-320.

Treml finds an increase of production and per capita consumption of alcohol in the USSR over the 15 years prior to 1972, in spite of frequent anti-alcohol campaigns and an absence of alcohol advertising.

U.S. Federal Trade Commission, "Recommendations of the Staff of the Federal Trade Commission: Omnibus Petition for Regulation of Unfair and Deceptive Alcoholic Beverage Advertising and Marketing Practices, Docket No. 209-46," March 1985.

The FTC responds to the challenge that alcohol advertising encourages alcohol abuse. They conclude that the existing body of economic and marketing research sheds virtually no light on relationship between alcohol advertising and abuse. They feel BATF has jurisdiction in this area.

Waterson, M.J., "Advertising Facts and Advertising Illusions," International Journal of Advertising, v. 3, 1984, pp. 207-222.

Waterson argues the absence of advertising leads to less choice, lower levels of innovation, higher prices, and the vices of cartels and protected or regulated markets. There is no evidence to suggest advertising can manipulate the overall size of such large mature markets even if that is the deliberate intention.

Waterson, M.J., "Advertising and Alcohol: An Analysis of the Evidence Relating to Two Major Aspects of the Debate," International Journal of Advertising, v. 8, 1989, pp. 111-131.

Waterson analyzes the argument surrounding the effects of alcohol advertising on alcohol consumption. Advertising plays an insignificant role in molding the broad patterns of demand.

R.S. Weinberg & Associates, "Advertising and Malt Beverage Demand: A Macro Analysis of Brewing Industry Advertising Expenditures 1947-1983," Briefing for Ad Ban Task Force, Anheuser-Busch, Inc., 1984.

Researchers measure advertising effectiveness by correlating advertising expenditures with per capita consumption. Malt beverage advertising does not have any significant impact on the total level of malt beverage consumption.

Wilcox, G.B., D. Shea, and R. Hovland, "Alcoholic Beverage Advertising and the Electronic Media," Communications and the Law, v. 8, 1986, pp. 31-41.

The authors review the Federal Trade Commission decision on advertising. There is insufficient reason to warrant regulation of alcohol advertising on the basis of deception or unfairness because, even if advertising stimulates consumption, alcohol abuse does not necessarily result from increased consumption.

MISCELLANEOUS STUDIES

AMA Board of Trustees Report, "Alcohol: Advertising, Counteradvertising, and Depiction in the Public Media," Journal of the American Medical Association, v. 256, no. 11, 1986, pp. 1485-1488.

This report summarizes existing laws and regulations on alcohol advertising, including BATF and FTC roles. Research on the links between advertising and consumption has methodological flaws, yet alcohol advertising influences excessive or hazardous drinking to a limited degree.

Buchanan, D.R., and J. Lev, Beer and Fast Cars: How Brewers Target Blue-collar Youth through Motor Sport Sponsorships, AAA Foundation for Traffic Safety, 1989.

The study documents industry expenditures and justifications for motor sports sponsorships. The researchers attend motor sports events and interview students about their attitudes about drinking and driving. Motor sports receive the most sponsorship money of all types of sports.

Cowan, R. and J.F. Mosher, "Public Health Implications of Beverage Marketing," Contemporary Drug Problems, v. 12, 1985, pp. 621-657.

Cowan and Mosher describe the alcohol beverage market and practices. When the alcohol industry devises marketing strategies that directly compete with nonalcoholic beverages, there are serious public health implications.

Hacker, G.A., R. Collins, and M. Jacobson, Marketing Booze to Blacks, Center for Science in the Public Interest, 1989.

The authors examine the marketing of alcohol to Blacks and make several recommendations to alcohol companies, black media, black civic and community leaders, other businesses and government.

Katzper, M., R. Ryback, and M. Hertzman, "Alcoholic Beverage Advertisement and Consumption," Journal of Drug Issues, v. 8, no. 4, 1978, pp. 339-353.

The authors review the alcohol beverage industry's role and views regarding advertising. The alcohol industry has its own set of advertising guidelines, which are preferable to Federal regulation. They conclude that the alcoholic beverage industry assumes advertising increases consumption.

Kilbourne, J., "Deadly Persuasion: The Case Against Advertising of 'Legal' Drugs," Adolescent Counselor, Oct/Nov, 1990.

Kilbourne argues that alcohol advertising affects attitude formation and the internalization of social norms. Kilbourne suggests ways to reduce the effects of alcohol advertising on children and to educate them about alcohol.

Maxwell, B. and M. Jacobson, Marketing Disease to Hispanics, Center for Science in the Public Interest, 1989.

The authors review the literature about the marketing of alcohol to Hispanics and the associated health risks of alcohol, tobacco, and "junk foods." Peer pressure and parental drinking behaviors are the two biggest factors affecting drinking by youth.

Mosher, J.F. and L.M. Wallack, "Government Regulation of Alcohol Advertising: Protecting Industry Profits versus Promoting the Public Health," Journal of Public Health Policy, December 1981, pp. 333-353.

Mosher and Wallack challenge the approach taken by the Bureau of Alcohol, Tobacco, and Firearms (BATF). They urge BATF to take seriously its responsibility under the Federal Alcohol Administration Act to protect the public from misleading and potentially misleading alcohol advertising.

Neuendorf, K., "Summary of Nov. 16 Presentation Addressing the Question, 'Should Advertising Be Restricted on Alcoholic Beverages?'" The ACA Research Quarterly, v. 1, no. 4, 1990, pp. 15-16.

Neuendorf agrees that it is impossible to pinpoint a causal relationship between alcohol advertising and consumption given the evidence to date. The most effective type of regulation would involve "counteradvertising" including health messages, rather than a prohibition against alcohol advertising.

Orlandi, M.A., L.R. Lieberman, and S.P. Schinke, "The Effects of Alcohol and Tobacco Advertising on Adolescents," Drugs and Society, v. 3, no. 1/2, 1988, pp. 77-97.

The authors explain arguments about the effects of advertising on children and adolescents that have been made by alcohol and tobacco industries, researchers, and public health advocates. They suggest an alternative framework for future discussions on the effect of alcohol and tobacco advertising on adolescent substance use.

Postman, N., C. Nystrom, L. Strate, and C. Weingartner, Myths, Men, & Beer: An Analysis of Beer Commercials on Broadcast Television, 1987, AAA Foundation for Traffic Safety, 1987.

The authors examine the cultural myths and messages in a sample of 40 commercials broadcast on network television during in February and March of 1987. Television commercials play an important role in children's internalization of cultural meanings, interpretations, and values, whether or not the commercials are directed at children.

U.S. Department of Health and Human Services, Alcohol, Drug Abuse, and Mental Health Administration, National Institute on Alcohol Abuse and Alcoholism, Seventh Special Report to the U.S. Congress on Alcohol and Health, January 1990.

The authors report the current information on alcohol abuse, the health consequences of alcohol use, and social factors involved in alcohol use. Research on the effects of advertising has not documented a strong relationship between alcohol advertising and consumption. The authors call for further research on the role of advertising.

Wallack, L.M., "Assessing Effects of Mass Media Campaigns: An Alternative Perspective," Alcohol Health and Research World, Fall 1980, pp. 17-29.

Wallack studies the assumptions that underlie mass media campaigns and offers an alternative framework for assessing possible campaign effects.

Wallack, L.M., "Mass Media Campaigns: The Odds Against Finding Behavior Change," Health Education Quarterly, v. 8, no. 3, 1981, pp. 209-251.

Wallack reviews the history, commonalities, and effects of large-scale moderation and abstinence campaigns. It is not surprising that mass media based campaigns have shown few direct effects.

Wallack, L.M., "Alcohol Advertising Reassessed: The Public Health Perspective," In Grant, Plant & Williams (Eds.) Economics and Alcohol: Consumption and Controls, 1983, pp. 243-248.

Wallack reviews studies that (1) use econometric models, (2) assess the effects of advertising on individuals, and (3) analyze the content of advertising. None of the approaches addresses the cultural meaning and values established and transmitted by advertising.

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