Evidence Report/Technology Assessment
Number 107

Preventing Violence and Related Health-Risking Social Behaviors in Adolescents

Prepared for:
Agency for Healthcare Research and Quality
U.S. Department of Health and Human Services
540 Gaither Road
Rockville, MD 20850
www.ahrq.gov

Contract No. 290-02-0003

Prepared by:
Southern California Evidence-based Practice Center, Los Angeles, CA

Investigators
Linda S. Chan, PhD
Michele D. Kipke, PhD
Arlene Schneir, MPH
Ellen Iverson, MPH
Curren Warf, MD
Mary Ann Limbos, MD, MPH
Paul Shekelle, MD

AHRQ Publication No. 04-E032-2
October 2004

This report may be used, in whole or in part, as the basis for development of clinical practice guidelines and other quality enhancement tools, or a basis for reimbursement and coverage policies. AHRQ or U.S. Department of Health and Human Services endorsement of such derivative products may not be stated or implied.

AHRQ is the lead Federal agency charged with supporting research designed to improve the quality of health care, reduce its cost, address patient safety and medical errors, and broaden access to essential services. AHRQ sponsors and conducts research that provides evidence-based information on health care outcomes; quality; and cost, use, and access. The information helps health care decisionmakers—patients and clinicians, health system leaders, and policymakers—make more informed decisions and improve the quality of health care services.

Suggested Citation:
Chan LS, Kipke MD, Schneir A, Iverson E, Warf C, Limbos MA, Shekelle P. Preventing Violence and Related Health-Risking Social Behaviors In Adolescents. Evidence Report/Technology Assessment No. 107 (Prepared by the Southern California Evidence-based Practice Center under Contract No. 290-02-2003.) AHRQ Publication No. 04-E032-2. Rockville, MD: Agency for Healthcare Research and Quality. October 2004.

Preface

The Agency for Healthcare Research and Quality (AHRQ), through its Evidence-Based Practice Centers (EPCs), sponsors the development of evidence reports and technology assessments to assist public- and private-sector organizations in their efforts to improve the quality of health care in the United States. This report was requested and funded by the Office of Medical Applications of Research (OMAR), National Institutes of Health (NIH) for the Consensus Development Conference on "Preventing Violence and Related Health-Risking Social Behaviors in Adolescents" and co-sponsored by the National Institute of Mental Health, NIH. The reports and assessments provide organizations with comprehensive, science-based information on common, costly medical conditions and new health care technologies. The EPCs systematically review the relevant scientific literature on topics assigned to them by AHRQ and conduct additional analyses when appropriate prior to developing their reports and assessments.

To bring the broadest range of experts into the development of evidence reports and health technology assessments, AHRQ encourages the EPCs to form partnerships and enter into collaborations with other medical and research organizations. The EPCs work with these partner organizations to ensure that the evidence reports and technology assessments they produce will become building blocks for health care quality improvement projects throughout the Nation. The reports undergo peer review prior to their release.

AHRQ expects that the EPC evidence reports and technology assessments will inform individual health plans, providers, and purchasers as well as the health care system as a whole by providing important information to help improve health care quality.

We welcome comments on this evidence report. They may be sent by mail to the Task Order Officer named below at: Agency for Healthcare Research and Quality, 540 Gaither Road, Rockville, MD 20850, or by email to **epc@ahrq.gov.**

Carolyn M. Clancy, M.D.
Director
Agency for Healthcare Research and Quality

Jean Slutsky, P.A., M.S.P.H.
Director, Center for Outcomes and Evidence
Agency for Healthcare Research and Quality

Barnett S. Kramer, M.P.H., M.D.
Director
Office of Medical Applications of Research

Kenneth S. Fink, M.D., M.G.A., M.P.H.
Director, EPC Program
Agency for Healthcare Research and Quality

Marian D. James, M.A., Ph.D.
EPC Program Task Order Officer
Agency for Healthcare Research and Quality

Acknowledgments

This study was supported by Contract 290-02-0003 from the Agency for Healthcare Research and Quality (AHRQ). We acknowledge the support of Jacqueline Besteman J.D., MA, the former Director of the EPC Program and the continuing support of Kenneth Fink, M.D., M.G.A., M.P.H., Director of the EPC Program and Marian James, Ph.D., the Task Order Officer for this project.

We deeply appreciate the support, commitment, and guidance of our Technical Expert Group (TEG), who served as vital resources throughout our process. They are Sonia Chessen from the Department of Health and Human Services, Sandra Graham, Ph.D., from the University of California at Los Angeles, Nancy Guerra, Ed.D., from the University of California at Riverside, Ron Haskins, Ph.D., from the Brookings Institute, Darnell Hawkins J.D., Ph.D., from the University of Illinois at Chicago, Doug Kirby, Ph.D., from ETR Associates, Georgine Pion, Ph.D., from Vanderbilt University, Cathy Widom, Ph.D., from New Jersey School of Medicine, and Franklin Zimring, J.D., from the University of California at Berkeley.

We would also like to extend our appreciation to our external peer reviewers, who provided constructive feedback and insightful suggestions for the improvement of our report. They are Paula Duncan M.D. from the Vermont Child Health Improvement Program, Kathy Grasso, J.D., from the United States Department of Justice, Lynne Havenkos, M.D., M.P.H., from the National Institute on Child Health and Human Development, Joan Sera Hoffman, Ph.D., from the Centers for Disease Control and Prevention, Patrick Kanary from the Center for Innovative Practices, and Danielle Laraque, M.D., from Mount Sinai School of Medicine.

We owe our thanks to our librarian, Melissa L. Just, M.L.I.S., who conducted preliminary searches and retrieved 100% of the full-length articles and to the members of our research team who tirelessly screened, reviewed, and abstracted the articles within an extremely tight time frame. They include Michael Chan, M.P.H.,and medical student, Sergui Grozavu M.A., Michele Mouttapa, Ph.D., candidate, Laura Parks M.P.H., Bettsy Santana B.A., and M.P.H. student, Ida Shihady M.P.H., and Robin Toblin M.A. and Ph.D. student.

Finally, we are indebted to Robert Johnson, M.D., Chair of the Conference Panel, who provided invaluable guidance throughout our project.

Structured Abstract

Context. The overarching goal of this review is to identify the highest quality research findings in the field of youth violence. In preparation for a state-of-the-science conference in the fall of 2004, the Office of Medical Applications of Research (OMAR) and the National Institute of Mental Health (NIMH) nominated and supported the topic for an Agency for Healthcare Research and Quality (AHRQ)-sponsored systematic review and analysis of the evidence on individual, family, school, community, and peer level influences as well as research to evaluate prevention intervention effectiveness. AHRQ awarded the Task Order to the Southern California Evidence-Based Practice Center (SC-EPC) and its partner, Childrens Hospital Los Angeles, to conduct the review.

Objectives. The evidence review was conducted to address six key questions mandated in the Task Order: (1) What are the factors that contribute to violence and associated adverse health outcomes in childhood and adolescence? (2) What are the patterns of co-occurrence of these factors? (3) What evidence exists on the safety and effectiveness of interventions for violence? (4) Where evidence of safety and effectiveness exists, are there other outcomes beyond reducing violence? If so, what is known about effectiveness by age, sex, and race/ethnicity? (5) What are commonalties of the interventions that are effective and those that are ineffective? (6) What are the priorities for future research?

Data Sources. We used data reported in published articles retrieved from any of four electronic databases—MEDLINE®, PsychINFO, SocioAbstracts, and ERIC. A systematic search of each database was performed in April/May of 2003, and then again in October/November of 2003.

Study Selection. Published articles were eligible for inclusion if they were peer-reviewed, were published in 1990 or thereafter, reported on research conducted in the United States, and specifically examined either risk/protective factors associated with youth violence perpetration or the effectiveness of a violence prevention intervention designed to reduce violence among adolescents, ages 12 through 17 years. Excluded were case reports, editorials, letters, reviews, practice guidelines, non-English language publications, and papers from which no data could be abstracted. To evaluate the literature related to risk factors, we limited our analysis to studies that used a prospective longitudinal cohort design, and to evaluate the literature related to intervention effectiveness, we limited our analysis to randomized or nonrandomized controlled trials in which a control group was used either concurrently or prospectively. Given these parameters, we screened a total of 11,196 titles and abstracts; reviewed 1,612 full-length articles; abstracted data from 265 articles onto evidence tables and ultimately analyzed evidence abstracted from 67 studies.

Data Extraction. All citations were screened by two independent researchers and discrepancies resolved by consensus. Data were abstracted and recorded onto evidence tables by a team member and then checked by a senior researcher. All screening and data abstraction used pre-established criteria and guidelines.

Data Synthesis. *To identify risk factors contributing to youth violence,* we reviewed findings that were reported in two or more cohort studies, and we reported a finding as consistently

associated with violence if at least 75 percent of the articles reported the same finding (i.e., 75 percent of articles reported a statistically significant association between a specific risk factor and a violence-related outcome). A finding was considered statistically significant if the article reported a p-value less than 0.05. *To evaluate the effectiveness of prevention interventions*, we considered an intervention to be effective if one or more violent outcome indicators was reported to be significantly different at the p less than 0.05 level. If none of the violent outcome indicators were reported to be significantly different at the $p<0.05$ level, we characterized those interventions as having no reported evidence of effectiveness.

Main Results. Across all studies, only one risk factor, male gender, was consistently reported to be significantly associated with youth violence perpetration. Low family socioeconomic status (SES) was consistently reported not to be an independent risk factor associated with youth violence. Co-occurrence of family SES with other risk factors could be associated with youth violence. Reported significance and non-significance showed very little consistency for all other risk factors. Moreover, few studies examined a comparable set of risk factors (i.e., risk factors were often examined only by a single study) limiting our ability to make conclusions based on the available evidence. Among studies that specifically focused on adolescent males, we identified a consistent significant association between violence and anger, cigarette smoking, and non-violent delinquency. For adolescent females, we identified a consistent significant association between violence and non-violent delinquency. For research conducted with at-risk youth populations, we found a consistent significant association between being Latino and repeat physical aggression among adolescent males; no consistency was observed for the findings of research conducted with at-risk adolescent females. With respect to the review of the effectiveness of prevention interventions, the number of studies was too small for the detection of any systematic differences among programs with different characteristics.

Conclusions: We found little agreement with respect to the definitions used to measure youth violence and ways in which risk/protective factors are conceptualized, operationally defined, measured, analyzed, and reported, despite the severe restrictions that limited the number and quality of studies reviewed. As a result, little consistency was observed in findings across individual studies and the literature does not appear to be growing in a cumulative nature. We recommend that researchers nationwide initiate efforts to develop comparable approaches to defining, measuring, analyzing, and publishing research data related to youth violence, and that new initiatives be funded to facilitate the collection of comparable data across multiple sites and with multiple youth populations. Furthermore, we recommend that future research consider the use of an "individual-level-data-meta-analysis" method to identify sequential and simultaneous co-occurrences of contributing factors to youth violence. We recommend that social scientists studying youth violence increase the rigor of their research, including the use of control populations and extended follow-up to evaluate the sustained effectiveness of youth violence prevention interventions.

Contents

Figures

Tables

Appendixes

Bibliography

Appendixes and Bibliography for this report are provided electronically at http://www.ahrq.gov/clinic/tp/adolvitp.htm.

Agency for Healthcare Research and Quality

Evidence Report/Technology Assessment

Number 107

Preventing Violence and Related Health-Risking Social Behaviors in Adolescents

Summary

Introduction

Over the last two decades of the 20th century, violence emerged as one of the most significant public health problems in the United States (Administration for Children and Families, 2004). While recent trends have been encouraging, homicide remains the second leading cause of death among adolescents (National Center for Injury Prevention and Control, 2004). During this period, an increasing number of research studies has have sought to characterize youth violence and the contexts in which it occurs, as well as risk and protective factors associated with such violence. At the same time, a myriad of prevention interventions have been developed and evaluated with multiple youth populations and in a range of settings.

In the fall of 2004, the National Institute of Mental Health (NIMH) will convene a State-of-the-Science Conference on "Preventing Violence and Related Health-Risking Social Behaviors in Adolescents." The purpose of this consensus conference is to provide a forum to present and review what is currently known about preventing youth violence. In preparation for this meeting, the Office of Medical Applications of Research (OMAR) and the National Institute of Mental Health (NIMH) nominated and supported the topic for an Agency for Healthcare Research and Quality (AHRQ)-sponsored systematic review and analysis of the evidence. AHRQ awarded this project to the Southern California Evidence-based Practice Center (SC-EPC) and its partner, Childrens Hospital Los Angeles, to conduct the review and summarize the findings in an evidence report. Researchers were to review longitudinal risk factor research to identify the role of individual, family, school, community and peer-level influences as well as interventional research to evaluate prevention intervention effectiveness.

This evidence report addresses the following six key questions:

1. What are the factors that contribute to violence and associated adverse health outcomes in childhood and adolescence?
2. What are the patterns of co-occurrence of these factors?
3. What evidence exists on the safety and effectiveness of interventions for violence?
4. Where evidence of safety and effectiveness exists, are there other outcomes beyond reducing violence? If so, what is known about effectiveness by age, sex, and race/ethnicity?
5. What are commonalities of the interventions that are effective, and those that are ineffective?
6. What are the priorities for future research?

For the purpose of this evidence review, we used the Centers for Disease Control and Prevention's definition of violence: "threatened or actual physical force or power initiated by an individual that results in, or has a high likelihood of resulting in, physical or psychological injury or death" (National Center for Injury Prevention and Control, 2004). We made the decision to include only the following types of violent behavior: murder or homicide, aggravated assault, non-aggravated assault, rape or sexsexual assault, robbery, gang fight, physical aggression, psychological injury or harm, and other serious injury or harm. Thus, we did not review the growing literature that reports on studies of

Agency for Healthcare Research and Quality

Advancing Excellence in Health Care • www.ahrq.gov

Evidence-Based Practice

suicide, verbal aggression, bullying, arson, weapon carrying, externalizing behaviors (e.g., acting out), attitude about violent behavior, youth crime against property or materials (such as burglary, theft), or intent to commit violence as outcomes. These related behaviors and attitudes are included in this report only to the extent that they have been proposed as risk factors for the forms of violence on which this report focuses.

The definition of violence prevention interventions that we used was developed for and published in the *Surgeon General's Report on Youth Violence* (Satcher, 2001). According to this definition, "Primary prevention interventions are those that are universal, intended to prevent the onset of violence and related risk factors; secondary prevention interventions are those implemented on a selected scale for children/youth at enhanced risk for youth violence, intended to prevent the onset and reduce the risk of violence; and tertiary prevention interventions are those that are targeted to youth who have already demonstrated violent or seriously delinquent behavior."

Methods

Analytic Framework

To complete the project with the resources available, it was necessary to narrow the focus of this evidence review. To this end, we limited our review to peer-reviewed articles published in 1990 or later and retrievable within four search engines—MEDLINE®, PsychINFO, SocioAbstracts, and ERIC. We also limited the review to studies conducted in the United States and focused on violent behavior perpetrated by adolescents, ages 12 through 17 years. Thus, this review excluded studies of violence perpetrated by children, pre-adolescents, and young adults.

To assist project staff in conducting the evidence review, a nine-member multidisciplinary Technical Expert Group (TEG) was established, comprising individuals with both content and methodological expertise. Specifically, the TEG brought to this review a diverse set of expertise from a range of fields and disciplines, including early childhood development, adolescent development, juvenile justice, child abuse and neglect, anthropology, psychology, sociology, social work, public health, and public policy.

We created a list of potential risk and protective factors organized by domain—i.e., individual, family, school, peer, community, and social domains—to inform data abstraction and synthesis. We also developed a conceptual and analytical framework to examine the associations among risk factors, violent behavior, and interventions to guide the analysis. As these background materials were being developed, we shared them with the NIH Panel Chair and our Task Order Officer, discussed them with members of our TEG, and made numerous revisions based on the feedback that we received.

Search

The National Library of Medicine (NLM) performed all searches. Librarians from NLM met with project staff via teleconference to discuss the scope, the key questions, and the search strategy. The librarians also worked with project staff to select the databases that were ultimately used and to evaluate the search strategies that had been developed by the project team.

NLM searched four electronic databases—MEDLINE®, PsychINFO, SocioAbstracts, and ERIC—in April/May of 2003 and again in October/November 2003. For "youth," the following search terms were used: adolescent, teen, juvenile, and youth. For "violence," the following terms were used: violence, school violence, dangerous behavior, rape, homicide, domestic violence, courtship violence, dating violence, interpersonal violence, date rape, rape, raping, rapes, rapist, bully, bullies, bullied, bullying, physical assault, physical attack, physical aggression, direct aggression, overt aggression, knifing, stabbing, gunshot, brutality, bludgeoning, and murder.

Study Selection

Three inclusion criteria were applied for citations and manuscripts: published in 1990 or thereafter, related to the range of risk and protective factors associated with perpetrators of youth violence and violence-related crimes between ages 12 and 17 years, and conducted in the United States only. Excluded were case reports, unpublished program evaluations, editorials, letters, reviews, practice guidelines, non-English language publications, and papers from which data could not be abstracted.

For the questions on risk factors, we based our assessment on prospective longitudinal cohort studies, because of the general consensus that cross-sectional studies would not allow us to identify temporal predictors of youth violence (Heimer, 1997; Herrenkohl, Guo, 2001). For the evaluation of the effectiveness of interventions, we examined the findings from randomized controlled trials (RCTs) as well as non-RCTs or single-group time series in which a control group was used either concurrently or prospectively.

Evaluation of Study Quality

We evaluated the quality of individual studies using the criteria set forth in the Procedures for EPC Reports for Office of Dietary Supplements (ODS) and OMAR (ODS and OMAR, 2003). Because all the prospective longitudinal cohort studies included in our review satisfied four of the seven criteria in the same ways, we used the three remaining criteria—

followup rate of 80 percent or more, valid and reliable instruments used, and appropriate control of confounding factors—to assess the quality of individual studies. For studies that assessed the effectiveness of interventions, we used the OMAR criteria for RCTs and observational studies.

According to OMAR guidelines (ODS and OMAR, 2003), the rating of the strength of scientific evidence remains the prerogative of the Consensus Panel. However, we conducted two sensitivity analyses to assist the Consensus Panel to assess the strength of the scientific evidence in our review. First, we re-analyzed the data excluding the studies with sample size below the thresholds set at 1,100 for the general population and 500 for the at-risk population, to restrict the analyses to the studies with the greatest power to detect significant predictors. Second, we re-assessed the findings using only studies with good quality.

Data Abstraction

For primary screening, two members of the team independently reviewed each title or abstract: one reviewer was a member of the faculty with specific expertise related to adolescent development and/or youth violence, and the other reviewer had a master's degree in public health or was a doctoral student in the field of psychology, public health, or prevention research. The Task Order Manager or the Task Order Coordinator compared the screening results of the two reviewers and resolved discrepancies. The same procedure was followed for secondary screening of full-length articles. For articles selected for inclusion, data were abstracted by a member of the project team onto a specially prepared form. Completed forms were checked by the Task Order Manager.

Data Synthesis

Risk factor identification. To identify homogeneous subgroups for data pooling, we stratified the eligible studies according to the following criteria: demographics of the study population; characteristics of the study; outcomes; and type of analysis. We used a systematic approach to summarize the findings. When findings for a single cohort were reported in multiple articles, the cohort was considered the unit of analysis. In the summary, findings for one cohort that were reported in more than one article were counted as only one article. However, if several articles reported findings for one cohort but each reported the findings for different outcome measures, each was counted. When a risk factor was assessed using both bivariate and multivariate analysis, the results of the multivariate analysis took precedence. Findings were considered significant if the p statistic was less than 0.05.

For summarizing the evidence, we considered a factor to be consistently associated with violence if 75 percent or more of the cohort studies reported a significant association for the factor. Likewise, factors reported not to be associated with violence in at least 75 percent of the studies under consideration were considered not associated with violence. Otherwise, the findings were considered inconclusive. We evaluated consistency for factors that were reported in two or more cohort studies. Evidence was considered inadequate if the results for a particular factor were reported in only one cohort study.

For evaluating the effectiveness of interventions. We stratified the accepted studies by the level of intervention and the type of study design. Initially, we planned to stratify the studies further by the various characteristics of interventions that might ultimately contribute to the effectiveness of the intervention (such as intervention setting and target population). However, many of the reports omitted mention of these study characteristics.

Because of the diversity of the studies, we did not pool findings across studies. Instead, we summarized the findings of the programs as effective or ineffective. We considered an intervention to be effective if one or more violence outcome indicators was reported to be significantly different at the $p<0.05$ level, based on the findings reported in the article(s). If none of the violence outcome indicators was reported to be significantly different, we considered the program ineffective.

Results

We screened 11,196 titles and abstracts, reviewed 1,612 full-length articles, and included 67 articles in our evidence assessment (35 for the risk factor questions and 32 for the intervention questions).

Factors Contributing to Youth Violence (Key Question #1)

The 35 articles that addressed risk factors contributing to youth violence were based on 23 prospective cohort studies covering 11 study populations defined by gender, race/ethnicity, and at-risk population. Findings for specific racial/ethnic groups suffered from small numbers of cohorts or small numbers of subjects.

Across all studies, only one risk factor, male gender, was consistently reported to be significantly associated with youth violence perpetration (Rivera and Widom, 1990; Roitberg and Menard, 1995; Saner and Ellickson, 1996; Komro, Williams, 1999; Foshee, Bauman, 2000; Herrenkohl, Guo, 2001; McCloskey and Lichter, 2003). Low family socioeconomic status (SES) was consistently reported not to be an independent risk factor for youth violence (Roitberg and Menard, 1995; Saner and Ellickson, 1996; Herrenkohl, Egolf, 1997; Brezina,

1999; Herrenkohl, Guo, 2001; Herrera and McCloskey, 2001). Co-occurrence of family SES with other risk factors was associated with youth violence. There was very little consistency of reported significance or non-significance for all other risk factors. Few studies examined a comparable set of risk factors (i.e., risk factors were often examined only by a single study) limiting our ability to draw conclusions based on the available evidence. Among studies that specifically focused on adolescent males, a consistent finding was the significant association between violence and anger (Felson, 1992; Foshee, Linder, 2001), cigarette smoking (Dornbusch, Lin, 1999; Ellickson, Tucker, 2001) and non-violent delinquency (Becker and McCloskey, 2002; Saner and Ellickson, 1996). For adolescent females, a consistent finding was the significant association between violence and non-violent delinquency (Becker and McCloskey, 2002; Herrera and McCloskey, 2003; Saner and Ellickson, 1996). For research conducted with at-risk youth populations, a consistent finding was the significant association between being Latino and repeated physical aggression among adolescent males (Loeber, Wei, 1999; Loeber, Wung, 1993); there were no consistent findings for research conducted with at-risk adolescent females.

Patterns of Co-occurrence of These Factors (Key Question #2)

In addition to our search for independent risk factors that have a high likelihood of leading to youth violence, we were also interested in clusters of risk factors that may lead to youth violence. A number of factors that were found to be statistically significant when no other risk factors were taken into account were found not to be significant when other risk factors were taken into consideration. For example, low SES or low family income was reported as a significant risk factor associated with youth violence when the co-occurrence of other risk factors was not taken into consideration. But when the effect of other risk factors was taken into consideration, its significance disappeared, implying that the other risk factor(s) were stronger predictor(s) of youth violence than was low SES. (Roitberg and Menard, 1995; Saner and Ellickson, 1996; Herrenkohl, Egolf, 1997; Brezina, 1999; Herrenkohl, Guo, 2001; Herrera and McCloskey, 2001).

We defined co-occurrence of factors as the simultaneous presence of two or more risk or protective factors that together predict violence in an individual. We identified five articles on four cohort studies that addressed different aspects of co-occurrences. These articles reported the following findings.

Pre/perinatal risk exposure combined with disadvantaged familial environment at age 7 increased the chances of criminal offending during early adulthood among a high-risk, inner-city group (Piquero and Tibbetts, 1999). Polydrug use was associated with increased violence in both boys and girls, a finding not identifiable from analyses that focused on the use of a specific drug (Dornbusch, Lin, 1999). Youth exposed to multiple risk factors were found to be more likely than others to engage in later violence (Herrenkohl, Egolf, 1997). The co-occurrence of parent-family connectedness, school connectedness/parental presence, and grade point average in both boys and girls significantly decreased the risk of youth violence (Borowsky, Ireland, 2002). Beyers et al. (Beyers, Loeber, 2001) reported the following combinations of risk factors associated with repeated youth violence: (a) living in a low-SES neighborhood, lack of guilt, sexual activity, carrying a hidden weapon, and poor communication at home and (b) living in a high-SES neighborhood and physical aggression. The following combinations of risk factors were reported not to be associated with repeat youth violence: (a) living in a low-SES neighborhood and any or a combination of the following: age, impulsive/hyperactive behavior, low school motivation, positive attitude toward problem behavior, boy not involved at home, poor parental supervision, peer delinquency, or bad friends and (b) living in a high-SES neighborhood plus any or a combination of the following: impulsive/hyperactive behavior, lack of guilt, positive attitude toward problem behavior, sexual activity, or peer delinquency.

Effectiveness of Interventions for Violence (Key Questions #3, #4, and #5)

We identified 32 intervention evaluation studies, of which 13 employed randomized controlled trial (RCTs) design and 19 employed other study designs. The following provides a summary of the key findings.

Effectiveness by level of intervention. Direct within-study comparisons of the effectiveness of interventions by the level of intervention (primary, secondary, tertiary) were not identified, but some measure of the effectiveness of interventions by level can be made by simply comparing the proportion of studies at each level that report beneficial effects. Not considering the study design and excluding one inconclusive study, effectiveness was reported in five of 15 (33 percent) primary interventions, four of 10 (40 percent) secondary interventions, and five of six (83 percent) tertiary interventions. When only RCTs were considered, effectiveness was reported in one of five (20 percent) primary intervention, three of six (50 percent) secondary intervention, and two of two (100 percent) tertiary interventions.

Effectiveness by age, gender, and race/ethnicity. The focus of this assessment was on adolescents ages 12 through 17; thus, all programs determined to be effective reduced violent

behavior in this age group. The data did not permit further analysis according to age. Similar to our assessment with the level of interventions, within study comparisons are the strongest analytic approach to study differential effectiveness by demographic groups. However, none of the studies provided the information needed to evaluate differential effectiveness by age, gender, or race/ethnicity. Instead, effectiveness was reported primarily within each gender or ethnic group.

Effectiveness by selected characteristics of intervention programs. Overall, we did not observe any differences in program effectiveness among different settings, between single or multimodal programs, among programs with different durations, or among programs implemented at different school levels. However, we observed that four of four (100 percent) secondary interventions that lasted a year or longer were effective (four of four), whereas five of five (100 percent) secondary interventions that lasted less than 6 months were ineffective.

Discussion

The overarching goal of this review was to bring greater scientific rigor to the evaluation process to identify the highest quality research findings in the field of youth violence. With the severely restricted scope of the project, much of the value of this report was the identification of the current status of research on youth violence, the existing research gaps and inconsistencies, and the need for additional scientifically rigorous studies. Despite the limited scope, we identified a voluminous literature that is rather fragmented in nature. We found little agreement with respect to the definitions used to measure youth violence and the ways in which risk/protective factors are conceptualized, operationally defined, measured, analyzed, and reported. As a result, the findings showed little consistency across individual studies and the research literature is not growing cumulatively. Consequently, we are limited in our ability to draw conclusions and make recommendations.

Specifically, for the review of risk factors contributing to youth violence, we were unable to perform a quantitative synthesis for the risk factors by developmental stages, by type of at-risk population, by type of violent outcome, and by type of statistical analysis due to the limited number of prospective cohort studies. Efforts to examine the effects of co-occurrence of risk factors have been limited, although some efforts have been made to examine the multifactorial nature of risk and protective factors contributing to youth violence.

With respect to the review of the effectiveness of prevention interventions, the number of studies was too small for the detection of any systematic differences among programs with different characteristics. The characterization of intervention programs was not consistently or uniformly reported in published articles, making it difficult to evaluate program effectiveness by program characteristics.

Priorities for Future Research (Key Question #6)

Risk factors contributing to youth violence. Considerable effort is needed to develop uniformity in the ways in which youth violence and violence-related outcomes are both defined and operationalized, and these definitions should be incorporated into future research to begin to build some consistency and uniformity in study findings. We therefore recommend initiation of a national effort to develop comparable approaches to defining, measuring, and analyzing research data related to youth violence, and the funding of new initiatives to facilitate the collection of comparable data across multiple sites and with multiple youth populations. Such multi-site cooperative agreement studies would permit the use of a combined prospective cohort from which a common standardized dataset could be assembled and analyzed.

Further, additional research is needed to examine both sequential and simultaneous co-occurrences of risk factors that contribute to youth violence. Future research should concentrate on minimizing both non-participation and attrition in longitudinal studies.

Natural prospective cohorts must be established, pseudo prospective cohorts could also be considered. We have identified many prospective cohort studies focused on various stages of development, different types of study population, and different types of outcomes that could be coordinated and assembled to form a pseudo prospective cohort from which a common dataset could be assembled and advanced statistical analysis conducted. Such an effort would require strong central support, cooperation from all parties involved, and long-term financial commitments.

Interventions for the prevention of youth violence. More randomized controlled interventions are needed to evaluate program effectiveness in general and for various groups of youth in particular, e.g., those of different ages, both genders, all ethnicities/races, and possessing the various characteristics that appear to increase risk. We therefore recommend that researchers increase the scientific rigor, including the use of control populations and extended followup, to evaluate the sustained effectiveness of youth violence prevention interventions. While RCTs with individual subjects are ideal, they are difficult to implement in "real world" settings, especially for the behavioral and social sciences, and group RCTs are the best alternatives. Therefore, it is important that more research effort be focused on the design, implementation,

and analysis of group RCTs. Research in this area will contribute greatly to the scientific methods in the social sciences.

A national consensus building effort is also needed to identify and clarify the science related to (a) the use of conceptual frameworks and causal pathways related to youth violence; (b) risk factors and mechanisms leading to violent outcomes; (c) strategies and interventions to reduce violent outcomes; (d) methodologies and scientifically grounded approaches that should ideally be used to evaluate prevention interventions; (e) the effective use of policy to reduce youth violence; and (f) methodologies for evaluating such policies.

Rating of study quality. For prospective longitudinal studies, we have shown that a high retention rate alone is inadequate to measure sample bias. We believe that the participation rate, followup or retention rate, and proportion of participants with complete data should be considered when assessing the possibility of bias in the study sample, especially for outcomes such as violence. For intervention studies, we do not believe that the OMAR study quality criteria truly assessed the quality of the studies we reviewed because they were derived primarily from clinical studies. Unlike many clinical interventions for medical conditions, youth violence interventions are often multifaceted, involve the efforts of multiple parties (e.g., teachers, parents, school administrators, and so on), are conducted over long periods of time, and can be adversely affected by factors that cannot be anticipated, characteristics that make the studies difficult to evaluate. The nature of the interventions in social science studies can also preclude some of the methodological components critical to clinical trials. The need to develop valid instruments to evaluate the quality of studies in the social sciences is apparent.

Quality of publications. Special efforts are needed to improve the quality of publications, including the consistency and adequacy with which the study characteristics, such as research questions, conceptual framework, study design, and description of the study population, are specified.

Evidence assessment methods. Because of the multifactorial nature of the factors contributing to youth violence, alternatives to quantitative synthesis of published information should be sought. Unlike many clinical interventions, interventions to prevent or stop youth violence are often multifaceted, involving the efforts of multiple parties (e.g., teachers, parents, and school administrators), requiring long time commitments, and being sensitive to factors that cannot be anticipated. We propose that social science researchers consider an "individual-level-data-meta-analysis" method (Olkin and Sampson, 1998; Mathew and Nordstrom, 1999; Stewart and Clarke, 1995; Stewart and Parmar, 1993; Nagin and Tremblay, 1999) for future systematic reviews to identify both independent predictors and clusters of predictors that lead to youth violence. The method is described further in the report.

Availability of the Full Report

The full evidence report from which this summary was taken was prepared for the Agency for Healthcare Research and Quality (AHRQ) by the Southern California Evidence-based Practice Center, under Contract No. 290-02-0003. It is expected to be available in October 2004. At that time, printed copies may be obtained free of charge from the AHRQ Publications Clearinghouse by calling 800-358-9295. Requesters should ask for Evidence Report/Technology Assessment No. 107, *Preventing Violence and Related Health-Risking Social Behaviors in Adolescents.* In addition, Internet users will be able to access the report and this summary online through AHRQ's Web site at www.ahrq.gov.

Suggested Citation

Chan LS, Kipke MD, Schneir A, Iverson E, Warf C, Limbos MA, Shekelle P. Summary, Evidence Report/Technology Assessment No. 107. (Prepared by the Southern California Evidence-based Practice Center, under Contract No. 290-02-0003.) AHRQ Publication No. 04-E032-1. Rockville, MD: Agency for Healthcare Research and Quality. September 2004.

References

Administration for Children and Families. Toward a blueprint for youth. Accessed: May 2004. http://www.acf.hhs.gov/programs/fysb/youthinfo/blueprint2.htm.

Becker KB, McCloskey LA. Attention and conduct problems in children exposed to family violence. Am J Orthopsychiatry 2002;72(1):83-91.

Beyers JM, Loeber R, Wikstrom PO, et al. What predicts adolescent violence in better-off neighborhoods? J Abnorm Child Psychol 2001;29(5):369-81.

Borowsky IW, Ireland M, Resnick MD, et al. Violence risk and protective factors among youth held back in school. Ambul Pediatr 2002;2(6):475-84.

Brezina T. Teenage violence toward parents as an adaptation to family strain: Evidence from a national survey of male adolescents. Youth Soc 1999;30(4):416-44.

Dornbusch SM, Lin I-C, Munroe PT, et al. Adolescent polydrug use and violence in the United States. Int J Adolesc Med Health 1999;11(3-4):197-219.

Ellickson PL, Tucker JS, Klein DJ. High-risk behaviors associated with early smoking: results from a 5-year follow-up. J Adolesc Health 2001;28(6):465-73.

Felson RB. "Kick 'em when they're down": Explanations of the relationship between stress and interpersonal aggression and violence. Sociol Q 1992;33(1):1-16.

Foshee VA, Linder F, MacDougall JE, et al. Gender differences in the longitudinal predictors of adolescent dating violence. Prev Med 2001;32(2):128-41.

Heimer K. Socioeconomic status, subcultural definitions, and violent delinquency. Soc Forces 1997;75(3):799-833.

Herrenkohl RC, Egolf BP, Herrenkohl EC. Preschool antecedents of adolescent assaultive behavior: a longitudinal study. Am J Orthopsychiatry 1997;67(3):422-32.

Herrenkohl TI, Guo J, Kosterman R, et al. Early adolescent predictors of youth violence as mediators of childhood risks. J Early Adolesc 2001;21(4):447-69.

Herrera VM, McCloskey LA. Gender differences in the risk for delinquency among youth exposed to family violence. Child Abuse Negl 2001;25(8):1037-51.

Loeber R, Wei E, Stouthamer-Loeber M, et al. Behavioral antecedents to serious and violent offending: Joint analyses from the Denver Youth Survey, Pittsburgh Youth Study and the Rochester Youth Development Study. Stud Crime Crime Prev 1999;8(2):245-63.

Loeber R, Wung P, Keenan K, et al. Developmental pathways in disruptive child behavior. Dev Psychopathol 1993;5(1-2):103-33.

Mathew T, Nordstrom K. On the equivalence of meta-analysis using literature and using individual patient data. Biometrics 1999;55(4):1221-3.

McCloskey LA, Lichter EL. The contribution of marital violence to adolescent aggression across different relationships. J Interpers Violence 2003;18(4):390-412.

Nagin D, Tremblay RE. Trajectories of boys' physical aggression, opposition, and hyperactivity on the path to physically violent and nonviolent juvenile delinquency. Child Dev 1999;70(5):1181-96.

National Center for Injury Prevention and Control. Youth violence: Overview. Accessed: May 2004. http://www.cdc.gov/ncipc/factsheets/yvfacts.htm.

ODS and OMAR. Procedures for EPC Reports for ODS and OMAR. 2003.

Olkin I, Sampson A. Comparison of meta-analysis versus analysis of variance of individual patient data. Biometrics 1998;54(1):317-22.

Piquero A, Tibbetts S. The impact of pre/perinatal disturbances and disadvantaged familial environment in predicting criminal offending. Stud Crime Crime Prev 1999;8(1):52-70.

Rivera B, Widom CS. Childhood victimization and violent offending. Violence Vict 1990;5(1):19-35.

Roitberg T, Menard S. Adolescent violence: A test of integrated theory. Stud Crime Crime Prev 1995;4(2):177-96.

Saner H, Ellickson P. Concurrent risk factors for adolescent violence. J Adolesc Health 1996;19(2):94-103.

Satcher D. Youth violence: A report of the surgeon general. Accessed: May 2004. http://www.surgeongeneral.gov/library/youthviolence/.

Stewart LA, Clarke MJ. Practical methodology of meta-analyses (overviews) using updated individual patient data. Cochrane Working Group. Stat Med 1995;14(19):2057-79.

Stewart LA, Parmar MK. Meta-analysis of the literature or of individual patient data: is there a difference? Lancet 1993;341(8842):418-22.

www.ahrq.gov
AHRQ Pub. No. 04-E032-1
September 2004

ISSN 1530-440X

Evidence Report

Chapter 1. Introduction

Purpose of this Review

Over the last two decades of the 20th century, violence emerged as one of the most significant public health problems in the United States (Administration for Children and Families, 2004). While adults continue to constitute the majority of violent offenses, the decade between 1983 and 1993 was marked by an unprecedented surge of violence, often lethal violence, among young people in the United States (Administration for Children and Families, 2004). This surge of violence left countless young people and their families affected by injuries, disability, and death. Since 1993, there have been encouraging signs that youth violence may be on the decline, a trend that researchers, and the legal and policy communities are attempting to understand. The dramatic rise in youth-centered violence that began in the early 1980s precipitated an urgent and widespread drive among researchers and policy makers across multiple disciplines and sectors to understand the factors that contribute to violence and to develop interventions to address these factors and stem the tide of increasing violence. Science can play an important role in clarifying the scope of the problem, elucidating the responses needed to further reduce and/or eliminate youth violence and related harmful health behaviors, and informing both the development and evaluation of new policies and prevention interventions.

In October of 2004, the National Institutes of Health will convene a State-of-the-Science Conference on "Preventing Violence and Related Health-Risking Social Behaviors in Adolescents." The purpose of this consensus conference is to provide a forum to present longitudinal and experimental risk factor research and intervention research that has yielded information documenting the role of individual, family, school, community, and peer level influences. In preparation for this meeting, the Office of Medical Applications of Research (OMAR) and the National Institute of Mental Health (NIMH) nominated and supported the topic. The Agency for Healthcare Research and Quality (AHRQ) awarded this project to the Southern California Evidence-Based Practice Center (SC-EPC) and its partner, Childrens Hospital Los Angeles, to conduct a systematic review and analysis of the scientific evidence that exists relative to the prevention of violence and related health-risking social behaviors in adolescence, and to summarize these findings in an evidence report. This systematic review included an evaluation of the factors that contribute to violence during childhood and adolescence as well as the effectiveness of prevention interventions. The findings contained in this report will be presented at the 2004 conference.

Epidemiology of Youth Violence

According to a seminal 2001 report by the Surgeon General, youth violence is one of the Nation's most serious, insidious, and complex problems, influencing nearly every aspect of society (Satcher, 2001). In the decade that extended from roughly 1983 to 1993, an epidemic of violent, often lethal behavior emerged in the United States, resulting in untold injury, disability, and death (Cook & Laub, 1998). Indeed, during that decade, arrests of youth for serious violent offenses surged by 70 percent; more alarmingly, the number of young people who committed a homicide nearly tripled. During that same period of time, the homicide arrest rate, increased 273 percent for adolescents, 14 to17 years (from 7.0 to 19.1 per 100,000), and 65 percent for young adults, 18 to 24 years (from 15.7 to 25.3 per 100,000). In contrast, the homicide arrest rates reported among adults 24 years and older declined by 25 percent (6.3 to 4.7 per 100,000). This

increase in homicide arrest rates among adolescents and young adults has largely been attributed to an increase in gang-related activity, an increase in illicit drug use, and the increased availability of guns and other lethal weapons (Hennes, 1998). Among the youth arrested for violent offenses, most are males (84 percent), with males accounting for 94 percent of juveniles convicted for homicide (Federal Bureau of Investigations, 1999).

Yet as we mentioned above, since 1993, the peak year of the epidemic, some encouraging signs have appeared that youth violence is declining. Three important indicators of violent behavior—arrest records, victimization data, and hospital emergency room records—have shown significant downward trends nationally. Despite these encouraging trends, homicide continues to be the second and third leading cause of death in the U.S. for persons aged 15 to 24 years and 5 to 14 years, respectively, and it is the leading cause of death among African American and the second leading cause of death among Latino youth (National Center for Injury Prevention and Control, 2004).

While students are safer in school than out of school, recent shootings in the nation's schools have focused public attention on school-related violence and crime (DeVoe, Peter, 2002). From July 1, 1992 through June 30, 1999, there were 358 school-associated violent deaths in the United States. Overall, school-associated homicide rates appear to have increased in recent years due to an increase in students killed in multiple-victim homicide events. In a 1992-1993 survey of the National School Boards Association, 82 percent of school districts nationwide reported student involvement in violence had increased over the past 5 years (Lowry, Sleet, 1995). Violent behaviors reported by districts included student-on-student assault (78 percent of districts), shootings or knifings (39 percent), and rape (15 percent of districts). An examination of more recent trends in student-on-student assaults shows that the percentages of students who reported fighting on school property declined from 16 percent in 1993 to 13 percent in 2001.

Not all violence reaches the level of homicide. Indeed, one of the most common forms of violence perpetrated by youth is physical fighting. According to the 1999 Youth Risk Behavior Survey, 36 percent of students nationwide reported having been in a physical fight one or more times on 1 or more days during the 12 months preceding the survey, amounting to 105.9 incidents of physical fighting per 100 students. Overall, male students (44 percent) were significantly more likely than female students (27 percent) to have participated in a physical fight; this finding was consistent across racial/ethnic groups and within grades (Kann, Kinchen, 2000). However, encouraging trends have emerged in the percentage of youth reporting involvement in physical fighting, with a significant decrease between 1993 and 1999.

Young males are disproportionately represented as both victims and perpetrators of all forms of violence in the United States. Of the 18,272 homicides committed in the United States in 1998, 35 percent of all victims were younger than age 25 years and 82 percent of these victims were male (Dahlberg and Potter, 2001). Males, 10 to 17, are also significantly more likely to be involved in aggravated assault and robbery than their female peers, while male students in grades 9 through 12 were more likely to report having been in a physical fight and to have engaged in physically aggressive behaviors while at school (Lowry, Sleet, 1995).

Further, the risk of violent death and of committing a violent crime is greater for young people of color and those who are economically disadvantaged. Homicide is the leading cause of death among African-American and Latino youth, 15 to 24. (Dowd, 1998) In 1998, homicide rates for African-American youth were more than twice the rate of Latino youth and more than 13 times the rate of Caucasian, non-Hispanic youth (56.5 vs. 23.3 vs. 4.2 per 100,000, respectively) (Dahlberg and Potter, 2001). In addition to having the highest homicide

victimization rate, African-American male youth also have the highest homicide arrest rate. In 1991, African-Americans were 7 times more likely to be arrested for homicide than Whites. Between 1985 and 1994, African-American males, ages 14 to 17 years, had the largest increase in homicide arrest rates (315 percent) (Hennes, 1998). However, racial differences in homicide rates appear to be mediated by both poverty and race-specific homicide victimization; homicide arrest rates become similar after controlling for socioeconomic status (Hennes, 1998).

Over the past two decades, a growing body of research has begun to identify the range of individual, social, environmental and community-level factors that are associated with an increased risk for youth violence, delinquency, and juvenile crime. Researchers generally agree that behavior, including violent and antisocial behavior, is the result of a complex interplay of individual, biological, genetic, and environmental factors that begin to exert their effects during or even prior to fetal development and continue throughout life (Bock and Goode, 1996). Evidence is also emerging regarding developmental precursors in early childhood to youth antisocial and delinquent behavior (McCord, Widom, 2001; Shonkoff and Phillips, 2000). The literature documents the exploration by researchers of potential causes for or contributors to youth violence from early childhood such as child abuse, particular parenting styles, and features of the environment or the community. A wealth of literature also documents investigations of adolescents themselves and their involvement with gangs and other peer groups, the availability of firearms in their community, and their relationships with their sexual partners, all as potential cofactors for violence. Another body of research literature looks at resiliency in an effort to find clues to why the majority of young people with similar individual, familial, and community exposures to these risk factors do not become involved in violence.

Despite this growing evidence, it has been exceedingly difficult to evaluate the strength of this evidence regarding the reported relationships between youth violence and a wide range of risk factors and protective influences. This difficulty is in part due to the fact that numerous disciplines and fields of research, including but not limited to epidemiology and public health, psychology, child development, sociology, anthropology, social work, medicine, education, and public policy, have collectively contributed to this literature, each potentially looking at and operationally defining violence, as well as risk and protective influences, in different ways. Moreover, a wide range of research study designs have been used to evaluate risk and protective influences, with varying degrees of scientific rigor. As a result, the current literature is fragmented in nature, with inconsistent findings often reported across individual studies. While numerous attempts have been made to review the literature (Dahlberg and Potter, 2001; Raine, 2002; Sampson, Morenoff, 2002; Villani, 2001), it remains unclear which risk factors are most salient across different research settings and subject populations. Consequently, it remains relatively unclear which risk and protective factors are most amenable to change through prevention. Moreover, few have attempted to perform a systematic review of the strength of the existing evidence, or to limit their scope to those studies conducted with the greatest scientific rigor. Thus, questions remain about what future research is needed to extend the current literature. It is for all these reasons that the National Institutes of Health commissioned a systematic review of the literature and the strength of the evidence reported in this literature, the results of which are summarized in this report.

Violence Prevention Programs

As the rates of violence began to increase in the 1980s, an entire field of violence prevention emerged with the design and development of many new violence prevention intervention

approaches and programs. Prevention and early intervention programs are now in place in cities and regions throughout the country; many target youth violence through early child interventions, others are specifically targeted to adolescents. And while many of these interventions have been evaluated to determine their effectiveness in preventing violent behavior that is perpetrated by youth, the quality and scientific rigor of those evaluations has varied considerably. Moreover, the research on youth violence prevention remains fragmented in nature, in part because of the wide range of interventions approaches used, some better described than others, with the specific targets for the interventions often poorly defined. In addition, given the wide range of program designs and the settings in which they are likely to be delivered, it is difficult to determine what scientific standard should be set and/or methodological approach used to evaluate existing programs with the utmost in scientific rigor. A number of youth violence interventions and prevention programs have been demonstrated to be effective (Satcher, 2001). Unfortunately, few interventions effectively address involvement with delinquent peers and gang membership. Moreover, determining which type of intervention approach might be most effective for which individuals remains largely an unsolved problem, as do sustaining positive outcomes associated with these interventions over time and enacting the kinds of national, state, and local policies that will address the underlying risk and protective factors that are so closely associated with youth violence, delinquency, and other potentially harmful behaviors.

Societal Burden of Youth Violence

The economic costs of violence can be difficult to measure. The cost of violence can be considered in terms of economic, emotional, and social costs, but no reliable estimates exist for expenditures associated with medical care, legal and social investigations, and interventions related either to nonfatal assaults or to homicide. Some estimates for medical care costs do exist. For example, medical treatment for fatal and non-fatal gunshot wounds is estimated to cost one billion dollars per year. The costs of other potential medical consequences of violence including the need for long-term institutional care, rehabilitation services, and support services to victims and their families, have not been estimated. The costs of forensic investigations, court proceedings, incarceration, or processes related to legal execution can also be considered among the economic costs of violence. One unique measure that can incorporate both financial and societal costs is Years of Potential Life Lost. . In 1994, more than 470,000 premature years of life were lost due to the homicide deaths of individuals younger than 25 years old (Dowd, 1998).

Even more difficult to measure than the economic costs of violence are the social and emotional costs. The social and emotional costs of violence include long-term physical and mental disabilities and adverse psychological and behavioral consequences for perpetrators, surviving victims, their families, entire communities, and society as a whole. .

Summary

Given this growing yet fragmented knowledge base regarding a critically important public health problem, it is important to conduct a systematic review of the literature in an effort to bring the best available science to bear on future programs and policies. Summarized herein are the findings from a review of the evidence that was conducted on behalf of the National Institutes of Health's Office of Medical Applications and Research (OMAR) and the Agency for Healthcare Research and Quality's Evidence-based Practice Center.

Chapter 2. Methods

Development of the Project Team

We worked closely with the Director of the Southern California Evidence-Based Practice Center to assemble a team of clinical, behavioral, and methodological experts, most of whom were staff members and faculty at Childrens Hospital Los Angeles. The team included the Task Order Director, with overall responsibility for the project; the Task Order Manager and Synthesis Coordinator, a biostatistician responsible for the methodology of the review and with expertise in conducting evidence based reviews; the Task Order Coordinator, responsible for coordinating activities to ensure effective communication and reporting; four Task Order Literature Reviewers and Synthesizers from the fields of medicine (two pediatricians, one of whom is board certified in Adolescent Medicine) and public health; and a Librarian. Additional researchers, primarily masters and doctoral students from the fields of public health, psychology, and prevention research, joined the team for three months to assist with the primary and secondary reviews. During the first six months, the team met weekly to review and refine the methodology of the task order.

Establishment of the Technical Expert Group (TEG)

In consultation with our Task Order Officer and the NIH Conference Panel Chair, we first created a Technical Expert Group (TEG) comprising nine individuals with both content and methodological expertise in the areas of youth violence and the prevention of youth violence. Specifically, we sought to create a multidisciplinary TEG that represented a range of related fields and disciplines, including early childhood development, adolescent development, juvenile justice, child abuse and neglect, anthropology, psychology, sociology, social work, public health, and public policy. The TEG was drawn from a large pool of potential candidates identified through a review of the literature and solicitation of nominations from researchers, and representatives from related federal agencies and private foundations. The list of potential technical experts and their curricula vitae were submitted to the Task Order Officer for approval. The final roster is provided in **Appendix D1.**[*]

Defining the Scope of Key Questions

This study was guided by a set of specific research questions that were developed by an NIMH panel of experts and modified in the Task Order. The initial Task Order specified that the team review and examine evidence related to both youth violence and delinquency. The body of published research related to youth violence and violence prevention alone was believed to be massive. Thus, one of the first efforts was to review the scope of the evidence related to youth violence and violence prevention interventions and to delinquency and to refine the key research questions that guided the Task Order. To assess the feasibility of reviewing both sets of literature, we first conducted a preliminary search of relevant databases to obtain an estimate of the number of published articles that might potentially be reviewed. From this search, we learned that MEDLINE® alone contained over 6,000 citations related to youth violence and over 11,000 articles related to youth delinquency, with little overlap between these two bodies of literature. We then determined that given the project timeline and available resources, it would

[*] Appendices for this report are provided electronically at http://www.ahrq.gov/clinic/tp/adolvitp.htm.

not be feasible to review the literature on youth violence as well as that on delinquency as outcome behaviors. Thus, in consultation with our Task Order Officer and the NIH Panel Chair, we limited the scope of this review to focus specifically on youth violence as an outcome. As a result, the key questions were modified to reflect the revised scope of this review. The following list of questions was used to inform the evidence review:

1) What are the factors that contribute to violence and associated adverse health outcomes in childhood and adolescence?
2) What are the patterns of co-occurrence of these factors?
3) What evidence exists on the safety and effectiveness of interventions for violence?
4) Where evidence of safety and effectiveness exists, are there other outcomes beyond reducing violence? If so, what is known about effectiveness by age, sex, and race/ethnicity?
5) What are the commonalties of the interventions that are effective, and those that are ineffective?
6) What are the priorities for future research?

Development of Causal Pathways and Analytical Framework for Key Questions

Once the scope of the evidence report and the key questions were refined, we adopted definitions for youth violence and violence prevention interventions to further guide the selection and review of the appropriate literature. The definition of youth violence that we chose was developed by the Centers for Disease Control and Prevention Injury Center:

> *Violence is "the threatened or actual physical force or power initiated by an individual that results in, or has a high likelihood of resulting in, physical or psychological injury or death"* (National Center for Injury Prevention and Control).

The definition of violence *prevention* interventions that we chose was developed for and published in the Surgeon General's Report on Youth Violence (Satcher, 2001): *"Primary prevention interventions* are those that are universal, intended to prevent the onset of violence and related risk factors; *secondary prevention interventions* are those implemented on a selected scale for children/youth at enhanced risk for youth violence, intended to prevent the onset and reduce the risk of violence; and *tertiary prevention interventions* are those that are targeted to youth who have already demonstrated violent or seriously delinquent behavior."

We also generated a list of potential risk- and protective factors that have been found to be associated with youth violence. This list was, in turn, organized by domain – i.e., individual, family, school, peer, community, and social, and macro-level domains – and used to inform data abstraction and synthesis (**Appendix E**[*]).

Finally, we developed a framework to examine conceptually and analytically the associations between risk factors, violent behavior, and interventions. The Causal Pathways for Violent Behavioral Outcomes During Adolescence (**Figure 1**) focus on the age of exposure to risk factors. The Conceptual Framework for Risk and Protective Factors by Age of Exposure (**Figure 2**) depicts the potential opportunities for primary, secondary, and tertiary prevention of youth violence and associated adverse health outcomes.

As these documents were being developed, we shared them with the NIH Panel Chair and our Task Order Officer. We also discussed these documents with members of our TEG during

[*] Appendixes for this report are provided electronically at http://www.ahrq.gov/clinic/tp/adolvitp.htm.

several teleconference meetings, and made numerous revisions based on the feedback that we received.

Literature Search

As specified by the Task Order, the National Library of Medicine (NLM) performed all the searches that were used for this evidence review. Librarians from NLM met with project staff via teleconference to discuss the evidence review, the scope of the review, and the key questions. They also worked with project staff to select the literature databases that were ultimately used and evaluated the search strategies that had been developed by the project team.

In addition, members of the project team worked closely with the NIH Panel Chair and members of the TEG to decide how to further refine the scope of the review and hence, the search strategy. Decisions related to the scope of the review included determining which bodies of literature and search databases we would target and how far back in time we would search for related publications. Ultimately, we chose to limit our review to peer-reviewed published articles, articles retrievable within four search engines – MEDLINE®, PsychInfo, SocioAbstracts, and ERIC, and articles that were published in 1990 or thereafter, recognizing that by doing so, we would exclude a considerable segment of the literature. This decision was made in an effort to reduce the number of citations to be reviewed, given the time and resource constraints of the project and to ensure that our review was focused on the most current literature.

The decision was also made to limit the review to studies that were conducted in the United States, given growing evidence to suggest that numerous risk- and protective factors for violence are country specific, particularly factors that affect youth violence, and because the overarching purpose of the NIH consensus conferences will be to identify gaps and future research needs for research that will largely be conducted in the United States. Even with the limitations placed on the initial search for relevant literature, our first search generated over 10,000 unduplicated citations for review.

We chose to limit the scope of the review further to focus specifically on violent behavior perpetrated by youth, ages 12 through 17 years. We also did not include in our review the increasingly popular topics of verbal aggression, bullying, arson, weapon carrying, externalizing behaviors (e.g., acting out), attitudes about violent behavior, and intent to commit violence. Because our primary focus was on perpetration of violence, we also did not include the extensive literature about childhood and youth victimization. Moreover, this report does not review literature related to youth crime against property or materials (e.g. burglary, theft, vandalism). Thus, these related behaviors and attitudes are considered in this report only to the extent that they appear in the literature as risk factors for violence. In addition, the review did not include studies that examined precursors to violence that occurred in early adulthood (i.e., 18 years and older) or studies on the prevention of violence among young adults (i.e., 18 years of age and older).

As presented in **Table 1**, the NLM performed four searches in April/May of 2003 using four databases – MEDLINE®, PsychInfo, ERIC, and SocioAbstracts. The specific search strategies and terms used by NLM for these searches are provided in **Appendices A1 through A9[*].** Each time a search was performed, every effort was made to eliminate duplicate citations of articles that were referenced in more than one database. This process included an electronic removal of

[*] Appendixes for this report are provided electronically at http://www.ahrq.gov/clinic/tp/adolvitp.htm.

duplicate citations, first by NLM and then by the project librarian, followed by manual cross-checking of all citations. **Table 1** provides a summary of the number of citations generated by each step and across the searches of the various databases provided to us by NLM. After elimination of duplicates, we were left with a total of 10,852 unique citations generated by these searches. A complete record of all titles and abstracts was kept using EndNote. We then performed a preliminary screening of these citations (described below).

To ensure that articles published during the course of this project were included, the NLM conducted a second supplemental search in October of 2003, using the same search strategies and databases. This search yielded an additional 344 citations; thus a total of 11,196 citations were identified during the course of this project.

Development of Data Collection Forms

We developed three data collection forms specifically for this project, including a Title/Abstract Screening Form (Form 1), a Secondary Screening Form for Full-Length Articles (Form 2), and the Study Quality Review Form (see **Appendixes B1, B2,** and **B3***).

The Title/Abstract Screening Form was developed as an initial screening tool to evaluate whether articles were appropriate for the evidence review, given the scope and key questions. The titles and abstracts (when available) were reviewed using six criteria to determine if they were eligible for inclusion within the evidence review. Articles were rejected if 1) they did not report original research findings (e.g., the article was an editorial, letter, discussion of clinical practice, overview, consensus statement, opinion piece, or commentary); 2) violence was not an outcome of the research; 3) the research did not involve human subjects; 4) the study was conducted outside the United States; 5) the age of the study population was 18 years or older; or 6) the study did not focus on youth as perpetrators of violence. If none of the rejection criteria applied, the article was deemed eligible for further review and the full-length article was retrieved.

The Secondary Screening Form of Full-Length Articles was developed to screen full-length articles for their appropriateness, given the scope and key questions. This form included three additional eligibility/rejection criteria, including 1) citation was a duplicate citation; 2) datawere not abstractable; and 3) study did not address one of the key questions. The form was also used to record the type of study design, using coded categories developed for and published in the Agency for Healthcare Research and Quality's Evidence Report Number 47: "Systems to Rate the Strength of Scientific Evidence" (West, King, 2002).

The Study Quality Review Form was used to evaluate the quality of each individual study; this form was adapted from guidelines that had previously been established by the OMAR to evaluate the quality of study designs (ODS and OMAR, 2003). The domains and elements for evaluating individual randomized controlled trials and observational studies are included in Form 3 (**Appendix B3***).

After developing these three screening/reviewing instruments, we conducted pilot testing and training with members of the project team to ensure the reliability and validity of the screening and review of data. For the primary screening, the entire team was given the same set of 10 titles and abstracts to review. The Task Order Manager and Coordinator then reviewed the results with the team to ensure that all reviewers were in agreement about criteria for rejection and inclusion. When discrepancies were identified or questions about key terms emerged, they were

brought to the team for discussion and resolution. For the secondary review, the team was similarly trained. The Task Order Manager thoroughly reviewed the screening instrument and answered questions, particularly those regarding new reasons for rejection. Reviewers were instructed to submit questions to the Task Order Manager by email, and these questions were shared with the entire team and discussed at weekly meetings.

Screening of Retrieved Titles/Abstracts Against Inclusion/Exclusion Criteria

When the searches had been completed and the duplicates had been removed, the citations were exported from EndNote into Microsoft Word so that each individual title and abstract could be printed on its own page for screening purposes. Excel spreadsheets were also created to record the results of the screening.

Two members of the team independently screened each citation. One screener was a member of the faculty with specific expertise related to adolescent development and/or youth violence, and the other screener had a masters degree in public health or was a doctoral student in the field of psychology, public health, or prevention research. The Task Order Manager or the Task Order Coordinator compared the screening results of the two screeners, resolved discrepancies, and recorded the decisions in the Excel master file. The citations for which full-length articles were to be pulled were forwarded to our librarian for retrieval. For the rejected citations, the reason for rejection was recorded (i.e., the first reason for rejection that was identified by the screeners). This protocol was followed throughout all screening processes.

Many citations identified through the initial and supplemental searches did not include an abstract or had a limited abstract. Thus, information was sometimes inadequate to perform the initial screening. In these cases, the full-length article was retrieved and the articles were screened using the secondary screening procedures (further described below).

At each staff meeting, the team reviewed the rules and instructions for screening and discussed any questions that arose during the initial round of screening. Most of the questions that arose during this round focused on whether or not terms used in the titles or abstracts corresponded to behaviors that fell within the definition of violence employed by the Task Order. These terms included, but were not limited to, conduct disorder, verbal aggression, oppositional defiant disorder, and externalizing behavior. Since many of these terms are not used uniformly in the literature and the title or abstract generally does not provide a full description of the behavior, many of these abstracts were accepted for further review.

Retrieval and Review of Full-Length Articles

The titles/abstracts identified for further review were forwarded to the librarian for full article retrieval. Libraries at both Childrens Hospital Los Angeles and the Keck School of Medicine at the University of Southern California were the primary sources of the articles. Articles not found at either library were sought through Inter-Library Loan requests. We were able to retrieve all 1,612 full-length articles.

Two independent reviewers used the Secondary Screening Form to screen all the full-length articles; the same project staff and screening procedures used for the primary screening were used for the secondary screening. As with the title/abstract screening, the Task Order Manager compared the screening results provided by the two screeners, resolved discrepancies through consensus, and recorded the decisions on the Excel master file. This process resulted in one of two outcomes: The article was either accepted for data abstraction or rejected. As was done with

the primary screening, the first reason for rejection identified by the two screeners was recorded for all rejected articles.

Data Abstraction into Evidence Tables

For each articlethat was deemed eligible for inclusion, data were abstracted by a member of the project team and subsequently checked by the Task Order Manager. Two sets of evidence tables were constructed for this project: the Evidence Abstraction Table for Risk Factors (Evidence Table #1) which was specifically designed to address Key Questions #1 and #2, and the Evidence Abstraction Table for Interventions (Evidence Table #2) which was designed to address Key Questions #3-#5. The Task Order Manager presented drafts of the format, coding, and recording instructions for the two Evidence Tables to the team for comment and discussion. Based on this discussion, the Evidence Tables were modified prior to abstraction. The format for Evidence Table #1 and Evidence Table #2 are included in **Appendixes B4 and B5**[*].

To pilot test the forms, we assigned each reviewer the same two articles for abstraction: one article about risk factors and one about an intervention. As a result of this pilot testing, minor modifications were made to the abstraction forms. To ensure quality control over time, the team met regularly to discuss and review terms, procedures, and the abstraction process. In addition, reviewers submitted questions by email to the Task Order Manager, and the answers were shared with the entire review team. Most of the questions that arose during this period addressed missing data in the articles. For example, reviewers wanted to know whether or not to abstract an article when only the median age was provided (rather than the age range) and whether or not to abstract articles when the outcome reflected only attitudinal change or skill development but not a change in behavior. The Task Order Manager later checked all evidence tables for consistency and accuracy.

For the articles that addressed Key Questions #1 and #2, the following data were abstracted using the Evidence Abstraction Table for Risk Factors: 1) article identifier information, including internal record number, first author's last name, year of publication, and journal of publication; 2) characteristics of the study, including study design, study quality, sample size, age, gender and race or ethnicity description of the study population, time period, location, setting, study population, and inclusion and exclusion criteria; 3) risk factor information, including main independent risk factor(s), instrument(s) used to measure factors, and other factors studied; 4) outcome definitions and characteristics, including outcome measure(s), definition of the outcome, instrument used to measure outcome(s), type of instrument, circumstance or situational context in which the violence measured occurred, e.g. whether the violent incident was proactive or reactive, weapon used, and victim-offender relationship; 4) findings reported in the article; 5) any adverse health outcomes; and 6) whether the study was theory-driven and the theory that was used.

For the 32 articles that addressed Key Questions #3 through #5, the following data were abstracted using Evidence Abstraction Table for Interventions: 1) article identifier, including internal record number, first author's last name, year of publication, and journal of publication; 2) characteristics of the study, including study design, study quality, sample size, age, gender and race or ethnicity description of the study population, time period, location, setting, study population, and inclusion and exclusion criteria; 3) moderating and or mediating variables reported in articles; 4) outcome definition and characterization, including outcome measure(s), definition, instrument used to measure outcome, type, circumstance or situational context in

[*] Appendixes for this report are provided electronically at http://www.ahrq.gov/clinic/tp/adolvitp.htm.

which the violence measured occurred, e.g. whether the violent incident was proactive or reactive,, weapon used, and victim-offender relationship; 5) whether the program represented a primary, secondary, or tertiary intervention, the kind of intervention (such as behavioral, skill building, etc.), how the intervention was delivered, target population, setting where intervention was delivered, setting where subjects were recruited, professional background of the individual(s) performing intervention (e.g. teacher, psychologist, graduate student), duration of the program, and/or frequency of intervention; 6) study findings; 7) intervention effectiveness, and 8) any negative outcomes attributed to the intervention.

Review and Assessment of Study Quality

For this Task Order, we were expected to use the criteria set forth in the Procedures for EPC Reports for Office of Dietary Supplements (ODS) and the Office of Medical Applications of Research (OMAR) (ODS and OMAR, 2003) to evaluate the quality of individual articles. Thus, to assess the quality of individual articles for Key Questions #1 and #2, we first evaluated the relevance of seven criteria previously developed for use with observational studies: 1) baseline comparability, 2) concurrent controls, 3) follow-up rate greater than or equal to 80 percent, 4) valid and reliable instruments used for assessments, 5) equal application of instruments for assessment, 6) important outcomes considered, and 7) appropriate control of confounders. Because all the prospective longitudinal cohort studies included in our review satisfied criteria #1, #2, #5, and #6 in the same ways, we used the three remaining criteria (i.e., #3, #4, and #7) to evaluate the quality of articles addressing risk and protective factors associated with youth violence. In addition, although it was not considered as a criterion, we examined the participation rate of each cohort study as well as the retention rate because we believe that it is important to maximize both the participation rate and follow-up rate to achieve an unbiased study sample for prospective longitudinal cohort studies. Large participation and retention rates are especially important for outcomes such as violence, because risk factors that are likely to contribute to youth violence are also likely to be associated with both participation and attrition rates.

For the Key Questions related to effectiveness of interventions, Key Questions #3, #4, and #5, we used the criteria set forth by OMAR for randomized controlled trials and observational studies (**Appendix B3**[*]). The rating system used with randomized controlled trials consists of "Good", "Fair" or "Poor." A "Good" rating was assigned if the study fulfilled all the OMAR criteria without uncertainty, which means that comparable groups were assembled initially through adequately concealed randomization and maintained throughout the study (follow-up at least 80 percent) and an intention-to-treat analysis was used. Intention-to-treat analysis was performed for randomized controlled trials. Intention-to-treat is a strategy for analyzing data from randomized controlled trials that compares participants according to the groups to which they were originally randomly assigned. This type of analysis is generally interpreted as including all originally enrolled participants in the final analysis, regardless of the treatment they actually received, whether they subsequently withdrew, or some other deviation from the protocol (Hulley, Cummings, 2001). A study was graded "fair" if any or all of the following problems occurred: the groups assembled initially were generally comparable but some questions remained whether some (although not major) differences occurred with follow-up due to differential attrition; some but not all important outcomes were considered; and some but not all

[*] Appendixes for this report are provided electronically at http://www.ahrq.gov/clinic/tp/adolvitp.htm.

potential confounders were accounted for. A "Poor" rating was assigned if the study failed to (at least partially) fulfill most criteria or if any of the following were reported: lack of comparability of groups assembled initially or failure to maintain them throughout the study; failure to mask outcome assessment; little or no attention given to key confounders; and lack of use of intent-to-treat analysis.. The rating system used with observational studies also used the "Good", "Fair" or "Poor" categories. A "Good" rating was assigned when the following criteria were satisfied: 1) comparable groups were assembled initially and maintained throughout the study (follow-up at least 80 percent); 2) reliable and valid measurement instruments were used and applied equally to the groups; 3) all important outcomes were considered; and 4) appropriate attention was given to confounders in analysis. A study was rated as "fair" if any or all of the following problems occurred: 1) generally comparable groups were assembled initially but some question remained whether some (although not major) differences occurred with follow-up, 2) measurement instruments were acceptable (although not the best) and generally applied equally, 3) some, but not all, important outcomes were considered, and 4) some, but not all, potential confounders were accounted for. A "Poor" rating was assigned if any of the following was reported: 1) groups assembled initially were not similar or comparable, or were not maintained throughout the study; 2) unreliable or invalid measurement instruments were used to assess exposure or outcomes or not applied equally among groups, and 3) key confounders were given little or no attention.

The rating system used with case-control studies also used the same three categories: "Good", "Fair" and "Poor". A "Good" rating was assigned when the following criteria were satisfied: 1) there was an appropriate ascertainment of cases and a nonbiased selection of case and control participants (i.e., cases and controls were drawn from the same population); the exclusion criteria were applied equally to cases and controls; 2) the response rate was equal to or greater than 80 percent; 3) diagnostic procedures and measurements were accurate and applied equally to cases and controls; and 4) appropriate attention was paid to confounding variables. A "Fair" rating was assigned for studies where: 1) there was no obvious subject recruitment or selection bias, 2) the retention rate was less than 80 percent, and 3) some attention was given to possible confounding variables. A "Poor" rating was assigned if: 1) significant sampling biases were evident, 2) the response rates were less than 50 percent, or 3) insufficient attention was given to important confounding variables.

Procedures to Reduce Bias, Enhance Consistency, and Check Accuracy

To reduce selection bias, we assigned two reviewers — one faculty member with relevant expertise and one masters- or doctoral-level intern — to screen and review titles/abstracts and full-length articles at every stage of the selection process. For data abstraction, one member of the project team with at least a masters degree in public health, psychology, or prevention research abstracted the data onto evidence tables, and the Task Order Manager reviewed all of the evidence tables for data abstraction and recording accuracy.

Analysis of the Scientific Evidence

We describe here our methods of data synthesis for the two sets of key questions: Questions #1 and #2, the risk factor questions; and Questions #3, #4, and #5, the intervention questions.

Factors Contributing to Youth Violence (Key Questions #1 and #2)

Key Question #1 asks, "What are the factors that contribute to violence and associated adverse health outcomes in childhood and adolescence?" and Key Question #2 asks, "What are the patterns of co-occurrence of these factors?" where co-occurrence is defined as the simultaneous presence of two or more risk or protective factors that are predictive of violence in an individual.

We used the causal pathways depicted in **Figure 1** and the conceptual framework laid out in **Figure 2** to guide the design of our analytic framework for these two questions. In **Figure 1**, we indicated 32 pathways from birth through outcome assessment at ages 12 to17, broken down into 62 stage-paths or outcome-paths. A stage-path represents the path from one stage to another. An outcome-path represents the path from factor exposure to outcome within the same stage-path. In **Figure 1**, we used "A" to denote the exposure stage-path from the birth stage to the infant/toddler stage (age 0-3), "B" to denote the exposure stage-path from infant/toddler stage (age 0-3) to the early childhood/latency stage (age 4-8), "C" to denote the exposure stage-path from the early childhood/latency stage (age 4-8) to the early adolescent stage (age 9-11), D to denote the exposure stage-path from the early-adolescent stage (age 9-11) to the adolescent stage (age 12-17), and E to denote the exposure to outcome-path within the adolescent stage (age 12-17). A complete prospective longitudinal study would follow participants from birth to adolescence and would provide probabilities for each stage-path and outcome-path. Thus, a goal of our analytic framework was to estimate the probability for each stage-path and outcome-path as laid out in **Figure 1**. The probabilities derived for the 32 outcome-paths in stage E would provide us with the likelihood of violent behavior at ages 12 through 17 for the 32 causal pathways.

To address Key Questions #1 and #2, which were related to risk factors associated with youth violence, we chose to review and analyze only the published findings of studies that used a prospective longitudinal cohort study design to examine risk factors. The decision to do so was based on several factors. First, the longitudinal prospective cohort design has stronger internal validity than other designs such as retrospective cohort studies or cross-sectional studies. Second, cross-sectional studies would not allow us to scientifically identify temporal predictors of youth violence. Lastly, resource constraints would have made it difficult to analyze data from the 198 articles that reported findings from cross-sectional studies.

As previously noted, the primary outcome of interest was violence, defined as "*threatened or actual physical force or power initiated by an individual that results in, or has a high likelihood of resulting in, physical or psychological injury or death"* and, for this study, perpetrated by youth ages 12 through 17 years. This definition was further operationalized to include the following types of violent behavior during the adolescent years: murder or homicide, aggravated assault, non-aggravated assault, rape or sexual assault, robbery, gang fight, physical aggression, psychological injury or harm, and other serious injury or harm.

Categorization of Risk and Protective Factors. Risk and protective factors associated with the perpetration of violence were organized within five major domains: individual, family/home, peers, school, and community factors. Within each domain, we further organized the risk and protective factors into constructs, with a list of specific risk factors.

- Individual-level risk- and protective factors were divided into nine constructs: biological risk factors, race/ethnicity, physical development, neurological/cognitive development, psychological condition, school functioning, behavioral development, social ties, and life

experience.

- Risk- and protective factors within the family/home domain included five constructs: home environment, family/parent characteristics, family conflict/harmony, parenting style or care-giver behaviors, and the quality of the parent-child relationship(s).
- Peer-related risk- and protective factors
- School-related risk- and protective factors included two constructs: the characteristics of the school environment and school policies.
- Community-level risk and protective factors also included two constructs: poverty/environmental risk factors and other environmental factors such as high crime rate, exposure to violent media, easy access to alcohol and drugs, easy access to firearms.

We developed this list of risk and protective factors following an initial review of the literature and then further expanded and/or modified it as we reviewed the evidence (**Appendix E**[*]).

Five age ranges/developmental stages were identified to further stratify the risk and protective factors by the timing of the exposure. These age ranges/developmental stages included prenatal exposure(prior to birth), infancy/toddler (0 through 3 years), childhood (4 through 8 years), early adolescence (9 through 11 years), and adolescence (12 through 17 years).

To examine the adverse health outcomes associated with the perpetration of youth violence, we established an additional classification scheme and coding system. The adverse health outcomes of youth perpetrators of violence were classified into five major categories: death, permanent and/or major physical disability, temporary and/or minor physical disability, mental health injury, and social health injury. Permanent and/or major physical disability included, but was not limited to, brain damage, paralysis, loss of extremities, and blindness. Temporary and/or minor physical disability included, but was not limited to, broken extremities. Mental health injuries included, but were not limited to, post-traumatic stress disorder (PTSD), depression, anxiety, and sexual problems. Social health injury included, but was not limited to, years of productive life lost, homelessness, family disruption, educational disruption, cycles of revenge and retaliation, STD/AIDS, and unintended pregnancy.

Grouping Data for Analysis. To search for homogeneous subgroups of participants for analysis, we stratified each of the studies included within the evidence review according to the following criteria:

- type of study population including gender, ethnicity, and risk level;
- characteristics of the study cohort including age at enrollment, duration of follow-up, and age at outcome assessment;
- type of outcomes being assessed; and
- type of analysis used to produce the findings.

We planned to pool findings from three or more studies within a homogeneous subgroup and provide pooled estimates of effect sizes. However, if we could not find three or more studies within a homogeneous subgroup for meta-analysis, we would use the vote-counting methods to summarize the study findings (Cooper and Hedges, 1994). Vote-counting is not the method of choice when test statistic values are reported for each study. Estimators based on vote-counting methods are less efficient than estimators based on effect sizes. Although vote-counting is not always the method of choice, in some cases we might not have a choice. If one or more of the

[*] Appendixes for this report are provided electronically at http://www.ahrq.gov/clinic/tp/adolvitp.htm.

studies do not report test statistics, but do report the direction and/or statistical significance of results, vote-counting procedures can be quite useful (Cooper and Hedges, 1994). In a vote-counting procedure, all studies that have data on a dependent variable and a specific independent variable of interest are examined. Three possible outcomes are defined. The relationship between the independent variable and the dependent variable is either significantly positive, significantly negative, or there is no specific relationship in either direction. The number of studies falling into each of these three categories is then simply tallied.

We summarized the study findings by the vote-counting procedure as follows:

- First, at least two cohort studies must report findings for a specific risk or protective factor. The evidence for a risk or protective factor was considered inadequate when it was reported in only one cohort study.
- Second, we classified the risk or protective factors into three categories of consistency:
    - those consistently reported as being significantly associated with violence (defined as at least 75 percent of the studies testing an association reporting a statistically significant result);
    - those consistently reported as being not statistically significantly associated with violence (similarly defined as ≥75 percent of studies); and
    - those where studies reported mixed findings.

A finding was considered to be statistically significant if the article reported a p-value less than 0.05. Because of the heterogeneity in the number and type of covariates or confounding factors included in the analytic model and the inconsistency in the way effect size was reported in the literature, we did not report the effect size of a study in the descriptive summary.

In many instances, study findings from a single cohort of subjects were reported in a number of articles. When this was the case, we used the cohort study as the unit of analysis rather than the article for either positive or negative outcome. Thus, in the summary of findings, different articles that reported the same outcomes for the same cohort were counted only once, whereas, findings for different outcomes were counted once for positive outcome and once for negative outcome. We also counted the same findings from different types of analysis within one article as one finding. When a finding was reported from both a bivariate analysis and a multivariate analysis in which the effects of other covariates were adjusted, only the finding from the multivariate analysis was used. To summarize the findings for each risk or protective factor, we included, first, the number of cohort studies that showed statistically significant findings, followed by the number of cohort studies that showed non-significant findings, both set off by parentheses. A finding that showed a p-value of less than 0.05 was considered statistically significant.

Sensitivity Analyses. This method of simply counting the number of studies with a significance positive or a significant negative finding is not recommended if it does not take into account the size and strength of the associations reported in the individual studies. In order to have a better understanding of the strength of the evidence on risk or protective factors reported this way, we conducted two sensitivity analyses to examine the risk or protective factors consistently reported to be associated or not associated with youth violence perpetration. The first sensitivity analysis considered the sample size and power of the study and the second sensitivity analysis considered the study quality.

For the sensitivity analysis on sample size and power, we used the thresholds set at a sample size of 1100 for the general population and 500 for the at-risk population. These thresholds were

developed using the logistic regression model most used in the literature. **Table 2** presents the power to detect a minimum odds ratio of 1.5 and 2.0 at a 0.05 level of significance for two levels of assumption regarding the correlation between the risk factor of interest and other risk factors in the model, various levels of probability of violence, and various cohort sizes, based on the logistic regression model. If we assume a 5-percent probability of youth violence at the mean level of the risk factors in the model for the low-risk population, a sample size of 1100 would be needed to achieve at least an 80 percent power to detect an odds ratio 1.5 or higher. If we assume a 15-percent probability of youth violence at the mean level of the risk factors in the model for the at-risk population, a sample size of 500 would be needed to achieve at least an 80 percent power to detect an odds ratio 1.5 or higher.

In the second sensitivity analysis, we excluded the studies that did not meet all OMAR study quality criteria. We re-assessed the effect of heterogeneity by performing a sensitivity analysis on the subgroups of "good" quality studies, as defined by the OMAR criteria. As pointed out previously, while we initially intended to perform further sensitivity analysis by the size and strength of the association, this analysis was not possible because the size and strength of the association was often not reported and/or not abstractable.

It is important to note the difference in the analytic approaches necessary to answer Key Question #1 compared with Key Question #2. While Key Question #1 was intended to identify *independent* risk factors that have a high likelihood of leading to youth violence, Key Question #2 was intended to identify *clusters* of risk factors that may lead to youth violence. Very frequently, a factor that is found statistically significant in a univariate or bivariate analysis becomes non-significant after adjusting for other factors in the model. However, with Key Question #2, we are interested in identifying clusters of risk factors that occur simultaneously (termed co-occurrence here) and that lead to youth violence. Different from the independent factors identified in Key Question #1, the factors in a cluster are likely to be highly correlated and if we subject them to adjustment in multivariate analysis, many will likely become non-significant. Therefore, analytically, while we are looking for *independent* risk or protective factors that occur simultaneously in Key Question #1, we are looking for *dependent* or correlated risk or protective factors in Key Question #2.

Interventions for Youth Violence (Key Questions #3, #4, and #5)

Key Question #3 asks, "What evidence exists on the safety and effectiveness of interventions for violence?

Key Question #4 asks, "Where evidence of safety and effectiveness exists, are there other outcomes beyond reducing violence? If so, what is known about effectiveness by age, sex, and race/ethnicity?"

Key Question #5 asks "What are commonalties of the interventions that are effective, and those that are ineffective?"

Our analytical plan for these questions included a process of stratifying studies and then pooling outcomes across a set of homogeneous studies.

The first step in our assessment was to stratify the accepted studies by the level of intervention and the type of study design. Initially we planned to stratify the studies by the various characteristics of an intervention, including the level of prevention (i.e., primary, secondary, tertiary), type of intervention (e.g., therapeutic, cognitive-behavioral), manner in which the intervention was delivered (e.g., one-on-one, small or large group), target population, setting where intervention was delivered (e.g., home, school, or community setting), setting from

which subjects were recruited, type of professional performing the intervention (e.g., researcher, educator), and duration and/or frequency of intervention sessions. These important features of interventions might ultimately contribute to the effectiveness of an intervention. However, during our review, we found that many of the characteristics of the interventions were not described or reported in the literature. Thus, accepted studies were stratified only by the level of prevention and the study design.

An intervention was considered a primary prevention intervention when it was implemented universally, i.e., to prevent the onset of violence and related risk factors within the general population. A secondary prevention intervention was defined as an intervention that was implemented selectively with children/youth who had been identified as being at increased risk for violence, to prevent onset and/or reduce the risk of violence. Tertiary prevention interventions were defined as those interventions that were targeted to youth who had already engaged in violent behavior.

We stratified study designs into five types: randomized controlled trial, non-randomized controlled trial, prospective study, cross-sectional study, or single group time series study.

Within each stratum defined by level of intervention and study design, we further evaluated the homogeneity of the studies by the type of study population, type of outcome measures, and type of program. For the outcome measure of violence, we used the same criteria for stratification as for Key Questions #1 and #2. For the study population, we used the constructs and age brackets of the exposure factors to define the study population that received the intervention. Only published data were used (i.e., we did not contact authors for additional information). Study quality was not used as a criterion for stratification because of the lack of agreement about how to rate social science research.

Once the eligible studies were stratified according to these predefined criteria, we planned to use meta-analysis to pool the findings if three or more studies appeared in each homogeneous stratum. However, because of the heterogeneity of the study populations (age, gender, race/ethnicity, general or at-risk population), the characteristics of the programs (level, type, setting, duration/frequency), the outcome measures (rate of growth or decline, prevalence or incidence rate), and the measurement timeframes (before and after implementation; measures at one month, one year, or several years after intervention), no two programs were alike. Thus, we did not pool study findings using meta-analytic methods but summarized the findings qualitatively using the vote-counting methods instead.

Rating the Strength of Scientific Evidence

According to the OMAR guidelines, EPCs are not required to make judgments about the overall strength of a body of evidence. The rating of the strength of scientific evidence remains the prerogative of the Consensus Panel. However, we conducted two sensitivity analyses to assist the Consensus Panel to assess the strength of the scientific evidence in our review. The first sensitivity analysis addressed the adequacy of number of subjects studied. We reanalyzed the data excluding the studies with sample size below the thresholds set at 1100 for the general population and 500 for the at-risk population. The second sensitivity analysis addressed the quality of studies. We re-assessed the findings excluding the studies that did not meet all OMAR study quality criteria.

Priorities for Future Research (Key Question #6)

At the outset of the project, we established a conceptual framework (a road map of causal pathways); frameworks to categorize exposure factors, interventions, and violence outcomes; an analytical plan to assess the evidence according to key questions; and tools to assess study quality and rate the strength of the evidence. These items were used as yardsticks to measure the adequacy of the existing literature to address the key questions and to identify gaps in relevant research.

We used the findings from our rating of the overall strength of a body of evidence to identify gaps and potential areas for future research in three domains: quality, quantity, and consistency.

For quality, we addressed the extent to which the design, conduct, and analysis displayed by a body of research minimized selection-, measurement-, and confounding biases.

For quantity, we referred to the strength of the relationship between the exposure factor being evaluated and the outcome being measured, as well as to the amount of information supporting that relationship. Three main factors contributed to quantity: the magnitude of effect (i.e., estimated effects such as mean differences, odds ratio, relative risk, or other comparative measure); the number of studies performed on the topic in question (e.g., only a few versus perhaps a dozen or more); and the number of individuals studied, aggregated over all the relevant and comparable investigations, which provides the width of the confidence limits for the effect estimates.

For consistency, we referred to the degree to which a body of scientific evidence was in agreement with itself and with outside information. A body of evidence is said to be consistent when numerous studies performed in different populations using different study designs to measure the same relationship produce essentially similar or compatible results. In addition, consistency addresses whether a body of evidence agrees with externally available information about the topic. It is important to note, however, that consistency is not possible without a uniform approach to defining and operationalizing the independent and dependent variables studied.

While the first area of recommendations address the quality of the study, the second area of recommendations address the quality of the publication. We addressed the adequacy of description of the characteristics of the study such as study questions, conceptual framework, study design, description of study population, randomization procedures if any, blinding procedures, data collection procedures and instruments, validity of data collection instruments, definition of and rationale for choice of exposure factors and outcomes, analytical approaches, statistical analysis, and publication of findings.

The third area of recommendations addressed the methods we used to assess the evidence on this topic of youth violence. The criteria driving this evidence review have been effectively applied to a review of the literature relating to the treatment of illness and disease. However, we question whether these exact criteria and methods can be applied effectively in a review of research that examines such a complex social problem such as youth violence. We summarized what this evidence assessment has and has not contributed to the field and made suggestions of how future assessments of evidence could be approached.

It is our hope that this evidence report will provide a basis for future research not only in the area of youth violence, but also in the area of quality of research, quality of publications, and quality of evidence assessment methodology.

Identification of Peer Reviewers

To identify a group of Peer Reviewers, we solicited nominations from our Technical Expert Group, our Panel Chair, and national associations recommended by our Project Officer (including the American Academy of Pediatrics, the American Public Health Association, the American Association of Health Plans, the American Academy of Family Physicians, the American Society of Internal Medicine, the American Psychological Association, and the American College of Physicians, and the Society of Adolescent Medicine). The role of Peer Reviewers is to provide independent feedback about the report. As a result of these solicitations, we received nominations for 24 individuals. These individuals represented federal agencies, academia, philanthropy, clinical practice, and managed care. From this list, the Task Order Project Director invited eight individuals — representing a variety of expertise and geography — to participate. This list of peer reviewers was approved by the Task Order Officer.

Peer Review Process

A copy of the draft evidence report was mailed to each peer reviewer, along with an instruction sheet (**Appendix B10**[*]) for reviewing the draft evidence report. A copy of the draft evidence report was also mailed to the members of the Technical Expert Group. All reviewers were asked to respond within three weeks. Six of the eight peer reviewers, six of the nine technical experts, and one AHRQ-appointed peer reviewer provided comments. **Appendix D2**[*] lists the names and affiliations of the six peer reviewers who submitted their comments.

Upon receipt of all responses from the peer reviewers and technical experts, the project staff compiled a summary of the comments and changes and revised the draft evidence report accordingly. We submitted a complete copy of each reviewer's comments, together with the report of disposition of those comments to the Task Order Officer for review and approval.

[*] Appendixes for this report are provided electronically at http://www.ahrq.gov/clinic/tp/adolvitp.htm.

Chapter 3. Results

Overview

Of the 11,196 titles and abstracts from the initial and supplemental literature searches, 1,612 (14.4 percent) met our criteria for eligibility for retrieval and secondary review. The results of the primary screening are summarized in **Table 3.** The reasons for rejecting the remaining 9,584 citations are summarized in **Table 4**. We were able to retrieve all 1,612 full-length articles. Secondary screening resulted in the acceptance of a total of 466 (28 percent) articles for data abstraction. Of these articles, 404 addressed either the first or second key question for this evidence review (i.e., these articles examined risk factors associated with youth violence), and 66 articles addressed one of the other key questions (i.e., these articles considered outcomes associated with a violence prevention intervention). Four of the accepted articles addressed both sets of questions (i.e., risk factors for youth violence and intervention effectiveness). A summary of the reasons why the other 1,146 articles were rejected is provided in **Table 5**. During the abstraction process, 201 articles were rejected because, on further review, they did not provide data that could be abstracted; the study outcome was not violence as defined by the project; or the research did not address one of the evidence review's Key Questions. The reasons for rejecting articles during this tertiary review are presented in **Table 6**. Of the 265 remaining articles, 67 were included in our evidence assessment: 35 for the risk factor questions and 32 for the intervention questions. **Figure 3** presents the screening and review process used for the task order. In the following sections, we present the findings of our analysis for each of the five Key Questions.

Key Question #1: What are the factors that contribute to violence and associated adverse health outcomes in childhood and adolescence?

The 35 articles that were included in our assessment reported findings from 23 prospective longitudinal cohort studies; the number of articles per cohort study ranged from 1 to 6. As pointed out in Chapter 2, we used the cohort as the unit of analysis so as to assign the same weight to studies whose findings were published in a single article and studies whose findings were published in multiple articles. A list and description of the 23 prospective cohort studies is provided in **Table 7**. Additional information about the study subjects and study design for each prospective study is provided in **Table 8**, including age, gender and race/ethnicity of the study sample, duration of follow-up assessment, the sample size used in reported statistical analyses, and the retention rates.

As noted in **Table 8,** the 23 cohort studies showed considerable variability with respect to the age at which subjects were first enrolled in the study, ranging from birth to 19 years; the duration of follow-up, which ranged from 1 to 18 years; the sample size, which varied from 86 to 14,358 subjects; and the retention rate, which ranged from a low of 33 percent to a high of 100 percent. We categorized the prospective studies according to sample characteristics, including population types (general population of children or adolescents vs. an at-risk population), gender, and racial/ethnic group; this information is summarized in **Table 9. Table 10** summarizes the various outcomes reported in each of the published articles by type of study population, the setting from which subjects were recruited, and sample size.

From the sample-size column in **Table 10,** we can determine the adequacy of sample size for each subpopulation. Based on the sample size and power considerations in **Table 2**, a cohort size of 1100 would be needed for the general population and 500 would be needed for the at-risk population, to achieve an 80 percent power to detect an odds ratio 1.5 or higher at 0.05 level of significance. Based on these thresholds, articles that deal with cohorts #8, #9, #12, #14, #22, and #23 for the general population and cohorts #1, #2, #17, and #21 for the at-risk population would not have adequate power to identify risk- or protective factors leading to youth violence. As a result, we lacked adequate statistical power for three of the six subpopulations of the general population, all of which are ethnic subpopulations (A-3: Male, African-American; A-4: Male, White; and A-6: Female, African-American. The three subpopulations with adequate power all represent multiple races/ethnicities. For the at-risk population, only two ethnic subpopulations were studied, each in a single cohort study. Subpopulation B-2, African-American males and females, studied 867 subjects and subpopulation B-4, White males, studied 195 subjects.

We then examined the other descriptor information in **Table 10**: outcome descriptor, recruitment setting, and age, and observed that no two prospective cohort studies were alike with respect to the type of study outcome descriptor, the recruitment setting, and the age at enrollment. Thus, we did not consider it to be scientifically sound to pool data across the heterogeneous cohort studies using meta-analysis. Instead, we summarized the study findings by population groups according to adequacy and consistency, defined as follows. First, at least two cohort studies must have reported findings for a specific risk- or protective factor: the evidence for a risk- or protective factor was considered inadequate when it was reported in only one cohort study. Second, we classified the risk- or protective factors into three categories of consistency: those consistently reported as being significantly associated with violence (defined as at least 75 percent of the studies that tested an association reporting a statistically significant result); those consistently reported as being not significantly associated with violence (similarly defined as 75 percent or more of studies); and those where studies reported mixed findings. A finding was considered to be statistically significant if the article reported a p-value of less than 0.05. In this summary, we did not use the effect size as a criterion because of the heterogeneity in the number and type of covariates or confounding factors included in the analytic model and the inconsistency in the way effect size was reported in the literature.

Using these criteria, we summarized the findings for each of the study populations that had at least two cohort studies and an adequate number of study subjects together with the combined findings for all 11 population groups (**Table 11**). As described in Chapter 2, we summarized the findings for each risk- or protective factor by including, first, the number of cohort studies that showed statistically significant findings, followed by the number of cohort studies that showed non-significant findings, both set off by parentheses (a finding that showed a p-value of less than 0.05 was considered statistically significant). We further summarized the findings presented in **Table 11** for all study populations, the general population, and the at-risk population in **Tables 12, 13, and 14,** respectively.

When all population groups were considered, findings for a total of 151 single factors were examined: 85 factors (56 percent) related to the individual risk domain, 40 factors (26 percent) related to the parental/familial risk domain, 11 factors (7 percent) related to the peers risk domain, three factors (2 percent) related to the school risk domain, and 12 factors (8 percent) related to the community risk domain. In addition, 12 multiple factors or pathways examined in this set of literature fell in one or more domain.

As presented in **Table 12**, seven individual domain risk factors were found to be consistent

predictors of youth violence, including male gender, antisocial behavior, alcohol use, alcohol and drug use, drug dealing, weapon carrying, and non-violent delinquency. Of the parental/familial risk factors, only lack of parental attachment was found to be a significant predictor of youth violence. Numerous risk factors across all risk domains were either consistently not associated with youth violence or were associated only in some studies, and many of the remaining factors were examined in only one cohort study [i.e., 47 of 85 (55 percent) factors in the individual risk domain, 22 of 40 (55 percent) factors in the parental/family risk domain, six of 11 (55 percent) factors in the peer risk domain, all (100 percent) factors in the school risk domain, and nine of 12 (75 percent) factors in the community domain]. Consequently, we judged that the strength of evidence was insufficient to be able to determine the predictive power of these factors.

While **Table 12** presents findings for all 11 study populations, **Table 13** and **Table 14** present findings for the three subpopulations with adequate sample sizes for the general population and for the at-risk population, respectively. For the general population (**Table 13**), findings on 48 risk or protective factors were examined from seven articles based on five cohort studies. Among the 48 factors, 10 factors (20 percent) were examined among two or more cohorts. Male gender (Komro, Williams, 1999; Roitberg and Menard, 1995; Saner and Ellickson, 1996) and alcohol or drug use (Kaplan, Tolle, 2001; Komro, Williams, 1999) were consistently significant risk factors; low socio-economic status (Roitberg and Menard, 1995; Saner and Ellickson, 1996) and living in an urban setting (McNulty and Bellair, 2003; Roitberg and Menard, 1995) were consistently reported as not being significant risk factors. We should point out that Roitberg and Menard, using data from the first five years (1976-1980) of the National Youth Survey of 1,725 Americans who were 11 to17 years old in 1976, reported that although the influence of socioeconomic status (SES) was significant in the first year of observation, the influence of SES was not significant in the subsequent three years of observation. Even for the first year, after adjusting for multiple comparisons, the influence of SES was not statistically significant. The effects of White ethnicity, alcohol use, illicit drug use, occupational strain, unstable family financial base, and low parental education were inconclusive. The evidence for the remaining 38 of 48 (79 percent) factors was derived from only one cohort study, and thus was considered inadequate as a basis for drawing conclusions.

Among *boys in the general population*, anger (Felson, 1992; Foshee, Linder, 2001), cigarette smoking (Dornbusch, Lin, 1999; Ellickson, Tucker, 2001) and non-violent delinquency (Becker and McCloskey, 2002; Saner and Ellickson, 1996) were consistently reported as significant risk factors for violence. Low socio-economic status (Brezina, 1999; Saner and Ellickson, 1996) was consistently reported as non-significant. Findings were mixed for the seven remaining risk factors with two or more cohort studies, including age, depression, physical aggression, illicit drug use, non-intact family structure, low parental education, and physical abuse by caretakers. Evidence for the remaining 47 of 58 (81 percent) factors were considered inadequate for assessment as they were investigated in one cohort study only.

For *girls in the general population*, non-violent delinquency (Becker and McCloskey, 2002; Herrera and McCloskey, 2003; Saner and Ellickson, 1996) was consistently reported as a significant risk factor. Illicit drug use (Dornbusch, Lin, 1999; Saner and Ellickson, 1996) and low parental education (Dornbusch, Lin, 1999; Saner and Ellickson, 1996) were consistently reported as non-significant. Age, cigarette smoking, and non-intact family structure showed mixed effects, and the remaining 44 of 50 (88 percent) factors did not have adequate evidence for assessment.

For *at-risk youth* (**Table 14**), male gender (in four of five cohort studies) was consistently

reported to be a significant risk factor for violence (Foshee, Bauman, 2000; Herrenkohl, Guo, 2001; McCloskey and Lichter, 2003; Rivera and Widom, 1990). One cohort study found that male gender was a significant risk factor for peer aggression and dating aggression but not for aggression toward parents (McCloskey and Lichter, 2003). Low SES was consistently reported as a non-significant risk factor (Herrenkohl, Egolf, 1997; Herrenkohl, Guo, 2001; Herrera and McCloskey, 2001). However, it should be noted that Herrenkohl and colleagues reported a significant influence of SES in bivariate analysis using data from the Lehigh longitudinal study in 1976 and data from the Seattle Social Development Project in 2001, but the influence of SES was not statistically significant after controlling for the influence of other factors in multivariate analysis. Findings on age, depression, empathy, antisocial behavior, individual involvement in pro-social activities, family's pro-violence attitude, parental violence, deviant peers, and the community's low neighborhood attachment were mixed. Finally, evidence for the remaining 41 of 52 (79 percent) risk factors was inadequate for assessment. One cohort study (Herrera and McCloskey, 2001) found increasing age as a significant risk factor, while two other cohort studies (Herrenkohl, Egolf, 1997; Rivera and Widom, 1990) found age to be a non-significant risk factor.

Among high-risk males, Latino ethnicity and repeated physical aggression (Loeber, Wei, 1999; Loeber, Wung, 1993) were consistently reported as significant risk factors. Impulsivity/attention deficit/hyperactivity disorders were reported as non-significant risk factors in two studies (Becker and McCloskey, 2002; Beyers, Loeber, 2001). Findings regarding an association with age, African-American race, positive attitude toward problem behavior, lack of guilt, having previously engaged in sexual intercourse, weapon carrying, violent behavior, poor academic performance, parental supervision or monitoring, and poor familial communication patterns were all found to be inconclusive. Evidence for the remaining 45 of 58 (78 percent) factors were judged inadequate for assessment, while findings for age were found to be mixed, with two cohort studies reporting it as a significant risk factor (Becker and McCloskey, 2002; Zhang, Loeber, 1997) and one study reporting it as a non-significant finding (Beyers, Loeber, 2001).

Among *high-risk females*, no factors were consistently reported as significant. Findings for 2 of the 32 risk or protective factors were mixed, and the evidence for the remaining 30 (94 percent) was judged inadequate for assessment.

In summary, although many risk factors were studied in the 23 prospective cohorts reviewed, 58 percent (87 of 151) of the risk factors were examined within only a single cohort study; 34 percent (52 of 151) of the risk factors had mixed findings; and only 8 percent (12 of 151) of the risk factors were consistently reported to be significantly associated with youth violence. Further, those factors that were consistently reported as significant or non-significant in this report were considered without regard to the type of violent outcome, the age at enrollment in the cohort, the type of at-risk population, and the type of analysis. Thus, additional research is needed to assess whether the associations are affected by these factors. Although we considered using meta-analysis techniques to pool findings, we found that the published data were too inconsistent and/or inadequate to allow the use of this technique.

Key Question #2: What are the patterns of co-occurrence of these factors?

While Key Question #1 was intended to identify *independent* risk factors that have a high likelihood of leading to youth violence, Key Question #2 was intended to identify *clusters* of risk

factors that may lead to youth violence. The analytic approach to the two key questions is different. Very frequently, a factor that is found to be statistically significant in a univariate or bivariate analysis becomes non-significant after adjusting for other factors in the model. For example, low SES or low family income was reported to be a significant risk factor associated with youth violence in bivariate analysis. The association disappeared (became non-significant) after controlling for the effect of other risk factors in the multivariate model. (Roitberg and Menard, 1995; Saner and Ellickson, 1996; Herrenkohl, Egolf, 1997; Brezina, 1999; Herrenkohl, Guo, 2001; Herrera and McCloskey, 2001) In contrast, Key Question #2 purports to identify clusters of risk factors that occur simultaneously (co-occur) and appear to predispose to youth violence. Unlike the independent factors identified in Key Question #1, the factors in a cluster are likely to be highly correlated and if we subject them to adjustment in multivariate analysis, many will likely become non-significant. Therefore, analytically, while we are looking for *independent* risk or protective factors in Key Question #1, we are looking for *dependent* risk or protective factors that occur simultaneously in Key Question #2.

Operationally, we defined co-occurrence as the simultaneous presence of two or more risk or protective factors that predict violence in an individual. Of the 23 longitudinal prospective cohort studies included in our assessment, only five articles from four cohort studies (Beyers, Loeber, 2001; Borowsky, Ireland, 2002; Dornbusch, Lin, 1999; Herrenkohl, Maguin, 2000; Piquero and Tibbetts, 1999) examined different types of co-occurrence of risk- or protective factors.

Using data collected from the National Longitudinal Study of Adolescent Health (Add Health), Dornbusch and colleagues (Dornbusch, Lin, 1999) examined the relationship between young people's use of drugs and involvement in violence and found polydrug use was significantly and positively associated with increased involvement in violence among both boys and girls. This same association was not found between use of a single illicit drug and violence. Also using Add Health data, Borowsky and colleagues (Borowsky, Ireland, 2002) reported the protective nature of three factors, including parent-family connectedness, school connectedness/parental presence, and grade point average; all three were found to be significantly and negatively associated with violence among both males and females. As part of the Seattle Social Development cohort study, Herrenkohl and colleagues (Herrenkohl, Egolf, 1997) reported that youth exposed to multiple risk factors were significantly more likely than non-exposed youth to engage in violence. However, in this study, only the number of risk factors and not the type of factors that co-occurred were reported. In a study that focused on repeated incidence of youth violence among high risk males recruited for the Pittsburgh Youth Study, Beyer and colleagues (Beyers, Loeber, 2001) reported that two combinations of risk factors were significantly associated with repeated violence: 1) low SES neighborhood, lack of guilt, early sexual activity, carrying hidden weapons, and poor communication at home, and 2) high SES neighborhood and physical aggression on the part of the youth. Importantly, whereas SES was consistently not reported as a significant "independent" risk factor in Key Question #1, SES was a significant risk factor when it co-occurred with other risk factors as determined in our analysis for Key Question #2. Data from the nationwide Collaborative Perinatal Project, which followed a cohort of African-American children from birth, Piquero and Tibbetts (Piquero and Tibbetts, 1999) reported that pre/perinatal disturbances — when combined with a disadvantaged familial environment at age seven years — were associated with increased risk for criminal offense during early adulthood among a high-risk, inner-city sample from Philadelphia.

Viewing the findings for both Key Questions #1 and #2, it is evident that both the dependent

and independent nature of the risk or protective factors must be properly assessed and clearly differentiated. Until this is done, controversies regarding the significance or non-significance of risk or protective factors will persist.

Study Quality For Studies For Key Questions #1 and #2

Because all the prospective longitudinal cohort studies included in our review satisfied four of the seven OMAR criteria for study quality in the same ways, we used the three remaining criteria to evaluate the quality of articles addressing risk and protective factors associated with youth violence. The criteria that were the same for all studies included: criterion 1, baseline comparability of groups; criterion 2, use of concurrent controls; criterion 3, equal application of instruments to all groups; and criterion 4, consideration of important outcomes. The three remaining criteria that we used to evaluate the quality of the individual articles are: the follow-up or retention rate (80 percent or greater), validity and reliability of instruments used for assessments, and appropriate control of confounders. **Table 15** summarizes our evaluation of these three criteria for the 35 published articles. Because one article (Loeber, Wei, 1999) included three cohort studies, the total of cohorts-articles in **Table 15** is 37. We used the cohort-article as the unit of evaluation of study quality, because the evaluation of study quality was based on the information provided in the article and the individual articles might report on different outcomes and different time periods and might use different analytic methods.

Three of the 37 cohort-articles (O'Leary and Slep, 2003; Stouthamer-Loeber, Loeber, 2001; Zhang, Loeber, 1997) did not provide information on retention rate. Of the articles that documented retention information, 18 (53 percent) reported a retention rate of 80 percent or higher. Because of the lack of information in the articles, we were unsure of the validity or reliability of the instruments used in assessments in six (16 percent) of the cohort-articles (Brezina, 1999; Felson, 1992; Kaplan, Tolle, 2001; Komro, Williams, 1999; McNulty and Bellair, 2003; Piquero and Tibbetts, 1999). Only three articles (8 percent) (Halpern, Udry, 1993; Kingery, Biafora, 1996; Stouthamer-Loeber and Loeber, 2002) did not control for confounding factors in the findings used in our assessment; 24 (65 percent) reported adjusted findings using multivariate techniques; and 10 (27 percent) adjusted for temporal relationship using path analysis or structural equation modeling.

Taking all three criteria into consideration, of the 37 cohort-articles, 16 (43 percent) fulfilled all the criteria and 18 (49 percent) did not fulfill one or more criteria. The three remaining cohort-articles (8 percent) fulfilled two of the three criteria with fulfillment of the third criterion being questionable.

While evaluating the retention (or follow-up) rate, we found inconsistencies not only in its derivation, but also in its adequacy as a measure of sample biases. In general, the sample data on which findings were based were subject to three types of biases: non-participation, loss –to-follow-up (addressed by retention rate), and missing data elements. Therefore, we further assessed quality as it relates to potential sample biases. In **Table 15,** we examine a) the number of participants and the percent of the eligible subjects who participated; b) the number and percent of participants retained in the study; c) the number and percent of participants whose data were analyzed, the denominator of which was the number of participants retained at the last follow-up; and d) the percent of participants in the initial cohort that were analyzed. The last indicator represents the net sample percent used in the analysis. We excluded three cohort-articles that did not provide adequate information (O'Leary and Slep, 2003; Stouthamer-Loeber, Loeber, 2001; Zhang, Loeber, 1997) in the comparison. If the retention rate was used as the

criterion, 18 of 34 cohort-articles (53 percent) reported a retention rate of 80 percent or higher. However, if the percent of original sample used in the analysis was used as the criterion, only three of 34 articles (9 percent) had a net sample percent of 80 percent or higher.

It is also interesting to compare the reporting of retention rates in multiple articles that used data from the same cohort study. Six cohort studies had findings published in more than one article. The articles based on the RAND Adolescent Panel Study (Ellickson, Tucker, 2001; Ellickson, Tucker, 2003; Saner and Ellickson, 1996) consistently reported retention rates under 80 percent. The articles based on the Add Health Survey (Borowsky, Ireland, 2002; Dornbusch, Lin, 1999) also consistently reported retention rates under 80 percent. The articles based on the Seattle Social Development Project (Herrenkohl, Guo, 2001; Herrenkohl, Hill, 2003; Herrenkohl, Maguin, 2000; Huang, Kosterman, 2001) consistently published retention rates over 80 percent. However, articles based on the Mother-Child Pair Study (Becker and McCloskey, 2002; Herrera and McCloskey, 2003; McCloskey and Lichter, 2003); the Pittsburgh Youth Study (Beyers, Loeber, 2001; Loeber, Wei, 1999; Loeber, Wung, 1993; Stouthamer-Loeber and Loeber, 2002; Stouthamer-Loeber, Loeber, 2001; Zhang, Loeber, 1997); and the Michigan's Youth in Transition Project (Brezina, 1999; Felson, 1992) reported inconsistent retention rates.

We believe that the participation rate, follow-up or retention rate, and complete data rate should be considered when assessing the possibility of bias in the study sample, particularly for outcomes such as violence. The risk factors that are likely to contribute to violent outcomes are also likely to contribute to non-participation, loss-to-follow-up, or missing data. It is important to point out that researchers have made considerable efforts to correct attrition or sample biases. Missing data estimation techniques or sample weights have been used in eight articles (Borowsky, Ireland, 2002; Ellickson, Tucker, 2001; Ellickson, Tucker, 2003; Herrenkohl, Guo, 2001; Herrenkohl, Hill, 2003; Huang, Kosterman, 2001; Kaplan, Tolle, 2001; Saner and Ellickson, 1996) to minimize sample size biases.

Sensitivity Analysis

To gain a better understanding of the strength of the evidence on reported risk- or protective factors, we conducted two sensitivity analyses to examine the risk or protective factors consistently reported as being associated or not associated with youth violence perpetration. First we reanalyzed the data after excluding the studies with sample size below the thresholds set at 1100 for the general population and 500 for the at-risk population. As a result, 20 articles from 13 cohort studies (out of an original 35 articles from 23 cohort studies) were included in the first sensitivity analysis. In the second sensitivity analysis, we excluded the studies that did not meet all the OMAR study quality criteria. Thus, 16 articles from nine cohort studies were included in the second sensitivity analysis. We did not perform a sensitivity analysis using articles that had both adequate sample size and good study quality because only four articles from three cohort studies satisfied both criteria, and no significant findings were reported based on these four articles.

The findings of the two sensitivity analyses are reported in **Table 16**. For each factor, we use a string of three symbols to designate the significance or non-significance of the association. The first symbol in the string represents the finding when all studies are included, the second symbol in the string represents the finding when only studies with adequate sample size are included, and the third symbol represents the finding when only studies with good study quality are included. A "+" symbol indicates a consistent finding of an association between the risk

factor and youth violence perpetration, and a "o" symbol indicates no consistent finding of no association between the risk factor and youth violence perpetration.

Factors consistently reported as being associated with violence. Male gender was the only factor that was consistently reported as being associated with violence in all three analyses. "Alcohol or drug use" and "selling drugs" in the individual domain and "low parental attachment" in the home/family domain were consistently reported as being associated with violence in two of the three analyses. Nine factors were reported as being associated with violence in one of the three analyses (**Table 16**).

When the six individual study populations were considered, no single factor was consistently reported as being associated with violence in all three analyses. Male gender (in both the general and at-risk populations); alcohol or drug use in the general population; cigarette use or smoking in the general male population; the Latino race in the at-risk male population; and repeated physical aggression in the at-risk male population were consistently reported to be associated with violence in two of the three analyses. Five factors were consistently reported to be associated with violence in one of the three analyses (**Table 16**).

Factors consistently reported not to be associated with violence. The identification of particular factors in **Table 16** as consistently not being associated with violence must be interpreted with caution. Some of these factors were significant risk or protective factors in univariate or bivariate analysis but were non-significant after adjustment for other risk factors in the multivariate model. While these factors were not independent risk factors, they could be risk factors when considered along with other risk factors as we have discussed in the previous section. Low family SES was consistently reported as not being an independent risk factor for violence. Age, ethnicity other than those listed, urban residence, illicit drug use in the general female population, and impulsive-attention deficit were not associated with violence in two of the three analyses.

Summary. We have examined the adequacy, quality, and consistency of the studies and reported the sensitivity of the findings. When sample size and study quality were considered, only male gender was consistently reported as being associated with youth violence perpetration, and low family SES was consistently reported not to be associated with youth violence as an independent predictor. Reported significance or non-significance showed little consistency for all other risk factors.

Key Question #3: What evidence exists on the safety and effectiveness of interventions for violence?

A total of 32 articles were selected to address Key Questions #3, #4, and #5, the questions that address safety and effectiveness of interventions. **Table 17** provides the numbers of articles by intervention level (primary, secondary, and tertiary prevention, according to the definitions provided in Chapter 2) and by study design. Two articles reported findings for primary and secondary prevention interventions in the same article. Thus, a total of 34 intervention studies are summarized in this table. **Table 18** lists the unit of randomization for randomized controlled studies (RCTs) and the name of the intervention. We provide a description of each intervention program and its findings for the five primary prevention interventions conducted by RCT in **Table 19**, for the 10 primary prevention interventions conducted using other study designs in

Table 20, for the secondary prevention interventions conducted by RCT in **Table 21**, for the four secondary prevention interventions conducted using other study designs in **Table 22**, for the two tertiary prevention interventions evaluated by RCT in **Table 23**, and for the five tertiary interventions evaluated using other types of study designs in **Table 24**.

For this assessment, we considered an intervention program effective when at least one violent outcome indicator was found to change significantly at the $p<0.05$ level after the intervention. When no significant change in violent outcome indicators occurred at the $p<0.05$ level, we considered the program ineffective.

Of the 32 intervention studies, 13 were evaluated using a RCT, and 19 were evaluated using other study designs. Of the 13 RCTs, five incorporated primary prevention interventions (Bosworth, Espelage, 2000; Farrell, Meyer, 2003; Foshee, Bauman, 1998; Foshee, Bauman, 2000; Orpinas, Kelder, 2000; Perry, Komro, 2003); six incorporated secondary prevention interventions (Foshee, Bauman, 1998; Foshee, Bauman, 2000; Friedman, Terras, 2002; Hanlon, Bateman, 2002; Ludwig, Duncan, 2001; Moore, Armsden, 1998; Simon, Sussman, 2002); and two incorporated tertiary prevention interventions (Henggeler, Clingempeel, 2002; Scott, Tepas, 2002). Of the five RCTs used to evaluate primary prevention interventions, one (Farrell, Meyer, 2003) was reported to be effective (20 percent). Of the six RCTs for secondary prevention interventions, three (Hanlon, Bateman, 2002; Ludwig, Duncan, 2001; Moore, Armsden, 1998) were reported to be effective (50 percent). And of the two RCTs for tertiary prevention interventions (Henggeler, Clingempeel, 2002; Scott, Tepas, 2002), both were found to be effective (100 percent).

Of the 19 interventions using other study designs, 10 evaluated a primary prevention intervention, four evaluated secondary prevention interventions, and five evaluated tertiary prevention interventions. Four primary prevention interventions (40 percent) (DuRant, Treiber, 1996; Hawkins, Catalano, 1999; O'Donnell, Stueve, 1999; Reynolds, Temple, 2001), one secondary prevention intervention (25 percent) (Hammond and Yung, 1991), and three tertiary prevention interventions (60 percent) (Borduin, Mann, 1995; Morrissey, 1997; Stein, 1999) were reported to be effective. The findings of one tertiary intervention (Hagan, King, 1994) were reported to be inconclusive.

Findings: Primary Interventions (RCTs)

All five RCTs testing primary prevention intervention were conducted in a school setting. None of these studies used the student as the unit of randomization; three used the school, one used a student team, and one used the homeroom as the unit of randomization. However, each study compared the pre-test characteristics of the experimental and control groups and adjusted for identified differences in analysis.

The one effective primary prevention intervention was "Responding in Peaceful and Positive Ways for 7th Graders," (RIPP) (Farrell, Meyer, 2003). RIPP is a skills building program offered as an elective class in 12 weekly sessions. The curriculum focuses on conflict resolution and is implemented by trained interventionists. The study used the homeroom or a class period as the unit of randomization. Age and gender at pretest were significantly different between the RIPP and control students, and these differences were adjusted for in the analysis. The adjusted rate of violent behavior per 100 students at one year post-intervention was 11.2 for the experimental group and 23.1 for the control group, with a risk ratio (control to intervention) of 2.1 (95 percent CI: 1.1, 3.7, $p<0.05$).

Primary interventions reporting no significant effect on violence (RCT). The Safe Dates Program (Herrenkohl, Maguin, 2000; Herrera and McCloskey, 2001) was one of the four programs that reported no significant effect on violence. The Safe Dates Program focused on changing norms associated with partner violence, decreasing gender stereotyping, and improving conflict managing skills. The program was conducted by teachers in ten 45-minute sessions in conjunction with a theater production performed by peers, a poster contest, and 20 workshops for community service providers. This study used the school as the unit of analysis and compared seven experimental schools with seven control schools. Sexual violence was assessed using the mean score at one-month and one-year follow-up. Although all indicators demonstrated lower mean scores for the intervention, the difference did not reach statistical significance. No standard errors or confidence intervals were provided. The long-term effect of the program at one year post-intervention was also reported to be less than the effect one month after the intervention.

The second primary prevention intervention for which no significant effect on violence was reported was the Drug Abuse Resistance Education (DARE and DARE PLUS) program (Perry, Komro, 2003). The DARE program is a 10-week skill-building curriculum taught by police officers, and the DARE PLUS program adds a four-week peer-led parent involvement program, youth-led extracurricular activities, and neighborhood action teams to address neighborhood and school-wide issues. Growth curve analysis based on a three-level linear random-coefficients model was used to assess the efficacy of the program. Neither the DARE nor the DARE PLUS program, when compared to the control group, reported effectiveness in boys or girls. The growth rate (± SE) of self-reported violent behavior and intentions at 18-month follow-up was 0.35±0.08 per year for boys in the DARE PLUS program (n=1381) and 0.54±0.09 per year for boys in the control group (n=1093); p=0.06, a difference that did not reach statistical significance. For girls, the growth rate was 0.23±0.07 for the DARE plus program and 0.30±0.07 for the control group (p=0.24).

The third primary prevention intervention for which no significant effect on violence was reported was the Students Management Anger and Resolution Together (SMART) (Bosworth, Espelage, 2000). SMART is a computer-based multimedia program, used freely and independently by students during a single semester, that includes three major components: anger management, perspective taking, and dispute resolution. The article reported no difference in the mean aggression score (measured over the previous 30 days on four aggressive behaviors at four months after implementation) among boys: 16.1 for the experimental group (n=145) vs. 16.9 for the control group (n=90). No significant difference was reported among girls, either: 14.0 for the experimental group (n=176) vs. 13.9 for the control group (105).

The fourth primary prevention intervention that reported no significant effect on violence was the Student for Peace Program (Orpinas, Kelder, 2000). The program included formation of a school health promotion council, training of peer mediators and peer helpers, training of teachers in conflict resolution, a three-semester violence-prevention curriculum, and monthly newsletters for parents. The evaluation compared the mean reported frequency of fighting, fighting with injuries, and threatening to hurt between the experimental (n=1020 students in four intervention schools) and control (n=1226 students in four control schools) groups at one-year and two-year follow-up. All results were adjusted for academic performance and race/ethnic background and the differences between intervention and control conditions were adjusted for baseline measurement. None of the differences reached statistical significance. The most

promising effect was among boys, where the difference between the treated and untreated groups was -8.8 (95 percent CI: -18.9, 1.3).

Findings: Primary Interventions (Other study designs)

Four of 10 primary prevention interventions that used a study design other than a RCT reported effectiveness. Three were non-randomized controlled trials (NRCT) and one was a single group with pre- and post-test design.

One of the effective programs was the Seattle Social Development Project (Hawkins, Catalano, 1999), which used a NRCT design. The program consisted of a five-day teacher training session that covered proactive classroom management, interactive teaching, and cooperative learning; four hours of student training to recognize and resist social influences to engage in problem behaviors; and voluntary parent training classes in child behavior management skills. A full intervention, provided in grades one through six, consisted of five days of teacher in-service training each intervention year, developmentally appropriate parenting classes offered to parents when children were in grades one through three, five, and six, and developmentally adjusted social competence training for children in grades one and six. A late intervention, provided in grades five and six only, paralleled the full intervention for those grades. The study reported a significant reduction in lifetime violence behavior for the full intervention (-11.4; 95 percent CI: -21.3, –0.4; p=0.04; n=149 for the intervention group and n=206 for the control group) six years after the intervention, when participants were assessed at 18 years of age. No significant reduction was reported for the late intervention (-3.3; 95 percent CI: -12.0, 6.3; p=0.54; n=243 for the intervention group and n=206 for the control group).

The second program that reported effectiveness was the Chicago Child-Parent Center Program (CPC) (Reynolds, Temple, 2001). The CPC was a multi-component program focusing on education and family support. It consisted of year-round structured learning activities, a multifaceted parent program, outreach activities, ongoing staff development, health and nutrition services, and comprehensive school-age services. The intervention (n=989 children) included a half-day preschool for children ages three to four years ("early" intervention), a half- or full-day kindergarten, and school-age services in linked elementary schools for students ages six to nine years ("late" intervention). The comparison group (n=550) consisted of children who participated in alternative early childhood programs. The main outcome measure was the mean number of arrests for violent offenses between the ages of 10 and 18 years, adjusted for gender, race, risk index, early/late program, and site. The authors reported significantly fewer arrests for violent offenses between 10 and 18 years of age (adjusted mean score of 22 percent versus 35 percent, p=0.02; n=837 for the intervention group; n=444 for the control group) for the early (preschool) group, and no significant findings for the late (school-age) group (mean score of 28 percent versus 25 percent, p=0.64; n=729 for the intervention group and n=552 for the control group).

The third program that reported effectiveness was the Reach for Health Community Youth Service (CYS) Program (O'Donnell, Stueve, 1999). This study compared two interventions. The experimental intervention consisted of a 35-session, 6-month curriculum, delivered by trained instructors, that focused on drug and alcohol use, gender, and violence (including 10 sessions focusing on violence prevention) and a 3-hour-per-week community volunteer component (the actual CYS program). The control intervention included only the instructional curriculum. The experimental group consisted of 419 seventh and eighth graders from one school, and the control group consisted of 553 seventh and eighth graders from another school. Regression analyses

were used to assess the influence of treatment condition on violent behavior outcomes, controlling for gender, race, grade, and social desirability. CYS was reported to be associated with a significant reduction in violent behavior among eighth graders, measured "during the past three months" and at six-months following the intervention (regression coefficient [SD]: -0.206 [0.096], $p<0.05$; n=445). No significant reduction in violence was reported among seventh graders who participated in the CYS program (regression coefficient [SD]: 0.102 [0.079]; p-value not significant; n=469).

Another primary prevention intervention study that reported effectiveness was a comparison of two violence prevention curricula for students in grades six through eight from two middle schools, the Violence Prevention Curriculum (146 students) and the Conflict Resolution Curriculum (63 students) (DuRant, Treiber, 1996). Both curricula consisted of ten 50-minute classroom sessions twice weekly over five weeks. The study compared the mean frequency of use of violence and the mean frequency of fighting during the previous 30 days assessed one week before and one week after participation in the intervention. For the Violence Prevention curriculum, the mean (SD) reported frequency of use of violence decreased from a level of 0.82 (1.79) before the intervention to 0.39 (1.28) after the intervention (p=0.004). For the Conflict Resolution curriculum, the mean (SD) reported frequency of use of violence was reduced from 0.73 (1.65) before the intervention to 0.51 (1.38) after the intervention (p=0.004).

Primary interventions reporting no significant effect on violence (non-RCT). Six primary prevention interventions that used a study design other than the RCT reported no significant effect. The first of these was the Improving Social Awareness-Social Problem Solving Project, a two-year program given to fourth and fifth grade students (Elias, Gara, 1991). Violence outcomes were measured six years after participation in the intervention, when students were in the ninth through eleventh grades. No sample sizes and no standard errors were reported in the article; thus the significance of the differences in the mean scores could not be determined. For boys, the discriminant analysis findings could not be used because they included both violent and non-violent outcomes. For girls, the discriminant function that significantly differentiated the experimental and control students did not include any of the three violent outcomes, indicating that the program had no significant effect on reducing violent behaviors in girls.

The second primary prevention intervention that reported no significant effect on violence was the Peaceful Conflict and Violence Prevention Curriculum (Durant, Barkin, 2001), designed for middle school students living in or around public housing. This program consisted of a 12-week, one-hour-per-week skill-building curriculum based on social cognitive theory. The intent of the program was to teach students to identify situations that could result in violence; and to teach a series of skills: avoidance, confrontation, problem-solving, communication and conflict resolution; the conflict cycle, the dynamics of a fight, and how to express anger without fighting. The study was conducted in four middles schools — two experimental (n=292 students) and two control (n=412 students). Use of violence during the previous 30 days was assessed using a 5-item scale and measured two weeks after participation in the intervention. The evaluation did not demonstrate significant differences between the experimental group [mean (SD) violence score: 1.1 (2.2); n=233] and the control group [mean (SD) violence score: 1.2 (2.4); (n=330)], p=0.63. The pre-test scores did not differ significantly between the two groups [1.4 (2.9) versus 1.1 (2.0); p=0.31].

The third primary prevention intervention that reported no significant effect on violence was the school-based hand-held metal detector program (Ginsberg C, 1993), a year round program in

which a team of security officers visited schools weekly and scanned students at random. This study used a multiple cross-sectional study design in which it measured outcomes at two points in time but with different participants at each contact point. The percent of students that reported having been involved in a physical fight at least once during the school year following participation in the intervention was almost identical between the 243 students in the three experimental schools and the 1156 students in 12 control schools: 26 percent (95 percent CI: 14 percent-38 percent) for the intervention group and 24 percent (95 percent CI: 21 percent-27 percent) for the control group.

The fourth primary prevention intervention that reported no significant effect on violence was the Georgia Juvenile Justice Reform Act of 1994 (Risler, Sweatman, 1998). A study evaluated the impact of this new law, which mandated that adolescents, ages 13 through 17, be tried as adults if arrested for murder, voluntary manslaughter, rape, aggravated sexual battery, aggravated child molestation, aggravated sodomy, or firearm robbery. The study measured the impact of the law using a multiple cross-sectional study design for adolescents 13 through17 arrested for aggravated assault, armed robbery, sex offense, rape, and murder. The mean arrest rate pre- vs. post-intervention was 1833 versus 1726 for aggravated assault; 749 versus 857 for armed robbery; 394 versus 426 for sex offense; 121 versus 118 for rape; and 82 versus 83 for murder. None of the differences were statistically significant. The denominator unit for the rates and sample sizes were not reported.

The fifth primary prevention intervention for which no significant effect on violence was reported was the All Stars Character Education and Problem Behavior Prevention Program (Harrington, Giles, 2001) for sixth and seventh grade students, in which 629 students received the program and 739 did not. The 8-month program included whole classroom sessions, small-group sessions outside of class, and one-on-one sessions between instructor and student. Homework was used to increase interaction between students and parents. The study examined outcomes associated with different types of interventionists (i.e., specialist versus teachers versus control) among youth in three racial/ethnic groups: Whites, African-American, and Latino. The mean scores for ten items of reported violence towards other persons at one-year follow-up for students exposed to the different interventionist types were as follows: for African-American students, 1.54 with the specialist, 1.27 with teachers, and 1.59 with the control group, for Latino students, 2.07 with specialists, 1.22 with teachers, and 1.34 with the control group; for White students, 1.40 with specialists, 1.42 with teachers and 1.37 with the control group. No significant differences in mean violence score were reported at one-year follow-up, or for pre- vs. post-test, regardless of the type of interventionist.

The sixth primary prevention intervention for which no significant effect on violence was reported was a traditional martial arts training program (Zivin, Hassan, 2001). A martial arts master taught the program three times a week over a 10-week period. The mean ±SD 9-item violence score rated by the teacher at four-month follow-up was 3.20±1.46 for the experimental group (n=31) and 3.34±1.05 for the control group (n=17). These differences were not statistically significant.

Findings: Secondary Interventions (RCTs)

Of the six RCTs for secondary prevention interventions, three were reported to be effective (Hanlon, Bateman, 2002; Ludwig, Duncan, 2001; Moore, Armsden, 1998) and three reported no significant effect in reducing youth violence (Friedman, Terras, 2002; Herrenkohl, Maguin, 2000; Herrera and McCloskey, 2001; Simon, Sussman, 2002).

One of the three secondary prevention RCTs for which effectiveness was reported was the Moving to Opportunity (MTO) demonstration project, a housing mobility experiment to study the effects of relocating families from high- to low poverty neighborhoods on juvenile crime. One experimental group consisted of 148 families with Section 8 housing vouchers that could be redeemed for housing only in census tracts with 1990 poverty rates less than 10 percent. These families also received housing-search assistance and life-skills counseling. Another experimental group consisted of 92 families with regular Section 8 housing vouchers that provided subsidies to lease private-market housing but with no limitations on where they could be redeemed. The control group consisted of 96 families on the MTO waiting list. The prevalence of arrests for violent crime during the post-program period was 2.4 percent for the MTO group and 5.0 percent for the control group, a difference (±SE) of 2.6 percent (±1.4 percent), which was statistically significant ($p<0.05$). The prevalence was 1.9 percent for the Section 8 group and 3.9 percent for the control group, a difference (±SE) of 2.0 percent (±1.1 percent), also statistically significant ($p<0.05$). The incidence rate per 100 teens for violent-crime arrests was 2.5 for the MTO program and 5.7 for the control program, a difference (±SE) of 3.2 (±1.5), which was statistically significant ($p<0.01$). The incidence rate per 100 teens was 1.9 for the Section 8 program and 4.3 for the control program, a difference (±SE) of 2.4 (±1.2), which was statistically significant at $p<0.01$.

Another secondary prevention intervention for which effectiveness was reported was the Early Community-Based Intervention Program for the prevention of substance abuse and other delinquent behaviors (Hanlon, Bateman, 2002) for inner-city youth at high risk of adopting a delinquent lifestyle. The one-year program consisted of individual counseling; group mentoring sessions available four to five days a week after school including structured skill building activities, educational and recreational field trips, and holiday celebrations; and informal parent discussions and parent-child social events. A Poisson regression analysis that compared self-reported violent behaviors between 235 experimental subjects and 193 control subjects during the preceding six months at one-year follow-up revealed significant treatment effects ($p=0.003$). Means and standard errors for this particular indicator were not provided.

The third secondary prevention intervention for which effectiveness was reported was the Childhaven's Therapeutic Child-Care Program (formerly the Seattle Day Nursery) (Moore, Armsden, 1998) for abused, neglected, and at-risk infants and toddlers and their parents. The program consisted of voluntary parent education, counseling, support groups, and linkage to professional services. The average length of participation was 23 months. The experimental group included 32 children and the control group included 29 children. Nearly two-thirds (n=21) of the parents in the experimental group were substantively engaged in the program, while 25 percent (n=8) did not participate at all. At 12-year follow-up, 21 of the 32 original families in the experimental group and 14 of the 29 original families in the control group were located. During the 12-year follow-up period, significant reduction in mean violent arrests (0.04 vs. 0.30, respectively; $p<0.05$) and in the incidence of fighting reported in juvenile court records and school files (12 percent vs. 36 percent, respectively; $p<0.05$) were observed in the experimental group compared to the control.

Secondary interventions reporting no significant effect on violence (RCT). A secondary prevention intervention for which no significant effect on violence was reported was the Safe Dates Program, which also conducted a primary intervention, described above. The secondary intervention targeted eighth- and ninth-grade students who were perpetrators of violence

(Herrenkohl, Maguin, 2000; Herrera and McCloskey, 2001). The Safe Dates Program focused on changing norms associated with partner violence, decreasing gender stereotyping, and improving conflict managing skills. The intervention was delivered in ten 45-minute sessions conducted by teachers together with a theater production performed by peers and included a poster contest and 20 workshops for community service providers. The program also had a primary intervention program component (reported in the previous section). The evaluation of the secondary intervention component focused on perpetrators of violence. The unit of analysis was the school: seven schools carried out the intervention and seven served as controls. The one-month mean score for sexual violence perpetration was 0.07 for the experimental group and 0.18 for the control group, and the one-year mean score was 0.15 for the experimental group and 0.12 for the control group. The one-month mean score for violence reported in a current relationship was 0.17 for the experimental group and 0.16 for the control group; the one-year mean score was 0.15 for the experimental group and 0.12 for the control group. The differences were not statistically significant at a significance level of p less than 0.05.

Another secondary prevention program for which no significant effect on violence was reported was the project Towards No Drug Abuse (TND) (Simon, Sussman, 2002) for youth in continuation high schools. The program consisted of a curriculum of nine, 40-minute sessions delivered over three weeks by trained health educators and was designed to provide motivation, listening skills, information about chemical dependency, coping skills, information about peer norms, and help with decision-making. The study enrolled 14 experimental schools and 7 control schools. The total number of students involved in the program was 850 (no gender breakdown was provided for the sample). Sixty percent of the boys and 56 percent of the girls in the experimental schools, compared with 68 percent of boys and 55 percent of the girls in the control schools reported violence perpetration in the past 12 months. Violence perpetration included slapping, punching, kicking, beating up someone, threatening with a weapon, and injuring someone with a weapon. These differences were not statistically significant at a significance level of p less than 0.05.

The third secondary prevention program for which no significant effect on violence was reported was the Triple-Modality Classroom Program (Friedman, Terras, 2002) for court-referred adolescent males in a residential treatment facility. The intervention included 55 classroom sessions focused on helping participants (1) understand the effects of drugs, alcohol and tobacco on health and behavior and learn how to cope with temptations and pressures to start or to continue using drugs; improve self expression; learn how to control and direct one's behavior, and achieve personal and social skills; (2) control tendencies toward violence; and (3) clarify their values, explore other values, and attempt to develop and identify with a set of socially acceptable and desirable values. Participants attended an average of 34 sessions. The program studied 201 adolescent males — 110 in the intervention group and 91 in the control group. Multiple regression analysis in which the degree of violent offenses was the dependent variable, and age, years of education, race, occupation of head of household, growing up with biological parents, having been physically abused, and problem behavior and attitude were the independent variables reported no significant advantage of the program (t-statistic: +0.44, not statistically significant at $p<0.05$).

Findings: Secondary Interventions (Other study designs)

Four secondary prevention interventions were studied using study designs other than RCT. Effectiveness was reported for one of the four, the Positive Adolescents Choices Training

(PACT) Program. This program targeted high-risk African-American middle school students; 21 students received the intervention and 13 students did not (Hammond and Yung, 1991). The program blended cognitive methods and skill building to address interpersonal violence delivered in small groups by trainers at school sites in 37 to 38, 50-minute sessions during the school year. Of the 21 students who received the intervention, 15 attended all the sessions and six attended only some of the sessions. No pre-intervention difference was found between students who attended all the sessions, students who attended some of the sessions, and the control students with respect to suspension attributable to violence (13 percent, 33 percent, 23 percent, respectively; p=0.64). However, significant post-intervention differences were observed (0 percent, 16 percent, 54 percent, respectively; p=0.003). The time period for the outcome measure was not specified.

Secondary interventions reporting no significant effect on violence (non-RCT). The Selective Serotonin Reuptake Inhibitors (SSRIs) Treatment Program for psychiatrically hospitalized adolescents (Constantino, Liberman, 1997) was one of three programs for which no effectiveness was reported. The adolescents, who were not selected for aggressiveness, were divided into an experimental group of 19 patients who received SSRI trial for 5 weeks, and a control group of 39 patients who were hospitalized for at least four weeks but did not receive an SSRI trial. The mean number of physical aggression episodes per week for 13 experimental patients was 0.69 on the medication and 0.50 off the medication, a difference that was not statistically significant. The study also compared the mean number of episodes of physical aggression per week between the experimental and the control patients, and controlled for disruptive behavior as well as affective and psychotic disorders. No significant differences were observed, likely due to inadequate power.

The second secondary prevention intervention for which no significant effect on violence was reported was the Conflict Resolution Model of Family-Systems Intervention for Individual Parent-Child Dyads (Dykeman, 2003). This intervention was targeted to students with behavioral problems from recently dissolved families who were referred by special education teachers. Fifteen parent-child dyads met weekly for 90 minutes with a counselor for an average of three months in a community agency. The mean number of physical aggression acts (±SD) at six-month follow-up was 1.33±0.90 compared with 1.73±0.88 prior to intervention (p=0.11).

The third secondary prevention intervention for which no effectiveness was reported was the Alternative to Suspension for Violent Behavior (ASVB) (Breunlin, Bryant-Edwards, 2002) for high school students who have been suspended for physical violence. The program, which also included families, consisted of four, 90-minute sessions dedicated to teaching social problem-solving and thinking skills, family intervention, and anger management. The evaluation was a NRCT with pre- and post-intervention comparison. The percent of re-suspension for physical violence (i.e., fighting) per year was 7 percent for the experimental group (n=42) compared with 11 percent for the control group (n=123), a difference that was not statistically significant.

Findings: Tertiary Interventions (RCTs)

We reviewed two RCTs for tertiary interventions. Effectiveness was reported for both. One was the Turning Point Rethinking Violence (TPRV) Program (Scott, Tepas, 2002), a collaborative program designed to educate, and remediate first-time male violent crime offenders — ages 13 to18 years — and their parents regarding the consequences of violence. The program consisted of four key components: trauma experience where participants visit a trauma

center, a hospital morgue, and an autopsy room; victim impact panel, to expose participants to the impact of violence on the family and friends of the victim; six weeks of group therapy focusing on conflict resolution and anger management; and referrals for follow-up mental health and health care services. The total face-to-face contact with program activities was approximately 14 hours. The recidivism rate, defined as conviction rate for violent offenses within one year after first violence conviction and completion of court sanctions, was 0.05 for the experimental group (n=38) and 0.33 for the control group (n=38) ($p<0.05$).

The other tertiary intervention for which effectiveness was reported was the Multi-Systemic Therapy (MST) Program for juvenile offenders meeting the DSM III R criteria for substance abuse or dependence (Henggeler, Clingempeel, 2002). Treatment, which included families, was characterized by intensive family services delivered in community settings (home, school, neighborhood) and the provision of comprehensive services over a 4 to 6 month period with therapists who maintained low case loads and were available on a 24-hour-a-day, 7-day-a-week basis. The mean ±SD four-year conviction rate of aggressive crimes was 0.61±0.90 for the experimental group (n=43) and 1.36±2.21 for the control group (n=37) ($p<0.05$).

Findings: Tertiary Interventions (Other study designs)

Five tertiary prevention interventions with other study designs were also evaluated. Effectiveness was reported for three of these programs, whereas findings from the evaluation of the fourth program were inconclusive.

One of the tertiary interventions for which effectiveness was reported was the Multi-Modal Treatment Approach, which used behavioral, cognitive-behavioral, and psychological skills training methods (Morrissey, 1997) for incarcerated male juvenile offenders. This trial compared an improved treatment approach (n=36) with an earlier version of the treatment program (n=41). The evaluation reported a one-year mean of violent incidents for each of five types of assaults — violent incidents, assault on residents, assault on staff, restraint for violence, and isolation for violence. Significant differences were reported for all five types of assault between the intervention group and the group exposed to the earlier version of the program. The one-year incidence for violent incidents was 1.5 for the intervention group and 7.1 for the control group ($p<0.05$). Other findings are provided in **Table 24**

Another tertiary prevention intervention for which effectiveness was reported was the Outpatient Behavioral Management of Aggressiveness in Adolescents (Stein, 1999), a single group, pre- and post-trial assessment that enrolled 16 adolescents with oppositional-defiant disorder and aggressive behaviors. The program consisted of three components — individual cognitive therapy for adolescents, the Real Economy Systems for Teens (REST) program, and the response cost program for parents to introduce the idea of consequences for aggressive behavior. Parental reports of their observations during a 20-week period showed a significant reduction in the mean rate of aggressive acts during the third phase of the program, when the response cost program was added to the cognitive and REST components of the program. After aggression stopped, weekly office visits were discontinued but the REST and response cost programs remained in effect. The parents were instructed to continue observations until the end of the program to secure stabilization of the behaviors. Parents were followed up by phone at one year; however, the findings were not reported.

The third tertiary intervention for which effectiveness was reported compared a Multi-Systemic Therapy (MST) Program (n=77) to an individual therapy (IT) program (n=63) targeting juvenile offenders at high risk for committing additional serious crimes. Findings from the

hierarchical multiple regression analysis on the number of arrests for violent crimes during the four-year follow-up period showed significant effectiveness of the MST program, $p<0.003$. The program was found to be equally effective with youth of both genders and of differing ethnic backgrounds.

Tertiary interventions reporting no significant effect on violence (non-RCT). One study of a tertiary prevention intervention reported no significant effect on violence. The Project Back-on-Track Program was a multi-faceted after-school diversion program for youths referred for violent offenses, who met criteria for conduct disorder (Myers, Burton, 2000). Treatment included group and family therapies, parent groups, educational sessions, community service projects, and empathy-building exercises. Youth participants met for 32 hours over four weeks, and parents or guardians were required to attend 15 hours of interventions. This program used a NRCT design in which 30 youths participated in the intervention and 30 acted as controls. The evaluation assessed the number of violent crimes (assault, aggravated assault, and attempted aggravated assault) committed over a 12-month period. Two crimes were reported for the intervention group compared with six for the control group, but the difference did not reach statistical significance.

The Stout Cottage Serious Sex Offenders Program (SSOP) (Hagan, King, 1994) was a tertiary prevention program targeting convicted adolescent male rapists. The program used both confrontational and supportive techniques in a group therapy process that met three times a week over an eight-month period. The recidivism rate during the program's two-year post discharge period was 5/50 or 10 percent for convicted sexual assaults and 14/50 or 26 percent for other convicted crimes. However, without a control group, the relevance of the recidivism rates was difficult to interpret. Therefore, we considered the findings of this study inconclusive.

Safety of interventions

The outcome indicators used for our analysis included both the reduction of violent behaviors and adverse health effects and safety. However, only three of the 32 studies considered the issue of intervention safety. The NRCT of the Selective Serotonin Reuptake Inhibitors (SSRIs) treatment program reported adverse effects of the treatment (Constantino, Liberman, 1997). Of the 19 treated patients, two experienced minor adverse effects of SSRIs. One experienced dose-dependent tremor and insomnia and another developed mild recurrent headaches. Neither patient required discontinuation of drugs. The other two studies, Student for Peace (Orpinas, Kelder, 2000) and Violence Prevention Curriculum for Adolescents and Conflict Resolution Curriculum for Youth Provider (DuRant, Treiber, 1996) included "frequency of injuries due to fights" as an outcome measure. No significant differences were found in either study between the treated and the control groups in the frequency of fighting resulting in injury.

Summary of Findings

For this assessment we used the vote-counting method (described in Chapter 2) because better methods of synthesis were not possible due to the heterogeneity of the intervention studies. For example, in terms of the level of intervention analysis, within study comparisons of interventions aimed at different levels would be the strongest level of evidence (since study level variables are controlled for), but that these did not exist. Given the absence of such data, some measure of the effectiveness of interventions at different levels could be made by simply assessing the number of effective studies at each level, although this is an imperfect measure.

Given that this is the best we could do, however, we noted that the effectiveness of the programs appeared to be associated with the level of intervention, that is, tertiary interventions were more likely to be associated with change than were primary interventions. The distinctions in apparent effectiveness among the three levels of intervention were most clearly shown with RCTs. A descriptive summary of the effectiveness of intervention programs by the level of intervention and by study design for 31 studies is provided in **Table 25.** The one study that did not report conclusive findings was excluded.

Key Question #4: Where evidence of safety and effectiveness exists, are there other outcomes beyond reducing violence? If so, what is known about effectiveness by age, sex, and race/ethnicity?

Similar to our assessment with the level of interventions, within study comparisons are the strongest analytic approach to answer this question. However, none of the studies provided the information needed to evaluate differential effects by age, gender, or race/ethnicity. Here we provide a summary of the findings we reported in the Results section for Key Question #3 for those studies that reported effectiveness of intervention programs by gender and/or ethnicity.

For primary interventions, three of the five RCTs reported findings for boys and girls — the DARE and DARE PLUS program (Perry, Komro, 2003), the Students Management Anger and Resolution Together program (Bosworth, Espelage, 2000), and the Student for Peace Program (Orpinas, Kelder, 2000). None of the evaluations of these programs compared the effectiveness of the intervention for boys vs. girls; thus, no findings on differential effectiveness can be reported. Neither of the other two RCTs reported their findings by gender, but they adjusted their findings by gender and other covariates. One of the 10 non-RCT studies reported findings separately for boys and girls (Elias, Gara, 1991). However, the discriminant analysis findings could not be used for boys because they included both violent and non-violent outcomes. For girls, the discriminant function that significantly differentiated the experimental and control students did not include any of the three violent outcomes, indicating that the program had no significant effect in reducing violent behaviors in girls.

None of the RCTs of primary interventions reported their findings by race/ethnicity; however, one study (Orpinas, Kelder, 2000) adjusted its findings by race/ethnicity but did not show the relative effectiveness by race/ethnicity. One of the 10 non-RCT studies reported findings by race/ethnicity (Harrington, Giles, 2001) but found no effectiveness for Whites, African-Americans, or Latinos; no differential effectiveness among ethnic groups within the study was reported

For secondary interventions, only one of six RCTs reported its findings by gender (Simon, Sussman, 2002) and it reported no program effectiveness in either gender group. One RCT did not report its findings by gender or race/ethnic groups but instead adjusted its findings by age, race and other covariates.

For tertiary interventions, only one of the six studies, the Multi-Systemic Therapy program (Borduin, Mann, 1995), reported its findings by gender and ethnicity. The program was associated with equivalent changes in violent behavior for youth of both genders and of different ethnic backgrounds.

We provide a descriptive summary of the effectiveness of interventions by gender and predominant racial/ethnic groups in **Table 26**.

Key Question #5: What are commonalties of the interventions that are effective, and those that are ineffective?

Similar to the assessment of effectiveness by gender and racial/ethnic groups, it is impossible to draw any conclusions about relative effectiveness of the interventions by program characteristics, because no one study explicitly compared effectiveness by characteristics of the interventions. Using the vote-counting method, we examined four characteristics of the intervention program: the setting in which the intervention took place; whether the intervention was a single or a multi-component intervention; the duration of the intervention; and the school level at which the intervention was implemented. Overall, we did not observe any significant variations in intervention effectiveness according to the delivery setting, between single and multi-component interventions, among interventions of different duration, or among interventions implemented at different school levels. However, we did observe that secondary interventions that lasted a year or longer were more likely to be found effective (as reported in four of four articles) than those that lasted six months or less (as reported in five of five articles). We provide a descriptive summary of the reported effectiveness of the interventions by the selected program characteristics in **Table 27**.

Although we intended to perform meta-analysis to pool the findings of homogeneous studies, we were unable to find such a homogeneous stratum of studies. We also planned to use meta-regression to identify the characteristics of interventions that were associated with the effectiveness of programs. However, due to the inadequacy and inconsistency of reporting measures of variation, we could not conduct a meta-regression analysis.

Study Quality of Studies for Key Questions #3, #4 and #5

Of the 32 interventions evaluated, 13 were RCTs, five on primary interventions, six on secondary interventions, and two on tertiary interventions. Eight criteria were used to evaluate the study quality of RCTs: 1) was randomization method adequate to assemble comparable groups? 2) was blinding or concealment method used in treatment allocation? 3) was blinding or concealment method used in outcome assessment? 4) were primary and secondary outcomes reliable and valid? 5) was the comparability of groups maintained throughout the study (80 percent or greater)? 6) was intent-to-treat analysis or similar analytical method used? 7) were important outcomes studied? 8) were all potential confounders accounted or controlled for? Since we selected only those studies with relevant violence outcomes, criterion #7 was common to all studies. In our evaluation we combined criteria #2 and #3 into one. Therefore, we evaluated the quality of the 13 RCTs using six criteria; the findings are presented in **Table 28**.

Although all 13 studies are RCTs, only four randomized the subjects adequately. The other nine studies did not adequately randomize the subjects, as evidenced by significant baseline differences between the intervention and comparison groups. In eight of the nine studies that did not adequately randomize the subjects, the researchers adjusted for the differences in the final analysis. All but one of the 13 RCTs controlled for confounding factors in analysis. Only two of the 13 RCTs used blinding techniques for treatment assignment or for outcome assessment, reflecting the difficulty of blinding in behavioral studies. Intent-to-treat analysis was generally not performed; only four of the 13 RCTs used intent-to-treat analysis. Rate of follow-up of study subjects was not reported in two studies and was over 80 percent in six. The validity of instruments used to measure outcomes was reported in ten studies and was not reported in three.

Only for one study was the instrument not considered valid.

Strictly speaking, none of the 13 RCTs fulfilled all six criteria enumerated here. If we excluded the randomization adequacy criterion, the blinding criterion, and the validity outcome criterion, and evaluated the quality based on the remaining three criteria — the 80 percent or greater follow-up rate, the use of intent-to-treat analysis, and the controlling of confounders in analysis, then two of the 13 RCTs fulfilled these three criteria. We do not believe that this system of evaluating study quality truly reflected the quality of the studies because the OMAR study quality criteria were derived primarily from clinical studies, and many of these criteria are not generally applicable to studies such as those considered in this analysis. The need to develop valid instruments to evaluate the quality of studies in the social sciences is apparent.

Chapter 4. Discussion

Overview

In this report, as in all efforts to systematically review and analyze a vast body of scientific evidence relating to a complex topic, it was necessary to make a number of decisions in an effort to clearly define, and in some cases, narrow the scope of this evidence review. Consequently, this review has a number of limitations. These limitations relate to the definition of violence used and, as a result, behaviors that were excluded from the review; the limitations also include the age range used to define adolescents, the timeframe of the literature reviewed, and because of the heterogeneous nature of the studies identified, the types of analysis and the kinds of conclusions we were able to draw.

First, the research staff decided to use the Centers for Disease Control and Prevention's (CDC's) definition of violence, which defines violence as "the threatened or actual physical force or power initiated by an individual that results in, or has a high likelihood of resulting in, physical or psychological injury or death". We operationalized the definition to include the following types of violent behavior during the adolescent years: murder or homicide, aggravated assault, non-aggravated assault, rape or sexual assault, robbery, gang fight, physical aggression, psychological injury or harm, and other serious injury or harm. By selecting this definition and limiting our focus to violence that was perpetrated by youth, we did not review the growing literature that relates to suicide, verbal aggression, bullying, weapon carrying, externalizing behaviors (e.g., acting out), attitudes about violent behavior, and intent to commit violence. Moreover, we did not review literature related to youth crime against property or materials (such as burglary, theft, vandalism, arson). These violence-related behaviors and attitudes were included in this review only to the extent that they appear in the literature as risk factors for violence.

Based on the CDC's definition, we reviewed interventions that examined only changes in youth violence as an outcome. Consequently, we did not review intervention research that analyzed only other related outcomes such as conflict resolution or negotiation skills, attitudes about violence, bonding with school, or relationships with pro-social peers.

Given the scope of the Task Order, we also chose to limit our focus to address violence as perpetrated by adolescents, ages 12 through 17 years. No universally accepted age definition of adolescence exists. While there is consensus that adolescence is the period between childhood and adulthood, some experts believe that adolescence ends with the age of majority, 18, while others extend adolescence to age 19, 21, or 24. Because of our chosen age parameters, we did not review the literature that describes violence perpetrated by children and pre-adolescents, nor did we review the literature related to violence perpetrated by those we defined as young adults, i.e. those 18 and over. In addition, we included early childhood interventions designed to reduce violence only if they include outcomes reported during adolescence.

Given our limited time and resources, we needed to further limit our evidence review to include only peer-reviewed published articles and articles retrievable by four search engines – MEDLINE®, PsychInfo, SocioAbstracts, and ERIC. We also decided to include only articles that were published in 1990 or later, recognizing that by doing so, we would exclude a considerable segment of the literature. Also excluded were published findings from research conducted outside the United States. To be sure, awareness is growing that violence, including youth violence, is a global problem. Examining risk and protective factors identified within

other regions and countries, and using these data to make international comparisons, would no doubt be an interesting and important endeavor. Unfortunately, such comparisons were outside the scope of this review.

Finally, we made the decision to limit our review to prospective longitudinal cohort studies to examine the evidence on risk and protective factors associated with youth violence. This decision was scientifically driven and made in an effort to ensure that our review was focused on the highest quality and most current literature. To be sure, the numerous cross sectional studies that have been conducted related to youth violence may shed light on risk factors that are worthy of further study. However, longitudinal studies of the same individuals have the greatest power to reveal possible risk and protective factors for and to test the effects of interventions on subsequent outcomes.

In this chapter, we provide a discussion of the findings from this evidence review according to each of the key questions, including a discussion of the methodological challenges inherent in performing this type of evidence review for such a topic. From this discussion, we offer a set of recommendations for future research priorities (Key Questions #6).

Risk Factors Contributing to Youth Violence (Key Questions #1 and #2)

Because few studies examined a comparable set of risk factors (i.e., many risk factors were examined only by a single study), our ability to draw conclusions based on the available evidence was limited. Across all studies, only one risk factor, male gender, was consistently reported as being significantly associated with youth violence perpetration. As an independent factor, low family SES was consistently reported not to be associated with youth violence; however, the co-existence of low SES with other potential risk factors increased the risk of youth violence. No other potential risk factors were consistently associated with increasing the risk for youth violence.

Among studies that specifically focused on adolescent males, we identified a consistent association between violence and anger, cigarette smoking, and non-violent delinquency. For adolescent females, we consistently identified a significant association between violence and non-violent delinquency. For research conducted with at-risk youth populations, being Latino was consistently associated with repeated physical aggression among adolescent males; no consistent findings were identified for research conducted with at-risk adolescent females.

Our attempt to draw conclusions from the literature regarding risk factors for youth violence has raised more questions than it answers. Methodological, analytical, and other issues limit our ability to derive conclusive findings from existing studies. In the following sections, we outline some of these issues to elucidate the challenges that the scientific and policy community must face to truly understand the antecedents to youth violence.

Issues Challenging Analysis of the Data

Definition of violence as an outcome variable. While this evidence review selected and included only studies that examined perpetration of violence as a primary outcome, we saw no uniformity in how violence was defined and measured. Some studies restricted their definition and measure of violence to physical assault, while others clustered homicide, rape/sexual assault, and other types of assault together. Additionally, studies often used different conceptual and theoretical models to guide and inform their research, as well as different approaches to measuring and analyzing these data. In this review, we treated all outcome measures equally,

whether studied individually or as an aggregate. Thus, we were not able to examine the individual risk factors associated with each specific form of violence (e.g., fighting versus homicide versus sexual assault). Ideally, with sufficient power, one would examine the various risk factors associated with each form of violence, and then examine the types of risk factors that are common to or shared across the various forms of violence.

Co-occurring versus independent predictors. The intent and the analytical implication of Key Question # 1 was distinct from those of Key Question #2. While we were looking for *independent* predictor(s) for youth violence in Key Question #1, we were looking for *dependent* risk or protective factors that occurred simultaneously in Key Question #2. In our review for Key Question #1, we reported the findings from multivariate models that controlled or adjusted for the effect of other factors included in the models. For Key Question #2, we reported the findings that occurred simultaneously as a cluster. Different from the independent predictors identified in Key Question #1, the factors in a cluster that occurred simultaneously were likely to be highly correlated. Frequently, a factor found statistically significant in a univariate or bivariate analysis was found non-significant after adjusting for other factors in the model. For example, Herrenkohl and colleagues (Herrenkohl, Egolf, 1997; Herrenkohl, Guo, 2001) reported a significant influence of SES in bivariate analysis using data from the Lehigh longitudinal study in 1976 and data from the Seattle Social Development Project in 2001, but the influence of SES was not statistically significant after controlling for the influence of other factors in multivariate analysis. Until both the dependent and independent nature of the risk and protective factors are properly assessed and clearly differentiated, controversies regarding the significance or non-significance of those factors will persist.

Non-significant findings. In analyzing the literature to identify independent risk- and protective factors, some factors were consistently found not to be associated with violence. A factor could be found not to be significantly predictive of violence for either of two reasons: either the factor is truly not associated with later violence or it has not heretofore been possible to conduct a study that allows the association to be measured. A factor may or may not appear to be meaningful or significant, depending on whether researchers are interested in identifying independent predictor(s) or dependent predictors that occur simultaneously, that is, whether univariate or bivariate analysis or multivariate analysis is conducted, as discussed above. From an analytical perspective, the non-significance of a finding might be related to sample size and power. Non-significance could be related to small sample size or inadequate power to detect a significant difference. Thus, a non-significant finding in a study with a small sample size may not eliminate the potential importance of a risk factor.

Heterogeneity of study populations and designs. For research syntheses, the number and heterogeneity of studies that assess the same or similar populations becomes important. That is, if the study populations, conditions, independent variables, outcomes, and original method of analysis are sufficiently different, attempting to draw meaningful conclusions from combined data can become difficult. For the current analysis, heterogeneity in both study populations and study characteristics (including dependent variables) limited the numbers of studies whose data could be compared, thus challenging our attempts to discern potentially significant factors.

Risk factor definitions, measures and analysis. Another analytical issue relates to cross-study differences in the definition, measurement, and analysis of risk factors. Major differences were identified in the operational definitions and measurements of risk and protective factors across most of the studies we reviewed. Thus, meta-analytic techniques could not be used to pool those risk/protective factors across the various studies. Such differences have no doubt contributed to some of the confusion that currently exists within the field. For the current evidence assessment, the differential grouping of several factors into constructs presented a problem. For example, some studies considered "alcohol and other drug use" as a risk factor while others considered "illicit drug use". This made it difficult to decide whether findings for them should be pooled because when factors were grouped into domains or constructs, the subtlety and/or uniqueness of individual factors might be lost. In our assessment, we used the factors as defined in the articles with no attempts to combine them into constructs. This may present difficulties in interpretation when one attempts to compare our findings with those in other reviews.

Challenges with Interpretations of Specific Findings

The issues and challenges described above have a significant impact on the interpretation of our findings related to key constructs of interest such as SES, age, and race/ethnicity. The demographic constructs are of interest to the Conference Panel as indicated in Key Questions #4. The socio-economic indicator is of interest as it has been shown to be a confounding factor in racial differences in homicide rates (Hennes, 1998).

Socio-economic status (SES). As we noted earlier, low SES or low family income was not consistently reported as a significant independent risk factor for youth violence. One reason could be that we included only studies that expressly used the term SES rather than including studies of factors such as low parental education or unstable financial base. Therefore, if a study reported that low parental education was a predictor but low SES was not, we reported them as two separate findings. We did not investigate whether the finding would be the same if we combined findings for participants with low parental education and those with low SES as a predictor.

Another reason that low SES was found not to be an independent significant risk factor for youth violence was that, as mentioned, the effect disappeared with multivariate analysis when other confounding factors were taken into consideration (Saner and Ellickson, 1996; Brezina, 1999; Herrenkohl, Egolf, 1997; Herrenkohl, Guo, 2001; Herrera and McCloskey, 2001).

Age. The findings on the effect of age were mixed, depending on many clinical and analytical factors. A significant effect of age was found in two cohort studies but not in seven other cohort studies when all population groups were combined. One study found age to be significant with bivariate analysis but not multivariate analysis (Herrenkohl, Egolf, 1997). A cohort study that examined risk factors from age six through 12 reported that age was a significant factor among boys but not girls (Becker and McCloskey, 2002, Herrenkohl, Hill, 2003). Another study that examined the role of childhood abuse and neglect in violence (Rivera and Widom, 1990) found that age was a significant factor for adult but not juvenile violent crimes. In a study that examined the risk factors for dating violence perpetration (Foshee, Bauman, 2001), age was not reported as a significant risk factor for either boys or girls. However, because the study used a follow-up period of only one year, the true impact of age could not be determined. In a study that examined repeated violent behavior in boys (Beyers, Loeber, 2001), age was found to be a

significant risk factor in low SES areas but not in high SES areas. However, this effect disappeared with multivariate analysis.

Race/ethnicity. Findings regarding the effect of race/ethnicity should also be interpreted with caution. Across all study types, all types of violent behaviors, and all study populations, Latino ethnicity was reported as a significant risk factor in four of seven cohort studies. And those studies that found an effect for Latino ethnicity were no more homogeneous than those that did not. Thus, no real conclusions can be drawn from the existing studies regarding the effect of race or ethnicity as a risk or protective factor.

The following series of findings illustrate the difficulties we faced in generalizing results from studies with different outcome measures of violence. In a large longitudinal cohort study for the general population when only fighting was considered as the violent behavior, being Latino was not a significant risk factor (McNulty and Bellair, 2003). In the article by Loeber et al. (Loeber, Wei, 1999) that reported findings on at-risk boys from three cohort studies, the findings on being Latino were mixed. When "fighting" was considered as the violent behavior, being Latino was a significant risk factor in one cohort study but not in another. When "rape, attack, and strongarm" were considered as the violent behaviors, being Latino was reported as a risk factor in both cohort studies. In another large cohort study for the general population, being Latino was reported as a significant risk factor among boys but not among girls (Dornbusch, Lin, 1999) when interpersonal violence perpetration was the outcome. Lastly, in a large study for inner-city male adolescents, where race/ethnicity was defined more specifically as Cuban, non-Cuban Hispanic, American Black, White, Haitian, Caribbean Black, Nicaraguan, and others (Kingery, Biafora, 1996), being Latino (Cuban or non-Cuban Hispanic) was not reported as a significant risk factor for "gang fights," "using force to get money or items," or "beating someone for no reason." In this study, being Caribbean Black and Nicaraguan were found to be risk factors for these violent behaviors. In a study for at-risk boys, being Latino was not reported as a significant risk factor for repeated violent delinquency either in high SES or low SES areas (Beyers, Loeber, 2001). These mixed findings for race/ethnicity illustrate the difficulties in combining and/or interpreting findings from different studies.

Effectiveness of Interventions for Youth Violence (Key Question #3)

Disregarding study design, we identified 16 articles that addressed 15 primary interventions, 11 articles that addressed 10 secondary interventions, and seven articles that addressed seven tertiary interventions. Thirteen of these studies were RCTs: five (37.5 percent) assessed primary interventions, six (46 percent) assessed secondary interventions, and two (15 percent) assessed tertiary interventions. Focusing only on these RCTs, one of five (20 percent) primary interventions, three of six (50 percent) secondary interventions, and two of two (100 percent) tertiary interventions were effective.

In general, this increasing effectiveness with increasing level of intervention is not unexpected. The overarching goal of most primary prevention interventions is to reduce risk behaviors that have been observed under some conditions to lead to violence. Therefore, their outcome indicators focus primarily on reduction of potential risk behaviors, such as use of illicit drugs. In contrast, the target populations for secondary and tertiary interventions to reduce violent behavior (or any behavior) are those already at heightened risk for or already engaging in the behavior. Thus the goal of those interventions, particularly tertiary interventions is more

likely to be reduction in violence outcomes, the focus of our analysis. We considered an intervention effective only if it was associated with a reduction in violence outcome(s), not if it merely reduced risk behaviors. Therefore, our findings for primary interventions should be interpreted in light of this contrast. What is more, a tertiary intervention is more likely to be successful than a primary intervention, because the target population is small and homogeneous with respect to prior engagement in the behavior of interest, compared with the population for a primary intervention.

In many of the RCTs we reviewed, although the unit of analysis was the individual subject, the unit of randomization was frequently not the individual subject but an aggregated unit of individuals, such as a school, team, homeroom, family, or youth bureau. This inadequacy in randomization results in inherent differences between the experimental group and the control group of subjects as was evidenced by the need for eight of the 13 RCTs to adjust for differences in the characteristics of the two groups in analysis. Further, cross-contamination can occur in group-randomized controlled trials that can influence the apparent effectiveness of programs. However, RCTs that enroll individual participants are extremely difficult to implement in "real world" settings, especially in the behavioral and social sciences; thus, group RCTs are frequently used instead. Therefore, more research should be focused on the design, implementation, and analysis of group RCTs to increase their scientific rigor. For example, the question of what is a sufficient number of groups to detect a minimum level of group difference needs to be addressed, as does the question of how to rigorously analyze the effectiveness of interventions where the group is the target of the intervention and where there are likely to be important group effects. Research in this area will contribute greatly to the rigor of the methods used in the social sciences.

Program Effectiveness by Age, Gender, and Race/Ethnicity (Key Question #4)

Similar to our assessment with the level of interventions, within study comparisons are the strongest analytic approach to answer this question. However, none of the studies provided the information needed to evaluate differential effects by age, gender, or race/ethnicity. Thus we resorted to the use of the "vote-counting" method (see Chapter 2) to summarize the findings.

Effect of age. The focus of this assessment was on violence perpetrated by adolescents, 12 through 17. Thus, we limited our review to published articles that reported intervention effectiveness in this age range. Because of the small number of studies identified, we did not subdivide the data for the 12 through 17 age range into smaller ranges.

Effect of gender. To assess the effect of gender on program effectiveness, we combined all types of study designs, using only studies that reported the gender distribution of their study subjects. Of the 21 studies that assessed effectiveness for both males and females, nine demonstrated effectiveness (43 percent), compared with two of four studies (50 percent) that enrolled only males. Among the five studies that presented findings for males and females separately, all but one found that the effectiveness of the interventions was the same for both genders; the one exception was a NRCT of a secondary prevention intervention.

Effect of race/ethnicity. For race/ethnicity, when we used the predominant ethnic group as the reference and combined all study designs, the effectiveness of interventions was found to be

ethnic-specific: three in 10 (30 percent) studies with predominantly Caucasian subjects, nine in 12 (75 percent) studies with predominantly African-American subjects, and none (0 percent) of the two studies with predominantly Latino subjects. Due to the small number of studies, these statistics should be viewed as descriptive in nature.

Commonalities of the Interventions That Are Effective, and Those That Are Ineffective (Key Question #5)

Similar to the assessment of effectiveness by gender and racial/ethnic groups, it is impossible to draw any conclusions about relative effectiveness of the interventions by program characteristics, because no one study explicitly compared effectiveness by characteristics of the interventions.

The most important characteristic that differentiated the effectiveness of the interventions was the level of the intervention – i.e., whether it was primary, secondary, or tertiary. Based on our analysis of the RCTs, effectiveness was reported in one of five (20 percent) primary interventions, three of six (50 percent) secondary interventions and two of two (100 percent) tertiary interventions. Although the number of studies is too small for statistical significance and although the results were based on the vote-counting method (see Chapter 2), the observed findings are clinically meaningful. The findings from studies using other designs are less clear than those from RCTs. Thus the type of study design might play a role in detecting program effectiveness.

Further, our finding that the effectiveness of interventions increases with the level should not be misconstrued as discrediting primary interventions. Primary interventions are frequently designed with the goal of preventing attitudes and behaviors that could lead to violence and are not directed towards reducing violence itself. Therefore, it would be more appropriate to measure population effectiveness (and use an appropriate intermediate outcome) for primary interventions rather than individual effectiveness as we have used in this review. A growing body of literature assesses the effectiveness of programs targeted to communities or neighborhoods. The efforts by developmental researchers to quantify community or neighborhood effects will no doubt contribute significantly to the evaluation of the effectiveness of primary intervention programs.

In our attempt to evaluate other characteristics of the intervention programs that might distinguish effective programs from ineffective programs, we did not observe any significant variations in intervention effectiveness according to the delivery setting, between single and multi-component interventions, among interventions of different duration, or among interventions implemented at different school levels. However, we did observe that secondary interventions that lasted a year or longer were more likely to be found effective (as reported in four of four articles) than those that lasted six months or less (as reported in five of five articles). Again, it is important to note that this analysis included only a small number of studies; thus, patterns, if any, would require further substantiation.

We believe many other characteristics of an intervention program might play a significant role in that program's effectiveness. One such characteristic is the success or failure related to the implementation of the intervention, such as the degree to which participants attended the sessions; this information was generally not reported within the articles reviewed nor consistently reported. A considerable contribution to the future literature would be the consistent reporting of intervention characteristics, as well as a description of the approach used to implement prevention interventions.

Limitations and Priorities for Future Research (Key Question #6: What are the priorities for future research?)

Given the restricted scope of the project and the methodology required for assessing the evidence, this report can not draw many conclusions, and many of the findings are clinically intuitive (e.g. male gender as a consistent risk factor, polydrug use leading to increased violence in boys and girls, youth exposed to multiple risk factors being more likely to engage in later violence). Much of the value of this report is in the identification of the current status of research on youth violence, the existing research gaps and inconsistencies, and the need for additional scientifically rigorous studies. The inconsistent reporting of the details of various intervention programs made it essentially impossible to evaluate comparative program effectiveness by individual program characteristics.

In the following sections, we address the limitations of our analysis and priorities for future research in five specific areas: 1) risk factors contributing to youth violence, 2) intervention programs for the prevention of youth violence, 3) quality of publications, 4) rating of study quality and 5) evidence assessment methodology. At the outset, we established conceptual and analytic frameworks, i.e., a road map of causal pathways, for organizing exposure to risk and protective factors — including participation in prevention interventions — and violence outcomes. We used these constructs to identify gaps in research with respect to our ability to assess the relationship between exposure to risk/protective factors and violence outcomes.

Risk Factors Contributing to Youth Violence

Definition, scope, and type of youth violence. As previously noted, we found little consistency in the definitions used by the various studies to define youth violence and/or violence related outcomes. Some studies defined violence according to one or more discrete behaviors, others used a composite score, while others combined related violent and non-violent behaviors in their definition of violence. Further, while we had hoped to be able to differentiate between life-threatening and non-life-threatening violence outcomes, few studies provided the information needed to make such a distinction. We believe that first and foremost, an effort needs to be made to develop some uniformity in the ways that youth violence and violence-related outcomes are both defined and operationalized, and these definitions should be incorporated into future research so that study conditions become more uniform and consistent. We therefore recommend that experts from the fields of psychiatry, psychology, sociology, criminal justice, public policy, and education launch a national effort to develop comparable approaches to defining, measuring, and analyzing research data related to youth violence, and that new initiatives be funded to facilitate the collection of comparable data across multiple sites, with multiple youth populations, by researchers from various theoretical orientations and disciplines. Such multi-site cooperative agreement studies would permit the use of combined prospective cohorts from which a common standardized dataset could be assembled and analyzed.

Framework for studying risk factors. While previous research has largely focused on the identification of risk factors associated with or predictive of youth violence, the ways in which risk and protective factors are defined and measured across studies and study populations show little consistency. This lack of consistency has contributed to difficulties in synthesizing findings across studies for the purpose of ultimately developing a cumulative knowledge base. Moreover, much of the research that has been conducted to examine risk factors has been conducted without

a framework within which to organize and integrate the temporal and lateral co-occurrences of risk factors. Although we have observed increasing efforts in this area, such as the creation of developmental pathways, they represent only a beginning because of the difficulties inherent in longitudinal studies and the requirement for large, uniform, and comprehensive datasets for such endeavors. Considerable effort is needed in this specific area of research. An important starting point would be to convene a consensus conference with experts representing the disciplines mentioned earlier, to develop consensus on how to define, conceptually organize, and measure risk and protective factors that may be associated with youth violence.

Study designs and methods. Of the 233 studies identified as being relevant to risk factors for violence, the majority were cross-sectional studies (71 percent or 165 studies). Cross-sectional studies are important in identifying risk factors that may be associated with violence, but they do not allow assessments of developmental pathways or the temporal and/or lateral causal patterns that culminate in violence. The longitudinal cohort study design is the gold standard and the only design appropriate to draw such conclusions. The ideal design would be a *natural* longitudinal cohort followed from birth and through all stages of childhood and adolescent development. However, longitudinal studies present many obstacles, such as non-participation and attrition. Future research must concentrate on minimizing both non-participation and attrition. While natural longitudinal cohorts must be established, *pseudo* longitudinal cohorts could also be developed. This would involve the coordination of existing longitudinal cohorts focused on various stages of development, different types of study populations, and different types of outcomes in order to assemble a common dataset for analysis. Such an effort would require strong central support and cooperation from all parties involved.
Another area of future research would be to compare the findings from cross-sectional studies with that from longitudinal studies in order to identify how and in what ways findings from cross-sectional studies could be used for longitudinal research. For example, what are the risk or protective factors that could be validly obtained from cross-sectional studies and which ones could not? What are the sources of data or methods of data collection in cross-sectional studies that would produce valid information on an individual equivalent to that from longitudinal studies?

Interventions for the Prevention of Youth Violence

Design and conduct of intervention studies. Of the 32 studies that were relevant to the key questions on interventions, only 13 (41 percent) were RCTs: five for primary prevention interventions, six for secondary prevention interventions, and two for tertiary prevention interventions.

Due to differences in the type of interventions implemented, as well as differences in the types of outcomes evaluated, we were not able to pool studies within a specific level of intervention (e.g., primary versus secondary prevention). We recommend more randomized controlled interventions at each level, as well as trials that enroll sufficient numbers of youths of both genders, the range of ages, varying race/ethnicity, and the spectrum of other characteristics thought to increase the risk of youth violence in order to permit comparative analysis.

What's more, greater effort is needed when the unit of randomization is larger than the individual to minimize differences and increase comparability of groups as well as to ensure that the appropriate analytical techniques are used to adjust for differences, if any. We encourage the use of advanced statistical techniques that allow for complex sampling schemes.

Analytic approach to study effectiveness by population subgroups or program characteristics. The analytic approach taken by researchers of these intervention studies in our review was to examine the effectiveness *within* each population subgroup rather than investigating the differential effectiveness *between* population subgroups such as gender or ethnic groups. The intent of Key Question #4 could be interpreted as either or both. If the interest of the researcher is to identify the differential effectiveness of a specific program *between* gender groups or *among* ethnic groups, then the researcher must design the study and measure the differential effectiveness of the intervention *between* and *among* the subgroups of interest. Evaluating the effectiveness *within* each subgroup (as most of the intervention studies that we have reviewed) does not provide the same information. Therefore, we recommend that more efforts should be placed in differentiating the two types of analytic approaches to study effectiveness, whether one is interested in *within* differences or *between* differences.

The science of intervention development and evaluation. Our finding that the description and the characterization of the intervention programs have not been consistent points to the need not only to standardize the execution and reporting of interventions but also to the need to refine the scientific approaches to translate research into practice, in our case, to translate research findings into intervention development and evaluation. Consensus building efforts are needed to identify and clarify the science related to a) the use of conceptual frameworks and causal pathways for youth violence, b) risk factors and mechanisms leading to violent outcomes, c) strategies and interventions to reduce violent outcomes, d) methodologies and scientifically grounded approaches to evaluate prevention interventions, e) the effective use of policy to reduce youth violence, and f) methodologies for evaluating such policies. We recommend that the field use the greatest scientific rigor possible, including the use of control populations and extended follow-up, to evaluate the sustained effectiveness of youth violence prevention interventions.

Quality of Publications

We attempted to evaluate the quality of each study with a defined set of criteria. However, we were not satisfied with these evaluations because the information provided in the publications was both inconsistent and inadequate. The characteristics of a study such as the study questions, conceptual framework, study design, description of study population, randomization procedures, blinding procedures, data collection procedures and instruments, validity of data collection instruments, definition of and rationale for choice of exposure factors and outcomes, analytical approaches, statistical analysis, and publication of findings could not be properly evaluated on a consistent basis, given the information in the articles. The inadequacy of the description of these methodological issues relates to both the space restriction imposed by journals and the lack of a standard for the type and amount of information to be included in the publication. Special efforts to improve the quality of publications are encouraged.

Rating of Study Quality

When we attempted to evaluate study quality, we found that the available instruments were not appropriate for use in the social sciences. The OMAR study quality criteria were derived primarily from clinical studies, and many are not applicable to studies of social phenomena such as youth violence. We believe that a unique set of instruments should be developed to evaluate the quality of both observational and experimental studies in the social sciences.

For prospective longitudinal studies, we have shown that a high retention rate alone is inadequate to measure sample bias. In general, the sample data on which results were based were subject to three types of bias: non-participation, lost-to-follow-up (addressed by retention rate), and missing data. Therefore, the retention rate represents only one of three components of sample bias. We believe that the participation rate, follow-up or retention rate, and proportion of participants with complete data should be considered when assessing the possibility of bias in the study sample, especially for outcomes such as violence. The risk factors that are likely to contribute to violent outcomes are also likely to contribute to non-participation, loss to follow-up, and missing data.

For intervention studies, we have shown that in a strict sense, none of the 13 RCTs evaluated in our review fulfilled all six criteria put forth by OMAR. However, we do not believe that this system of evaluating study quality truly assessed the quality of the studies we reviewed because the OMAR study quality criteria were derived primarily from clinical studies. Unlike many clinical interventions for medical conditions, youth violence interventions are often multi-faceted, involve the efforts of multiple parties (e.g., teachers, parents, school administrators, etc.), are conducted over long periods of time, and can be adversely affected by factors that cannot be anticipated, characteristics that make the studies difficult to evaluate. The nature of the interventions in social science studies can also preclude some of the methodological components critical to clinical trials. For example, many interventions are school or classroom based; thus, random assignment of individual students is not only logistically impossible but could threaten validity in other ways. Nor could randomized trials be used to evaluate the impact of a state law, given the obvious fact that individuals residing in the state cannot be randomly assigned to be subjected or not subjected to the law and the sanctions for breaking it. Even when randomized trials are possible, double blinding is not exactly relevant to some outcome measures (e.g., formal arrests made by the police). The need to develop valid instruments to evaluate the quality of studies in the social sciences is apparent.

Evidence Assessment Methods

Finally, we would like to comment on the methods used to assess the evidence for this topic. The Southern California Evidence-based Practice Center (SC-EPC) has applied these evidence assessment methods to evaluate the literature on a variety of clinical topics in the past. This report, which represents the SC-EPC's first use of the methods to assess evidence for a social science topic, demonstrated to us that such methods have limited value in the study of youth violence. Because of the complexity of the problem, the multi-factorial nature of contributing factors, and the multiple components of violent behaviors, it was virtually impossible to identify sets of data with sufficient homogeneity to allow pooling of data using meta-analytic technique.

Another difficulty we encountered in this assessment was the inability to abstract needed data from some of the articles. For example some articles excluded information that might have permitted data pooling, some combined outcomes of interest with those of no interest, and some reported on studies with vague age limits. A large number of potentially eligible articles within our scope were excluded for reasons such as these; thus, we believe that our assessment was based on only a small subset of potentially relevant studies. Alternative approaches should be considered to assess evidence for topics such as youth violence.

To circumvent the difficulties we described, we recommend that for future systematic reviews, the use of an *individual-level-data meta-analysis* method be considered (Stewart and Clarke, 1995; Stewart and Parmar, 1993) to identify temporal and lateral co-occurrences of

contributing factors. This approach calls for collaboration among investigators from various institutions who have been following cohorts of children prospectively, to contribute data on individual members of their cohorts. Eligible cohorts are identified based on *a priori* criteria. Risk factors, interventions, and outcomes of interest are also defined *a priori*. The unique feature of individual-level-data meta-analysis is the ability it confers to retrieve a uniform set of data directly on risk factors, characteristics of intervention, and outcome measures, case by case. This case-specific data set could then be analyzed using advanced statistical techniques such as the trajectory estimating method (Nagin and Tremblay, 1999). A meta-analysis of updated individual patient data has been found to provide the least biased and most reliable means of addressing questions that have not been satisfactorily resolved by individual studies (Stewart and Parmar, 1993). However, the quality of data and the ability for cohort investigators to collect and share relevant data are important factors in the success of this approach (Stewart and Parmar, 1993). Furthermore, when compared with meta-analysis of summary data from the literature, the individual-level-data-meta-analysis is markedly more costly in terms of data retrieval, study management, and monitoring and requires considerable forward planning and incentives for investigators to collaborate on study design, measurement procedures, data analysis, data documentation and archiving, and the sharing of data as well as recognition. The cost efficiency of meta-analysis summary data from the literature over analysis of variance of individual patient data has been shown for multiple homogeneous studies (Olkin and Sampson, 1998; Mathew and Nordstrom, 1999), such as those carried out in clinical research. However, as we have discussed, studies of topics such as youth violence are often beset by complexities that preclude the compilation of homogeneous data for meta-analysis but that increase their suitability for the individual-level-data-meta-analysis approach, despite the cost.

Another factor that complicated our use of evidence assessment methods was the decision to rely solely on published articles. This restriction precluded use of reports that summarized findings from program evaluations (which, typically, are not published as such) and which could have added to the scope and breadth of the review. . For future research and program development, it is highly recommended that a survey of federal agencies, foundations, and other appropriate entities be conducted to identify current and recent research and program evaluation activities. Producing a synthesis or summary of study-group findings and other comprehensive activities that respond to the Task Order questions might also be helpful (e.g., the Campbell Collaboration report on evidence-based criminal justice programming; the Surgeon General's report on violence; the National Research Council's *Juvenile Crime/Juvenile Justice*). Such a survey would provide data for the formulation of recommendations regarding the development of a national research and program development agenda.

Summary of Notable Points on the Utility of the Report

The overarching goal of this review is to bring the greatest scientific rigor to the evaluation process to identify the highest quality research findings on the topic of youth violence. With the severely restricted scope of the project, much of the value of this report was the identification of the current status of research on youth violence, the existing research gaps and inconsistencies, and the need for additional scientifically rigorous studies. Some notable points from the review included the following:

- The need for national efforts to develop comparable definitions, measurements, and analytical techniques for research data on youth violence;

- The need to facilitate the collection of comparable data across multiple sites and with multiple youth populations;
- The need to consider the use of individual-level-data-meta-analysis to examine temporal and lateral co-occurrences of risk factors contributing to youth violence;
- The recognized need to minimize non-participation and attrition in research studies;
- The call for recognition of pseudo prospective cohorts from which a common dataset can be assembled and advanced statistical analyses can be conducted;
- The need for conceptual frameworks and causal pathways, risk factors and mechanisms, effective strategies and interventions, scientifically grounded methodologies to evaluate prevention interventions, and effective use of policy and methodologies to evaluate these policies;
- The recognition of essential elements of quality publications; and,
- The need to assess and clearly differentiate the dependent and independent nature of the risk- or protective factors contributing to youth violence perpetration.

References and Included Studies

Administration for Children and Families. Toward a blueprint for youth. Accessed: May 2004. http://www.acf.hhs.gov/programs/fysb/youthinfo/blueprint2.htm.

Becker KB, McCloskey LA. Attention and conduct problems in children exposed to family violence. Am J Orthopsychiatry 2002;72(1):83-91.

Beyers JM, Loeber R, Wikstrom PO, et al. What predicts adolescent violence in better-off neighborhoods? J Abnorm Child Psychol 2001;29(5):369-81.

Bock G, Goode J. Genetics of criminal and antisocial behaviour. New York: Wiley; 1996.

Borduin CM, Mann BJ, Cone LT, et al. Multisystemic treatment of serious juvenile offenders: long-term prevention of criminality and violence. J Consult Clin Psychol 1995;63(4):569-78.

Borowsky IW, Ireland M, Resnick MD, et al. Violence risk and protective factors among youth held back in school. Ambul Pediatr 2002;2(6):475-84.

Bosworth K, Espelage D, DuBay T, et al. Preliminary evaluation of a multimedia violence prevention program for adolescents. Am J Health Behav 2000;24(4):268-80.

Breunlin DC, Bryant-Edwards TL, Hetherington JS, et al. Conflict resolution training as an alternative to suspension for violent behavior. J Educ Res 2002;95(6):349-57.

Brezina T. Teenage violence toward parents as an adaptation to family strain: Evidence from a national survey of male adolescents. Youth Soc 1999;30(4):416-44.

Constantino JN, Liberman M, Kincaid M. Effects of serotonin reuptake inhibitors on aggressive behavior in psychiatrically hospitalized adolescents: results of an open trial. J Child Adolesc Psychopharmacol 1997;7(1):31-44.

Cook PJ, Laub JH. The unprecedented epidemic in youth violence. In: Tonry M, Moore MH, editors. Youth violence: Crime and justice. Chicago: University of Chicago Press; 1998.

Cooper H, Hedges LV, editors. The handbook of research synthesis. New York: Russell Sage Foundation; 1994. Chapter 14, Vote-counting procedure in meta-analysis.

Dahlberg LL, Potter LB. Youth violence: Developmental pathways and prevention challenges. Am J Prev Med 2001;20(Suppl1):3-14.

DeVoe J, Peter K, Kaufman P, et al. Indicators of school crime and safety:2002. NCES Publication 2003009. Accessed: May 2004. (http://nces.ed.gov/pubs2003/schoolcrime/).

Dornbusch SM, Lin I-C, Munroe PT, et al. Adolescent polydrug use and violence in the United States. Int J Adolesc Med Health 1999;11(3-4):197-219.

Dowd MD. Consequences of violence. Premature death, violence recidivism, and violent criminality. Pediatr Clin North Am 1998;45(2):333-40.

Durant RH, Barkin S, Krowchuk DP. Evaluation of a peaceful conflict resolution and violence prevention curriculum for sixth-grade students. J Adolesc Health 2001;28(5):386-93.

DuRant RH, Treiber F, Getts A, et al. Comparison of two violence prevention curricula for middle school adolescents. J Adolesc Health 1996;19(2):111-7.

Dykeman BF. The effects of family conflict resolution on children's classroom behavior. J Instr Psychol 2003;30(1):41-6.

Elias MJ, Gara MA, Schuyler TF, et al. The promotion of social competence: Longitudinal study of a preventive school-based program. Am J Orthopsychiatry 1991;61(3):409-17.

Ellickson PL, Tucker JS, Klein DJ. High-risk behaviors associated with early smoking: results from a 5-year follow-up. J Adolesc Health 2001;28(6):465-73.

Ellickson PL, Tucker JS, Klein DJ. Ten-year prospective study of public health problems associated with early drinking. Pediatrics 2003;111(5 Pt 1):949-55.

Farrell AD, Meyer AL, Sullivan TN, et al. Evaluation of the responding in peaceful and positive ways (RIPP) seventh grade violence prevention curriculum. J Child Fam Stud 2003;12(1):101-20.

Federal Bureau of Investigations. Uniform crime report. Accessed: May 2004. http://www.fbi.gov/ucr/99cius.htm.

Felson RB. "Kick 'em when they're down": Explanations of the relationship between stress and interpersonal aggression and violence. Sociol Q 1992;33(1):1-16.

Foshee VA, Bauman KE, Arriaga XB, et al. An evaluation of Safe Dates, an adolescent dating violence prevention program. Am J Public Health 1998;88(1):45-50.

Foshee VA, Bauman KE, Greene WF, et al. The Safe Dates program: 1-year follow-up results. Am J Public Health 2000;90(10):1619-22.

Foshee VA, Linder F, MacDougall JE, et al. Gender differences in the longitudinal predictors of adolescent dating violence. Prev Med 2001;32(2):128-41.

Friedman AS, Terras A, Glassman K. Multimodel

substance use intervention program for male delinquents. J Child Adolesc Subst Abus 2002;11(4):43-65.

Ginsberg C. Violence-related attitudes and behaviors of high school students--New York City, 1992. MMWR Morb Mortal Wkly Rep 1993;42(40):773-7.

Hagan MP, King RP, Patros RL. The efficacy of a serious sex offenders treatment program for adolescent rapists. Int J Offender Ther Comp Criminol 1994;38(2):141-50.

Halpern CT, Udry JR, Campbell B, et al. Relationships between aggression and pubertal increases in testosterone: A panel analysis of adolescent males. Soc Biol 1993;40(1-2):8-24.

Hammond WR, Yung BR. Preventing violence in at-risk African-American youth. J Health Care Poor Underserved 1991;2(3):359-73.

Hanlon TE, Bateman RW, Simon BD, et al. An early community-based intervention for the prevention of substance abuse and other delinquent behavior. J Youth Adolesc 2002;31(6):459-71.

Harrington NG, Giles SM, Hoyle RH, et al. Evaluation of the All Stars character education and problem behavior prevention program: effects on mediator and outcome variables for middle school students. Health Educ Behav 2001;28(5):533-46.

Hawkins JD, Catalano RF, Kosterman R, et al. Preventing adolescent health-risk behaviors by strengthening protection during childhood. Arch Pediatr Adolesc Med 1999;153(3):226-34.

Heimer K. Socioeconomic status, subcultural definitions, and violent delinquency. Soc Forces 1997;75(3):799-833

Henggeler SW, Clingempeel WG, Brondino MJ, et al. Four-year follow-up of multisystemic therapy with substance-abusing and substance-dependent juvenile offenders. J Am Acad Child Adolesc Psychiatry 2002;41(7):868-74.

Hennes H. A review of violence statistics among children and adolescents in the United States. Pediatr Clin North Am 1998;45(2):269-80.

Herrenkohl RC, Egolf BP, Herrenkohl EC. Preschool antecedents of adolescent assaultive behavior: a longitudinal study. Am J Orthopsychiatry 1997;67(3):422-32.

Herrenkohl TI, Guo J, Kosterman R, et al. Early adolescent predictors of youth violence as mediators of childhood risks. J Early Adolesc 2001;21(4):447-69.

Herrenkohl TI, Hill KG, Chung I-J, et al. Protective factors against serious violent behavior in adolescence: A prospective study of aggressive children. Soc Work Res 2003;27(3):179-91.

Herrenkohl TI, Maguin E, Hill KG, et al. Developmental risk factors for youth violence. J Adolesc Health 2000;26(3):176-86.

Herrera VM, McCloskey LA. Gender differences in the risk for delinquency among youth exposed to family violence. Child Abuse Negl 2001;25(8):1037-51.

Herrera VM, McCloskey LA. Sexual abuse, family violence, and female delinquency: Findings from a longitudinal study. Violence Vict 2003;18(3):319-34.

Huang B, Kosterman R, Catalano RF. Modeling mediation in the etiology of violent behavior in adolescence: a test of the social development model. Criminology 2001;39(1):75-107.

Hulley SB, Cummings SR, Browner WS, et al. Designing clinical research: an epidemiologic approach, second edition. Philadelphia, PA: Lippincott Williams & Wilkins; 2001.

Kaplan HB, Tolle GCJ, Yoshida T. Substance use-induced diminution of violence: a countervailing effect in longitudinal perspective. Criminology 2001;39(1):205-24.

Kann L, Kinchen SA, Williams BI, et al. Youth risk behavior surveillance--United States, 1999. MMWR CDC Surveill Summ 2000;49(5):1-32.

Kingery PM, Biafora FA, Zimmerman RS. Risk factors for violent behaviors among ethnically diverse urban adolescents: Beyond race/ethnicity. Sch Psychol Int 1996;17(2):171-88.

Komro KA, Williams CL, Forster JL, et al. The relationship between adolescent alcohol use and delinquent and violent behaviors. J Child Adolesc Subst Abus 1999;9(2):13-28.

Loeber R, Wei E, Stouthamer-Loeber M, et al. Behavioral antecedents to serious and violent offending: Joint analyses from the Denver Youth Survey, Pittsburgh Youth Study and the Rochester Youth Development Study. Stud Crime Crime Prev 1999;8(2):245-63.

Loeber R, Wung P, Keenan K, et al. Developmental pathways in disruptive child behavior. Dev Psychopathol 1993;5(1-2):103-33.

Lowry R, Sleet D, Duncan C, et al. Adolescents at risk for violence. Educ Psychol Rev 1995;7(1):7-39.

Ludwig J, Duncan GJ, Hirschfield P. Urban poverty and juvenile crime: evidence from a randomized housing-mobility experiment. Q J Econ 2001;116(2):655-79.

Mathew T, Nordstrom K. On the equivalence of meta-analysis using literature and using individual patient data. Biometrics 1999;55(4):1221-3.

McCloskey LA, Lichter EL. The contribution of marital violence to adolescent aggression across different relationships. J Interpers Violence 2003;18(4):390-412.

McCord J, Widom CS, Crowell NA. Juvenile crime, juvenile justice. Washington, D. C.: National Academy Press; 2001.

McNulty TL, Bellair PE. Explaining racial and ethnic differences in adolescent violence: Structural disadvantage, family well-being, and social capital. Justice Q 2003;20(1):1-31.

Moore E, Armsden G, Gogerty PL. A twelve-year follow-up study of maltreated and at-risk children who received early therapeutic child care. Child Maltreat 1998;3(1):3-16.

Morrissey C. A multimodal approach to controlling inpatient assaultiveness among incarcerated juveniles. J Offender Rehabil 1997;25(1-2):31-42.

Myers WC, Burton PR, Sanders PD, et al. Project back-on-track at 1 year: a delinquency treatment program for early-career juvenile offenders. J Am Acad Child Adolesc Psychiatry 2000;39(9):1127-34.

Nagin D, Tremblay RE. Trajectories of boys' physical aggression, opposition, and hyperactivity on the path to physically violent and nonviolent juvenile delinquency. Child Dev 1999;70(5):1181-96.

National Center for Injury Prevention and Control. Youth violence: Overview. Accessed: May 2004. http://www.cdc.gov/ncipc/factsheets/yvfacts.htm.

O'Donnell L, Stueve A, San Doval A, et al. Violence prevention and young adolescents' participation in community youth service. J Adolesc Health 1999;24(1):28-37.

ODS and OMAR. Procedures for EPC Reports for ODS and OMAR. 2003

O'Leary KD, Slep AMS. A dyadic longitudinal model of adolescent dating aggression. J Clin Child Adolesc Psychol 2003;32(3):314-27.

Olkin I, Sampson A. Comparison of meta-analysis versus analysis of variance of individual patient data. Biometrics 1998;54(1):317-22.

Orpinas P, Kelder S, Frankowski R, et al. Outcome evaluation of a multi-component violence-prevention program for middle schools: the Students for Peace project. Health Educ Res 2000;15(1):45-58.

Perry CL, Komro KA, Veblen-Mortenson S, et al. A randomized controlled trial of the middle and junior high school D.A.R.E. and D.A.R.E. Plus programs. Arch Pediatr Adolesc Med 2003;157(2):178-84.

Piquero A, Tibbetts S. The impact of pre/perinatal disturbances and disadvantaged familial environment in predicting criminal offending. Stud Crime Crime Prev 1999;8(1):52-70.

Raine A. Biosocial studies of antisocial and violent behavior in children and adults: a review. J Abnorm Child Psychol 2002; 30(4) 312-26.

Reynolds AJ, Temple JA, Robertson DL, et al. Long-term effects of an early childhood intervention on educational achievement and juvenile arrest: A 15-year follow-up of low-income children in public schools. JAMA 2001;285(18):2339-46.

Risler EA, Sweatman T, Nackerud L. Evaluating the Georgia legislative Waiver's effectiveness in deterring juvenile crime. Res Soc Work Pract 1998;8(6):657-67.

Rivera B, Widom CS. Childhood victimization and violent offending. Violence Vict 1990;5(1):19-35.

Roitberg T, Menard S. Adolescent violence: A test of integrated theory. Stud Crime Crime Prev 1995;4(2):177-96.

Sampson RJ, Morenoff JD, Gannon-Rowley T. Assessing "neighborhood effects": social processes and new directions in research. Annu Rev Sociol. 2002;28:443-78.

Saner H, Ellickson P. Concurrent risk factors for adolescent violence. J Adolesc Health 1996;19(2):94-103.

Satcher D. Youth violence: A report of the surgeon general. Accessed: May 2004. http://www.surgeongeneral.gov/library/youthviolence/.

Scott KK, Tepas JJ, Frykberg E, et al. Turning point: rethinking violence--evaluation of program efficacy in reducing adolescent violent crime recidivism. J Trauma 2002;53(1):21-7.

Simon TR, Sussman S, Dahlberg LL, et al. Influence of a substance-abuse-prevention curriculum on violence-related behavior. Am J Health Behav 2002;26(2):103-10.

Shonkoff JP, Phillips D. From neurons to neighborhoods : the science of early child development. Washington, D.C.: National Academy Press; 2000.

Stein DB. Outpatient behavioral management of aggressiveness in adolescents: A response cost paradigm. Aggress Behav 1999;25(5):321-30.

Stewart LA, Clarke MJ. Practical methodology of meta-analyses (overviews) using updated individual patient data. Cochrane Working Group. Stat Med 1995;14(19):2057-79.

Stewart LA, Parmar MK. Meta-analysis of the literature or of individual patient data: is there a difference? Lancet 1993;341(8842):418-22.

Stouthamer-Loeber M, Loeber R. Lost opportunities for

intervention: Undetected markers for the development of serious juvenile delinquency. Crim Behav Ment Health 2002;12(1):69-82.

Stouthamer-Loeber M, Loeber R, Homish DL, et al. Maltreatment of boys and the development of disruptive and delinquent behavior. Dev Psychopathol 2001;13(4):941-55.

Villani, S. Impact of media on children and adolescents: a 10-year review of the research. J Am Acad Child Adolesc Psychiatry 2001;40(4):392-401.

West S, King V, Carey T, et al. Systems to rate the strength of scientific svidence. Evidence Report/Technology Assessment No. 47. AHRQ Publication No. 02-E016. Rockville, MD: Agency for Healthcare Research and Quality; 2002.

Zhang Q, Loeber R, Stouthamer-Loeber M. Developmental trends of delinquent attitudes and behaviors: Replications and synthesis across domains, time, and samples. J Quant Criminol 1997;13(2):181-215.

Zivin G, Hassan NR, DePaula GF, et al. An effective approach to violence prevention: traditional martial arts in middle school. Adolescence 2001;36(143):443-59.

Bibliography

Anonymous. Weapon-carrying among high school students--United States, 1990. MMWR Morb Mortal Wkly Rep 1991;40(40):681-4.

Anonymous. From the Centers for Disease Control. Physical fighting among high school students--United States, 1990. JAMA 1992;267(22):3009-10.

Anonymous. Physical fighting among high school students--United States, 1990. MMWR Morb Mortal Wkly Rep 1992;41(6):91-4.

Anonymous. Domestic violence. Am J Public Health 1993;83(3):458-63.

Anonymous. From the Centers for Disease Control and Prevention. Violence-related attitudes and behaviors of high school students--New York City, 1992. JAMA 1993;270(17):2032-3.

Anonymous. Adolescent homicide--Fulton County, Georgia, 1988-1992. MMWR Morb Mortal Wkly Rep 1994;43(40):728-30.

Anonymous. From the Centers for Disease Control and Prevention. Homicides among 15-19-year-old males--United States, 1963-1991. JAMA 1994;272(20):1572.

Anonymous. The role of the pediatrician in violence prevention. Proceedings of a conference. Chantilly, Virginia, March 4-5, 1994. Pediatrics 1994;94(4 Pt 2):576-651.

Anonymous. Sexual assault and the adolescent. American Academy of Pediatrics Committee on Adolescence. Pediatrics 1994;94(5):761-5.

Anonymous. Media violence. American Academy of Pediatrics Committee on Communications. Pediatrics 1995;95(6):949-51.

Anonymous. Defusing gang activity: different hospitals take different approaches. Hosp Secur Saf Manage 1999;19(11):1-4.

Anonymous. Firearm-associated deaths and hospitalizations--California, 1995-1996. MMWR Morb Mortal Wkly Rep 1999;48(23):485-8.

Anonymous. The WHO cross-national study on health behavior in school-aged children from 28 countries: findings from the United States. J Sch Health 2000;70(6):227-8.

Anonymous. JAMA patient page. Bullying. JAMA 2001;285(16):2156.

Anonymous. Children, youth and gun violence. Selected bibliography. Future Child 2002;12(2):Inside Back Cover.

Aber J, Lawrence, Brown JL, Jones SM. Developmental trajectories toward violence in middle childhood: course, demographic differences, and response to school-based intervention. Dev Psychol 2003;39(2):324-48.

Aber JL, Brown JL, Chaudry N, et al. The evaluation of the resolving conflict creatively program: an overview. Am J Prev Med 1996;12(5 Suppl):82-90.

Aber JL, Brown JL, Jones SM. Developmental trajectories toward violence in middle childhood: Course, demographic differences, and response to school-based intervention. Dev Psychol 2003;39(2):324-48.

Aber JL, Jones SM, Brown JL, et al. Resolving conflict creatively: Evaluating the developmental effects of a school-based violence prevention program in neighborhood and classroom context. Dev Psychopathol 1998;10(2):187-213.

Abram KM, Teplin LA. Drug disorder, mental illness, and violence. NIDA Res Monogr 1990;103:222-38.

Achenbach TM, Howell CT, McConaughy SH, et al. Six-year predictors of problems in a national sample: III. Transitions to young adult syndromes. J Am Acad Child Adolesc Psychiatry 1995;34(5):658-69.

Acton PA, Farley T, Freni LW, et al. Traumatic spinal cord injury in Arkansas, 1980 to 1989. Arch Phys Med Rehabil 1993;74(10):1035-40.

Adams D, Allen D. Assessing the need for reactive behaviour management strategies in children with intellectual disability and severe challenging behaviour. J Intellect Disabil Res 2001;45(4):335-43.

Adams J, McClellan J, Douglass D, et al. Sexually inappropriate behaviors in seriously mentally ill children and adolescents. Child Abuse Negl 1995;19(5):555-68.

Adams PF, Schoenborn CA, Moss AJ, et al. Health-risk behaviors among our nation's youth: United States, 1992. Vital Health Stat 10 1995(192):1-51.

Adams PL, Arnow J. Children in violence. J Am Acad Psychoanal 1996;24(1):179-86.

Adler NA, Schutz J. Sibling incest offenders. Child Abuse Negl 1995;19(7):811-9.

Administration for Children and Families. Toward a blueprint for youth. Accessed: May 2004. http://www.acf.hhs.gov/programs/fysb/youthinfo/blueprint2.htm.

af Klinteberg B. Biology, norms, and personality: a developmental perspective. Neuropsychobiology 1996;34(3):146-54.

af Klinteberg B, Andersson T, Magnusson D, et al. Hyperactive behavior in childhood as related to subsequent

alcohol problems and violent offending: A longitudinal study of male subjects. Pers Individ Dif 1993;15(4):381-8.

Agnew R. The techniques of neutralization and violence. Criminology 1994;32:555-80.

Ahmed MB. High-risk adolescents and satanic cults. Tex Med 1991;87(10):74-6.

Akhtar N, Bradley EJ. Social information processing deficits of aggressive children: Present findings and implications for social skills training. Clin Psychol Rev 1991;11(5):621-44.

Alaniz ML, Cartmill RS, Parker RN. Immigrants and violence: The importance of neighborhood context. Hisp J Behav Sci 1998;20(2):155-74.

Alexander B. Violence: a public health problem. Am Fam Physician 1992;46(1):67-8.

Allen JS, Rupert V, Spatafora K, et al. Differentiating violent from nonviolent female offenders using the Jesness Inventory. Pers Individ Dif 2003;35(1):101-8.

Altemeier WA. Is the media friend or foe to our children? Pediatr Ann 1995;24(2):68-9.

Aluja-Fabregat A, Torrubia-Beltri R. Viewing of mass media violence, perception of violence, personality and academic achievement. Pers Individ Dif 1998;25(5):973-89.

Alvarez A. Trends and patterns of justifiable homicide: a comparative analysis. Violence Vict 1992;7(4):347-56.

Amen DG, Stubblefield M, Carmicheal B, et al. Brain SPECT findings and aggressiveness. Ann Clin Psychiatry 1996;8(3):129-37.

Amodei N, Elkin BB, Burge SK, et al. Psychiatric problems experienced by primary care patients who misuse alcohol. Int J Addict 1994;29(5):609-26.

Andershed H, Kerr M, Stattin H. Bullying in school and violence on the streets: Are the same people involved? J Scand Stud Crim Crime Prev 2001;2(1):31-49.

Andershed HA, Gustafson SB, Kerr M, et al. The usefulness of self-reported psychopathy-like traits in the study of antisocial behaviour among non-referred adolescents. Eur J Personal 2002;16(5):383-402.

Anderson CA, Bushman BJ, Groom RW. Hot years and serious and deadly assault: empirical tests of the heat hypothesis. J Pers Soc Psychol 1997;73(6):1213-23.

Anderson NL, Roper JM. The interactional dynamics of violence, Part II: Juvenile detention. Arch Psychiatr Nurs 1991;5(4):216-22.

Anderson NL, Roper JM. The interactional dynamics of violence: II. Juvenile detention. Arch Psychiatr Nurs 1991;5(4):216-22.

Andre C, Jaber-Filho JA, Carvalho M, et al. Predictors of recovery following involuntary hospitalization of violent substance abuse patients. Am J Addict 2003;12(1):84-9.

Andrews JA, Foster SL, Capaldi D, et al. Adolescent and family predictors of physical aggression, communication, and satisfaction in young adult couples: a prospective analysis. J Consult Clin Psychol 2000;68(2):195-208.

Andrews TK, Rose FD, Johnson DA. Social and behavioural effects of traumatic brain injury in children. Brain Inj 1998;12(2):133-8.

Ansevics NL, Doweiko HE. Serial murderers: Early proposed developmental model and typology. Psychother Priv Pract 1991;9(2):107-22.

Archwamety T, Katsiyannis A. Factors related to recidivism among delinquent females at a state correctional facility. J Child Fam Stud 1998;7(1):59-67.

Arluke A, Levin J, Luke C, et al. The relationship of animal abuse to violence and other forms of antisocial behavior. J Interpers Violence 1999;14(9):963-75.

Armenteros JL, Lewis JE. Citalopram treatment for impulsive aggression in children and adolescents: An open pilot study. J Am Acad Child Adolesc Psychiatry 2002;41(5):522-9.

Arria A, Borges G, Anthony JC. Fears and other suspected risk factors for carrying lethal weapons among urban youths of middle-school age. Arch Pediatr Adolesc Med 1997;151(6):555-60.

Arria AM, Wood NP, Anthony JC. Prevalence of carrying a weapon and related behaviors in urban schoolchildren, 1989 to 1993. Arch Pediatr Adolesc Med 1995;149(12):1345-50.

Artz S. Where have all the school girls gone? Violent girls in the school yard. Child Youth Care Forum 1998;27(2):77-109.

Ash P, Kellermann AL, Fuqua-Whitley D, et al. Gun acquisition and use by juvenile offenders. JAMA 1996;275(22):1754-8.

Askenazy F, Caci H, Myquel M, et al. Relationship between impulsivity and platelet serotonin content in adolescents. Psychiatry Res 2000;94(1):19-28.

Askenazy FL, Sorci K, Benoit M, et al. Anxiety and impulsivity levels identify relevant subtypes in adolescents with at-risk behavior. J Affect Disord 2003;74(3):219-27.

Asnis GM, Kaplan ML, van Praag HM, et al. Homicidal behaviors among psychiatric outpatients. Hosp Community Psychiatry 1994;45(2):127-32.

Assaad J-M, Pihl RO, Seguin JR, et al. Aggressiveness, family history of alcoholism, and the heart rate response to alcohol intoxication. Exp Clin Psychopharmacol 2003;11(2):158-66.

Astor RA, Behre WJ. Violent and nonviolent children's and parents' reasoning about family and peer violence. Behav Disord 1997;22(4):231-45.

Astor RA, Meyer HA, Behre WJ. Unowned places and times: Maps and interviews about violence in high schools. Am Educ Res J 1999;36(1):3-42.

Atkin CK, Smith SW, Roberto AJ, et al. Correlates of verbally aggressive communication in adolescents. J Appl Commun Res 2002;30(3):251-68.

Atlas RS, Pepler DJ. Observations of bullying in the classroom. J Educ Res 1998;92(2):86-99.

Attar BK, Guerra NG, Tolan PH. Neighborhood disadvantage, stressful life events, and adjustment in urban elementary-school children. J Clin Child Psychol 1994;23(4):391-400.

Auffrey C, Fritz JM, Lin B, et al. Exploring differences between violent and nonviolent juvenile offenders using juvenile corrections facility client records. J Educ Psychol Consult 1999;10(2):129-43.

August GJ, Hektner JM, Egan EA, et al. The early risers longitudinal prevention trial: Examination of 3-year outcomes in aggressive children with intent-to treat and as-intended analyses. Psychol Addict Behav 2002;16(Suppl4):S27-S39.

August GJ, Realmuto GM, Hektner JM, et al. An integrated components preventive intervention for aggressive elementary school children: The Early Risers program. J Consult Clin Psychol 2001;69(4):614-26.

Avakame EF. Intergenerational transmission of violence, self-control, and conjugal violence: a comparative analysis of physical violence and psychological aggression. Violence Vict 1998;13(3):301-16.

Awad GA, Saunders EB. Male adolescent sexual assaulters: Clinical observations. J Interpers Violence 1991;6(4):446-60.

Ayers S. The truth about underage drinking. J La State Med Soc 2001;153(7):332-4.

Aylwin AS, Clelland SR, Kirkby L, et al. Sexual offense severity and victim gender preference: A comparison of adolescent and adult sex offenders. Int J Law Psychiatry 2000;23(2):113-24.

Azrael D, Hemenway D. 'In the safety of your own home': results from a national survey on gun use at home. Soc Sci Med 2000;50(2):285-91.

Baba Y. Vietnamese gangs, cliques and delinquents. J Gang Res 2001;8(2):1-20.

Bachman R, Peralta R. The relationship between drinking and violence in an adolescent population: Does gender matter? Deviant Behav 2002;23(1):1-19.

Bagley C, Pritchard C. The reduction of problem behaviours and school exclusion in at-risk youth: An experimental study of school social work with cost-benefit analyses. Child Fam Soc Work 1998;3(4):219-26.

Bagley C, Shewchuk-Dann D. Characteristics of 60 children and adolescents who have a history of sexual assault against others: Evidence from a controlled study. J Child Youth Care 1991:43-52.

Bailey SL, Flewelling RL, Rosenbaum DP. Characteristics of students who bring weapons to school. J Adolesc Health 1997;20(4):261-70.

Bailey SM, Thornton L, Weaver AB. The first 100 admissions to an adolescent secure unit. J Adolesc 1994;17(3):207-20.

Baker AJ, Tabacoff R, Tornusciolo G, et al. Calculating number of offenses and victims of juvenile sexual offending: the role of posttreatment disclosures. Sex Abuse 2001;13(2):79-90.

Baker K, Pollack M, Kohn I. Violence prevention through informal socialization: An evaluation of the South Baltimore Youth Center. Stud Crime Crime Prev 1995;4(1):61-85.

Baker W, Bramston P. Attributional and emotional determinants of aggression in people with mild intellectual disabilities. J Intellect Dev Disabil 1997;22(3):169-85.

Baldwin K. MSMS alliance focuses on violence prevention. Mich Med 2001;100(4):53.

Bank L, Duncan T, Patterson GR, et al. Parent and teacher ratings in the assessment and prediction of antisocial and delinquent behaviors. J Pers 1993;61(4):693-709.

Barkin S, Kreiter S, DuRant RH. Exposure to violence and intentions to engage in moralistic violence during early adolescence. J Adolesc 2001;24(6):777-89.

Barnes A, Ephross PH. The impact of hate violence on victims: emotional and behavioral responses to attacks. Soc Work 1994;39(3):247-51.

Barnow S, Schuckit M, Smith TL, et al. The real relationship between the family density of alcoholism and externalizing symptoms among 146 children. Alcohol Alcohol 2002;37(4):383-7.

Baron SW. Risky lifestyles and the link between offending and victimization. Stud Crime Crime Prev 1997;6(1):53-71.

Baron SW, Hartnagel TF. Street youth and criminal violence. J Res Crime Delinq 1998;35(2):166-92.

Baron SW, Hartnagel TF. Street youth and labor market strain. J Crim Justice 2002;30(6):519-33.

Barrios LC. Preventing school violence: a time for hard, solid thinking. Inj Prev 2000;6(3):165-6.

Barry CT, Frick PJ, Killian AL. The relation of narcissism and self-esteem to conduct problems in children: A preliminary investigation. J Clin Child Adolesc Psychol 2003;32(1):139-52.

Barry DS. Screen violence and America's children. Spectrum 1993;66:37-42.

Bars DR, Heyrend FL, Simpson CD, et al. Use of visual evoked-potential studies and EEG data to classify aggressive, explosive behavior of youths. Psychiatr Serv 2001;52(1):81-6.

Barstow DG. An offender-friendly society. J Psychosoc Nurs Ment Health Serv 1994;32(8):56.

Barylnik J. Psychopathology, psychosocial characteristics and family environment in juvenile delinquents. Ger J Psychol 2003;6(2):30-2.

Beaudoin MN, Hodgins S, Lavoie F. Homicide, schizophrenia and substance abuse or dependency. Can J Psychiatry 1993;38(8):541-6.

Beauford JE, McNiel DE, Binder RL. Utility of the initial therapeutic alliance in evaluating psychiatric patients' risk of violence. Am J Psychiatry 1997;154(9):1272-6.

Beauvais F, Chavez EL, Oetting ER, et al. Drug use, violence, and victimization among White American, Mexican American, and American Indian dropouts, students with academic problems, and students in good academic standing. J Couns Psychol 1996;43(3):292-9.

Becker DF, Edell WS, Fujioka TA. Attentional and intellectual deficits in unmedicated behavior-disordered adolescent inpatients. J Youth Adolesc 1996;25:127-35.

Becker DF, Edell WS, Fujioka TA, et al. Attentional and intellectual deficits in unmedicated behavior-disordered adolescent inpatients. J Youth Adolesc 1996;25(1):127-35.

Becker KB, McCloskey LA. Attention and conduct problems in children exposed to family violence. Am J Orthopsychiatry 2002;72(1):83-91.

Beer J, Beer J. Aggression of youth as related to parental divorce and eye color. Percept Mot Skills 1992;75(3 Pt 2):1066.

Beier SR, Rosenfeld WD, Spitalny KC, et al. The potential role of an adult mentor in influencing high-risk behaviors in adolescents. Arch Pediatr Adolesc Med 2000;154(4):327-31.

Bell CC, Jenkins EJ. Traumatic stress and children. J Health Care Poor Underserved 1991;2(1):175-85; Discussion 86-8.

Bell CC, Jenkins EJ. Community violence and children on Chicago's southside. Psychiatry 1993;56(1):46-54.

Bell K. Female offenders of sexual assault. J Emerg Nurs 1999;25(3):241-3.

Bellair PE, Roscigno VJ. Local labor-market opportunity and adolescent delinquency. Soc Forces 2000;78(4):1509-38.

Bellair PE, Roscigno VJ, McNulty TL. Linking local labor market opportunity to violent adolescent delinquency. J Res Crime Delinq 2003;40(1):6-33.

Bellair PE, Roscigno VJ, McNulty TL. Linking local labor market opportunity to violent adolescent delinquency. J Res Crime Delinq 2003;40(1):6-33.

Benda BB, Corwyn RF. The effect of abuse in childhood and in adolescence on violence among adolescents. Youth Soc 2002;33(3):339-65.

Benda BB, Corwyn RF, Rodell DE. Alcohol and violence among youth in boot camps for non-violent offenders. Alcohol Treat Q 2001;19(1):37-55.

Benda BB, Turney HM. Youthful violence: Problems and prospects. Child Adolesc Social Work J 2002;19(1):5-34.

Bender D, Loesel F. Protective and risk effects of peer relations and social support on antisocial behaviour in adolescents from multi-problem milieus. J Adolesc 1997;20(6):661-78.

Bennett L. Growing up with violence. Can Nurse 1993;89(7):33-6.

Bennett L, Fineran S. Sexual and severe physical violence among high school students. Power beliefs, gender, and relationship. Am J Orthopsychiatry 1998;68(4):645-52.

Bennett LW, Tolman RM, Rogalski CJ, et al. Domestic abuse by male alcohol and drug addicts. Violence Vict 1994;9(4):359-68.

Benoit JL, Kennedy WA. The abuse history of male adolescent sex offenders. J Interpers Violence 1992;7(4):543-48.

Benoit M. Impact of violence on children and adolescents: Report from a community-based child psychiatry clinic. Psychiatry Interpers Biol Process 1993;56(1):124-6.

Bentovim A. Trauma-organized systems in practice: Implications for work with abused and abusing children

and young people. Clin Child Psychol Psychiatry 1996;1(4):513-24.

Berenbaum SA, Resnick SM. Early androgen effects on aggression in children and adults with congenital adrenal hyperplasia. Psychoneuroendocrinology 1997;22(7):505-15.

Bergeret J. Adolescence: the crossroads of violence. J Adolesc Health 1992;13(5):418-9.

Bergman L. Dating violence among high school students. Soc Work 1992;37(1):21-7.

Berman LH. The effects of living with violence. J Am Acad Psychoanal 1992;20(4):671-5.

Bernstein DP, Stein JA, Handelsman L. Predicting personality pathology among adult patients with substance use disorders: effects of childhood maltreatment. Addictive Behaviors Addict Behav 1998;23(6):855-68.

Berthhold KA, Hoover JH. Correlates of bullying and victimization among intermediate students in the Midwestern USA. Sch Psychol Int 2000;21(1):65-78.

Beyers JM, Loeber R, Wikstrom PO, et al. What predicts adolescent violence in better-off neighborhoods? J Abnorm Child Psychol 2001;29(5):369-81.

Bickett LR, Milich R, Brown RT. Attributional styles of aggressive boys and their mothers. J Abnorm Child Psychol 1996;24(4):457-72.

Bierman KL, Smoot DL, Aumiller K. Characteristics of aggressive-rejected, aggressive (nonrejected), and rejected (nonaggressive) boys. Child Dev 1993;64(1):139-51.

Bihm EM, Poindexter AR, Warren ER. Aggression and psychopathology in persons with severe or profound mental retardation. Res Dev Disabil 1998;19(5):423-38.

Billingham RE, Bland R, Leary A. Dating violence at three time periods: 1976, 1992, and 1996. Psychol Rep 1999;85(2):574-8.

Billingham RE, Gilbert KR. Parental divorce during childhood and use of violence in dating relationships. Psychol Rep 1990;66(3 Pt 1):1003-9.

Bincer WL. The tragedy of gun violence. Wis Med J 1994;93(10):508-9.

Birmaher B, Stanley M, Greenhill L, et al. Platelet imipramine binding in children and adolescents with impulsive behavior. J Am Acad Child Adolesc Psychiatry 1990;29(6):914-8.

Birnbaum AS, Lytle LA, Hannan PJ, et al. School functioning and violent behavior among young adolescents: a contextual analysis. Health Educ Res 2003;18(3):389-403.

Bischof GP, Stith SM, Whitney ML. Family environments of adolescent sex offenders and other juvenile delinquents. Adolescence 1995;30(117):157-70.

Bischof GP, Stith SM, Wilson SM. A comparison of the family systems of adolescent sexual offenders and nonsexual offending delinquents. Fam Relat 1992;41(3):318-23.

Bjoerkqvist K, Lagerspetz KM, Kaukiainen A. Do girls manipulate and boys fight? Developmental trends in regard to direct and indirect aggression. Aggress Behav 1992;18(2):117-27.

Bjorkly S. SCL-90-R profiles in a sample of severely violent psychiatric inpatients. Aggress Behav 2002;28(6):446-57.

Black MM, Ricardo IB. Drug use, drug trafficking, and weapon carrying among low-income, African-American, early adolescent boys. Pediatrics 1994;93(6 Pt 2):1065-72.

Blake PY, Pincus JH, Buckner C. Neurologic abnormalities in murderers. Neurology 1995;45(9):1641-7.

Blum J, Ireland M, Blum RW. Gender differences in juvenile violence: A report from Add Health. J Adolesc Health 2003;32(3):234-40.

Blum J, Ireland M, Blum RW. Gender differences in juvenile violence: A report from Add Health. J Adolesc Health 2003;32(3):234-40.

Blum RW, Beuhring T, Shew ML, et al. The effects of race/ethnicity, income, and family structure on adolescent risk behaviors. Am J Public Health 2000;90(12):1879-84.

Blumensohn R, Ratzoni G, Weizman A, et al. Reduction in serotonin 5HT-sub-2 receptor binding on platelets of delinquent adolescents. Psychopharmacology (Berl) 1995;118(3):354-6.

Blumensohn R, Ratzoni G, Weizman A, et al. Reduction in serotonin 5HT2 receptor binding on platelets of delinquent adolescents. Psychopharmacology (Berl) 1995;118(3):354-6.

Blumenthal S, Gudjonsson G, Burns J. Cognitive distortions and blame attribution in sex offenders against adults and children. Child Abuse Negl 1999;23(2):129-43.

Blumstein A. Youth violence, guns and the illicit-drug industry. J Crim Law Criminol 1995;86(1):10-36.

Bock G, Goode J. Genetics of criminal and antisocial behaviour. New York: Wiley; 1996.

Bodtker A. Conflict education and special-needs students, part two: Improving conflict competence and emotional competence. Mediat Q 2001;18(4):377-95.

Bolger KE, Patterson CJ. Developmental pathways from child maltreatment to peer rejection. Child Dev 2001;72(2):549-68.

Bolland JM. Hopelessness and risk behaviour among adolescents living in high-poverty inner-city neighbourhoods. J Adolesc 2003;26(2):145-58.

Bolland JM. Hopelessness and risk behaviour among adolescents living in high-poverty inner-city neighbourhoods. J Adolesc 2003;26(2):145-58.

Bolland JM, McCallum DM, Lian B, et al. Hopelessness and violence among inner-city youths. Matern Child Health J 2001;5(4):237-44.

Bond AJ, Surguy SM. Relationship between attitudinal hostility and P300 latencies. Progr Neuro-Psychopharmacol Biol Psychiatr 2000;24(8):1277-88.

Booker AL, Hoffschmidt SJ, Ash E. Personality features and characteristics of violent events committed by juvenile offenders. Behav Sci Law 2001;19(1):81-96.

Boone SL. Aggression in African-American boys: A discriminant analysis. Genet Soc Gen Psychol Monogr 1991;117(2):203-28.

Booth RE, Zhang Y. Severe aggression and related conduct problems among runaway and homeless adolescents. Psychiatr Serv 1996;47(1):75-80.

Borduin CM, Mann BJ, Cone LT, et al. Multisystemic treatment of serious juvenile offenders: long-term prevention of criminality and violence. J Consult Clin Psychol 1995;63(4):569-78.

Borgatti JC. Crisis at Columbine: a lesson learned? Nurs Spectr (N Engl Ed) 1999;9(11):6-7, 32.

Borowsky IW, Ireland M, Resnick MD, et al. Violence risk and protective factors among youth held back in school. Ambul Pediatr 2002;2(6):475-84.

Boruch RF, Coleman D, Doria-Ortiz C, et al. Violence prevention strategies targeted at the general population of minority youth. Public Health Rep 1991;106(3):247-50.

Borzekowski DL, Poussaint AF. Common themes from the extremes: using two methodologies to examine adolescents' perceptions of anti-violence public service announcements. J Adolesc Health 2000;26(3):164-75.

Bosch X. Firearm-related homicides among teenagers and young adults. JAMA 1999;281(4):324.

Bosworth K, Espelage D, DuBay T. A computer-based violence prevention intervention for young adolescents: pilot study. Adolescence 1998;33(132):785-95.

Bosworth K, Espelage D, DuBay T, et al. Using multimedia to teach conflict-resolution skills to young adolescents. Am J Prev Med 1996;12(5 Suppl):65-74.

Bosworth K, Espelage D, DuBay T, et al. Preliminary evaluation of a multimedia violence prevention program for adolescents. Am J Health Behav 2000;24(4):268-80.

Bosworth K, Espelage DL, Simon TR. Factors associated with bullying behavior in middle school students. J Early Adolesc 1999;19(3):341-62.

Boulton MJ. A comparison of structural and contextual features of middle school children's playful and aggressive fighting. Ethol Sociobiol 1991;12(2):119-45.

Boulton MJ, Flemington I. The effects of a short video intervention on secondary school pupils' involvement in definitions of and attitudes towards bullying. Sch Psychol Int 1996;17(4):331-45.

Boulton MJ, Underwood K. Bully/victim problems among middle school children. Br J Educ Psychol 1992;62(Pt 1):73-87.

Bowen NK, Flora DB. When is it appropriate to focus on protection in interventions for adolescents? Am J Orthopsychiatry 2002;72(4):526-38.

Bowers L, Smith PK, Binney V. Perceived family relationships of bullies, victims and bully/victims in middle childhood. J Soc Pers Relatsh 1994;11(2):215-32.

Bownes IT, O'Gorman EC, Sayers A. Rape--a comparison of stranger and acquaintance assaults. Med Sci Law 1991;31(2):102-9.

Boyatzis CJ, Matillo GM, Nesbitt KM. Effects of the "Mighty Morphin Power Rangers" on children's aggression with peers. Child Study J 1995;25(1):45-55.

Brady EC, Chrisler JC, Hosdale DC, et al. Date rape: expectations, avoidance strategies, and attitudes toward victims. J Soc Psychol 1991;131(3):427-9.

Braga AA. Serious youth gun offenders and the epidemic of youth violence in Boston. J Quant Criminol 2003;19(1):33-54.

Braga AA, Kennedy DM, Waring EJ, et al. Problem-oriented policing, deterrence, and youth violence: An evaluation of Boston's Operation Ceasefire. J Res Crime Delinq 2001;38(3):195-225.

Brame R, Mulvey EP, Piquero AR. On the development of different kinds of criminal activity. Sociol Methods Res 2001;29(3):319-41.

Brannon JM, Troyer R. Peer group counseling: A normalized residential alternative to the specialized treatment of adolescent sex offenders. Int J Offender Ther Comp Criminol 1991;35(3):225-34.

Brecklin LR. The role of perpetrator alcohol use in the

injury outcomes of intimate assaults. J Fam Violence 2002;17(3):185-97.

Bremer JF. Serious juvenile sex offenders: Treatment and long-term follow-up. Psychiatr Ann 1992;22(6):326-32.

Brendgen M, Vitaro F, Tremblay RE, et al. Parent and peer effects on delinquency-related violence and dating violence: A test of two mediational models. Soc Dev 2002;11(2):225-44.

Brendgen M, Vitaro R, Tremblay RE, et al. Reactive and proactive aggression: predictions to physical violence in different contexts and moderating effects of parental monitoring and caregiving behavior. J Abnorm Child Psychol 2001;29(4):293-304.

Brener ND, Krug EG, Dahlberg LL, et al. Nurses' logs as an evaluation tool for school-based violence prevention programs. J Sch Health 1997;67(5):171-4.

Brener ND, Simon TR, Krug EG, et al. Recent trends in violence-related behaviors among high school students in the United States. JAMA 1999;282(5):440-6.

Brener ND, Wilson TW. Substance use on school property among students attending alternative high schools in the United States. J Drug Educ 2001;31(4):329-42.

Brennan PA, Grekin ER, Mednick SA. Maternal smoking during pregnancy and adult male criminal outcomes. Arch Gen Psychiatry 1999;56(3):215-9.

Breslow RE, Klinger BI, Erickson BJ. The disruptive behavior disorders in the psychiatric emergency service. Gen Hosp Psychiatry 1999;21(3):214-9.

Bretherton D, Collins L, Ferretti C. Dealing with conflict: Assessment of a course for secondary school students. Aust Psychol 1993;28(2):105-11.

Breunlin DC, Bryant-Edwards TL, Hetherington JS, et al. Conflict resolution training as an alternative to suspension for violent behavior. J Educ Res 2002;95(6):349-57.

Brezina T. Teenage violence toward parents as an adaptation to family strain: Evidence from a national survey of male adolescents. Youth Soc 1999;30(4):416-44.

Brezina T, Piquero AR, Mazerolle. Student anger and aggressive behavior in school: An initial test of Agnew's macro-level strain theory. J Res Crime Delinq 2001;38(4):362-86.

Briere J, Elliott D. Prevalence, characteristics, and long-term sequelae of natural disaster exposure in the general population. J Trauma Stress 2000;13(4):661-79.

Briggs S, MacKay T, Miller S. The Edinbarnet Playground Project: Changing aggressive behavior through structured intervention. AEP J 1995;11(2):37-44.

Briscoe J. Breaking the cycle of violence: A rational approach to at-risk youth. Fed Probat 1997;61(3):3-13.

Brockenbrough KK, Cornell DG, Loper AB. Aggressive attitudes among victims of violence at school. Educ Treat Child 2002;25(3):273-87.

Brody SL. Violence associated with acute cocaine use in patients admitted to a medical emergency department. NIDA Res Monogr 1990;103:44-59.

Broidy LM, Nagin DS, Tremblay RE, et al. Developmental trajectories of childhood disruptive behaviors and adolescent delinquency: A six-site, cross-national study. Dev Psychol 2003;39(2):222-45.

Broidy LM, Nagin DS, Tremblay RE, et al. Developmental trajectories of childhood disruptive behaviors and adolescent delinquency: a six-site, cross-national study. Dev Psychol 2003;39(2):222-45.

Brondolo E, Baruch C, Conway E, et al. Aggression among inner-city minority youth: A biopsychosocial model for school-based evaluation and treatment. J Soc Distress Homeless 1994;3(1):53-80.

Brooke MM, Questad KA, Patterson DR, et al. Agitation and restlessness after closed head injury: a prospective study of 100 consecutive admissions. Arch Phys Med Rehabil 1992;73(4):320-3.

Brookoff D, O'Brien KK, Cook CS, et al. Characteristics of participants in domestic violence. Assessment at the scene of domestic assault. JAMA 1997;277(17):1369-73.

Brooks JH, Reddon JR. Serum testosterone in violent and nonviolent young offenders. J Clin Psychol 1996;52(4):475-83.

Brown TL, Henggeler SW, Brondino MJ, et al. Trauma exposure, protective factors and mental health functioning of substance-abusing and dependent juvenile offenders. J Emot Behav Disord 1999;7(2):94-102.

Buitelaar JK. Open-label treatment with risperidone of 26 psychiatrically-hospitalized children and adolescents with mixed diagnoses and aggressive behavior. J Child Adolesc Psychopharmacol 2000;10(1):19-26.

Buitelaar JK, van der Gaag RJ, Cohen-Kettenis P, et al. A randomized controlled trial of risperidone in the treatment of aggression in hospitalized adolescents with subaverage cognitive abilities. J Clin Psychiatry 2001;62(4):239-48.

Burke EC. Youth violence. An epidemic vaccines can't treat. Minn Med 1993;76(8):5.

Burks VS, Laird RD, Dodge KA, et al. Knowledge structures, social information processing, and children's aggressive behavior. Soc Dev 1999;8(2):220-36.

Burrell B, Thompson B, Sexton D. Predicting child abuse

potential across family types. Child Abuse Negl 1994;18(12):1039-49.

Burt CW. Injury-related visits to hospital emergency departments: United States, 1992. Adv Data 1995(261):1-20.

Burton D, Foy D, Bwanausi C, et al. The relationship between traumatic exposure, family dysfunction, and post-traumatic stress symptoms in male juvenile offenders. J Trauma Stress 1994;7(1):83-93.

Burton DL. An examination of social cognitive theory with differences among sexually aggressive, physically aggressive and nonaggressive children in state care. Violence Vict 1999;14(2):161-78.

Burton DL, Nesmith AA, Badten L. Clinician's views on sexually aggressive children and their families: A theoretical exploration. Child Abuse Negl 1997;21(2):157-70.

Busch KG, Zagar R, Hughes JR, et al. Adolescents who kill. J Clin Psychol 1990;46(4):472-85.

Bushman BJ, Baumeister RF. Threatened egotism, narcissism, self-esteem, and direct and displaced aggression: does self-love or self-hate lead to violence? J Pers Soc Psychol 1998;75(1):219-29.

Buss DM. Manipulation in close relationships: five personality factors in interactional context. J Pers 1992;60(2):477-99.

Butchart A, Engstrom K, al. e. Sex- and age- specific relations between economic development, economic inequality and homicide rates in people aged 0-24 years: a cross-sectional analysis. Bull World Health Organ 2002;80(10):797-805.

Butts JA, Snyder HN. Youngest delinquents: Offenders under age 15. Sch Interv Rep 1997;11(2):6-11.

Butz C, Spaccarelli S. Use of physical force as an offense characteristic in subtyping juvenile sexual offenders. Sex Abuse 1999;11(3):217-32.

Bynum EG, Weiner RI. Self-concept and violent delinquency in urban African-American adolescent males. Psychol Rep 2002;90(2):477-86.

Caggiano AD. Identifying violent-toward-staff juvenile delinquents via the Millon Adolescent Clinical Inventory and neuropsychological measures. J Offender Rehabil 2000;32(1-2):147-65.

Cahn MD, Chamberlain B, Cross PO, et al. Forum on youth violence in minority communities. Interventions in early childhood. Public Health Rep 1991;106(3):258-63.

Cairns RB, Coleman-Miller B, Greenwood PW, et al. Violence prevention strategies directed toward high-risk minority youths. Public Health Rep 1991;106(3):250-4.

Caldwell JR. Interpersonal violence. Can political, sociologic or economic reform stem the epidemic? J Fla Med Assoc 1994;81(7):459-60.

Caldwell MF, Van Rybroek GJ. Efficacy of a decompression treatment model in the clinical management of violent juvenile offenders. Int J Offender Ther Comp Criminol 2001;45(4):469-77.

Calicchia JA, Moncata SJ, Santostefano S. Cognitive control differences in violent juvenile inpatients. J Clin Psychol 1993;49(5):731-40.

Callahan CM, Rivara FP, Farrow JA. Youth in detention and handguns. J Adolesc Health 1993;14(5):350-5.

Calvert WJ. Neighborhood disorder, individual protective factors, and the risk of adolescent delinquency. ABNF J 2002;13(6):127-35.

Campanella S. Delinquency risk prediction. J Child Youth Care 1990;4(5):73-83.

Campbell A. Representations, repertoires and power: Mother-child conflict. J Theory Soc Behav 1995;25(1):35-57.

Campbell A, Muncer S, Odber J. Aggression and testosterone: Testing a bio-social model. Aggress Behav 1997;23(4):229-38.

Campbell JS, Lerew C. Juvenile sex offenders in diversion. Sex Abuse 2002;14(1):1-17.

Cano A, Avery-Leaf S, Cascardi M, et al. Dating violence in two high school samples: Discriminating variables. J Prim Prev 1998;18(4):431-46.

Cantrell PJ, MacIntyre DI, Sharkey KJ, et al. Violence in the marital dyad as a predictor of violence in the peer relationships of older adolescents/young adults. Violence Vict 1995;10(1):35-41.

Capaldi DM, Clark S. Prospective family predictors of aggression toward female partners for at-risk young men. Dev Psychol 1998;34(6):1175-88.

Capaldi DM, Dishion TJ, Stoolmiller M, et al. Aggression toward female partners by at-risk young men: the contribution of male adolescent friendships. Dev Psychol 2001;37(1):61-73.

Capaldi DM, Owen LD. Physical aggression in a community sample of at-risk young couples: gender comparisons for high frequency, injury, and fear. J Fam Psychol 2001;15(3):425-40.

Capaldi DM, Patterson GR. Can violent offenders be distinguished from frequent offenders: Prediction from childhood to adolescence. J Res Crime Delinq

1996;33(2):206-31.

Capaldi DM, Shortt JW, Crosby L. Physical and psychological aggression in at-risk young couples: Stability and change in young adulthood. Merrill Palmer Q 2003;49(1):1-27.

Cappell C, Heiner RB. The intergenerational transmission of family aggression. J Fam Violence 1990;5(2):135-52.

Caprara GV, Barbaranelli C, Pastorelli C, et al. Prosocial foundations of children's academic achievement. Psychol Sci 2000;11(4):302-6.

Caprara GV, Regalia C, Bandura A. Longitudinal impact of perceived self-regulatory eficacy on violent conduct. Eur Psychol 2002;7(1):63-9.

Caputo AA, Frick PJ, Brodsky SL. Family violence and juvenile sex offending: The potential mediating role of psychopathic traits and negative attitudes toward women. Crim Justice Behav 1999;26(3):338-56.

Carbonneau R, Tremblay RE, Vitaro F, et al. Paternal alcoholism, paternal absence and the development of problem behaviors in boys from age six to twelve years. J Stud Alcohol 1998;59(4):387-98.

Carlo G, Raffaelli M, Laible DJ, et al. Why are girls less physically aggressive than boys? Personality and parenting mediators of physical aggression. Sex Roles 1999;40(9-10):711-29.

Carlson BE. Adolescent observers of marital violence. J Fam Violence 1990;5(4):285-99.

Carlson EA. A prospective longitudinal study of attachment disorganization/disorientation. Child Dev 1998;69(4):1107-28.

Carpenter EM, Nangle DW. Effects of brief verbal instructions on aggression: A replication in a Head Start setting. Child Fam Behav Ther 2002;24(4):21-38.

Carroll ST, Riffenburgh RH, Roberts TA, et al. Tattoos and body piercings as indicators of adolescent risk-taking behaviors. Pediatrics 2002;109(6):1021-10217.

Carvajal SC, Hanson CE, Romero AJ, et al. Behavioural risk factors and protective factors in adolescents: a comparison of Latinos and non-Latino whites. Ethn Health 2002;7(3):181-93.

Caspi A, Begg D, Dickson N. Personality differences predict health-risk behaviors in young adulthood: evidence from a longitudinal study. J Pers Soc Psychol 1997;73:1052-63.

Caspi A, Begg D, Dickson N, et al. Personality differences predict health-risk behaviors in young adulthood: evidence from a longitudinal study. J Pers Soc Psychol 1997;73(5):1052-63.

Caspi A, McClay J, Moffitt TE, et al. Role of genotype in the cycle of violence in maltreated children. Science 2002;297(5582):851-4.

Caspi A, Moffitt TE, Newman DL, et al. Behavioral observations at age 3 years predict adult psychiatric disorders. Longitudinal evidence from a birth cohort. Arch Gen Psychiatry 1996;53(11):1033-9.

Cassetta RA. Children: a community in crisis. Am Nurse 1994;26(10):1, 20-1.

Cassetta RA. Nurses work to prevent violence in schools. Am Nurse 1994;26(4):7.

Castiglia PT. Gangs. J Pediatr Health Care 1993;7(1):39-41.

Cauffman E, Feldman SS, Waterman J, et al. Posttraumatic stress disorder among female juvenile offenders. J Am Acad Child Adolesc Psychiatry 1998;37(11):1209-16.

Cavell TA, Hughes JN. Secondary prevention as context for assessing change processes in aggressive children. J Sch Psychol 2000;38(3):199-235.

Centers for Disease Control. National youth violence prevention resource center. Accessed: May 2004. http://www.safeyouth.org/scripts/pros/community.asp.

Chang J, Jen, Chen JJ, Brownson RC. The role of repeat victimization in adolescent delinquent behaviors and recidivism. J Adolesc Health 2003;32(4):272-80.

Chang JJ, Chen JJ, Brownson RC. The role of repeat victimization in adolescent delinquent behaviors and recidivism. J Adolesc Health 2003;32(4):272-80.

Chapple CL. Examining intergenerational violence: violent role modeling or weak parental controls? Violence Vict 2003;18(2):143-62.

Charlebois P, LeBlanc M, Gagnon C, et al. Age trends in early behavioral predictors of serious antisocial behaviors. J Psychopathol Behav Assess 1993;15(1):23-41.

Chase KA, Treboux D, O'Leary KD. Characteristics of high-risk adolescents' dating violence. J Interpers Violence 2002;17(1):33-49.

Chase KA, Treboux D, O'Leary KD, et al. Specificity of dating aggression and its justification among high-risk adolescents. J Abnorm Child Psychol 1998;26(6):467-73.

Cheadle A, Wagner E, Anderman C, et al. Measuring community mobilization in the Seattle Minority Youth Health Project. Eval Rev 1998;22(6):699-716.

Cheadle A, Wagner E, Walls M, et al. The effect of

neighborhood-based community organizing: results from the Seattle Minority Youth Health Project. Health Serv Res 2001;36(4):671-89.

Chen C, Greenberger E, Lester J, et al. A cross-cultural study of family and peer correlates of adolescent misconduct. Dev Psychol 1998;34(4):770-81.

Cheng TL, Wright JL, Fields CB, et al. Violent injuries among adolescents: declining morbidity and mortality in an urban population. Ann Emerg Med 2001;37(3):292-300.

Cheong J, Patock-Peckham JA, Nagoshi CT. Effects of alcoholic beverage, instigation, and inhibition on expectancies of aggressive behavior. Violence Vict 2001;16(2):173-84.

Cherpitel CJ. Alcohol and casualties: a comparison of emergency room and coroner data. Alcohol Alcohol 1994;29(2):211-8.

Chesney-Lind M, Paramore VV. Are girls getting more violent? Exploring juvenile robbery trends. J Contemp Crim Justice 2001;17(2):142-66.

Cheung P, Schweitzer I, Tuckwell V, et al. A prospective study of assaults on staff by psychiatric in-patients. Med Sci Law 1997;37(1):46-52.

Child Trends. Child trends databank. Accessed: May 2004. http://www.childtrendsdatabank.org/.

Choi PY, Pope HG. Violence toward women and illicit androgenic-anabolic steroid use. Ann Clin Psychiatry 1994;6(1):21-5.

Christoffel KK. Violent death and injury in US children and adolescents. Am J Dis Child 1990;144(6):697-706.

Christoffel KK. Firearm-related homicides among teenagers and young adults. JAMA 1999;281(4):323-4.

Christoffel KK, Spivak H, Witwer M. Youth violence prevention: the physician's role. JAMA 2000;283(9):1202-3.

Cirillo KJ, Pruitt BE, Colwell B, et al. School violence: prevalence and intervention strategies for at-risk adolescents. Adolescence 1998;33(130):319-30.

Clare P, Bailey S, Clark A. Relationship between psychotic disorders in adolescence and criminally violent behaviour. A retrospective examination. Br J Psychiatry 2000;177:275-9.

Clark E, Beck D, Sloane H, et al. Self-modeling with preschoolers: Is it different? Sch Psychol Int 1993;14(1):83-9.

Clark J. Our youth, our future. J Ky Med Assoc 1994;92(5):197-8.

Clarke J, Stein MD, Sobota M, et al. Victims as victimizers: physical aggression by persons with a history of childhood abuse. Arch Intern Med 1999;159(16):1920-4.

Clarke RA, Murphy DL, Constantino JN. Serotonin and externalizing behavior in young children. Psychiatry Res 1999;86(1):29-40.

Claussen AH, Crittenden PM. Physical and psychological maltreatment: relations among types of maltreatment. Child Abuse Negl 1991;15(1-2):5-18.

Clemence AJ, Hilsenroth MJ, Sivec HJ, et al. Hand Test AGG and AOS variables: Relation with teacher rating of aggressiveness. J Pers Assess 1999;73(3):334-44.

Clubb PA, Browne DC, Humphrey AD, et al. Violent behaviors in early adolescent minority youth: results from a "middle school youth risk behavior survey". Matern Child Health J 2001;5(4):225-35.

Coccaro EF, Kavoussi RJ, Hauger RL. Serotonin function and antiaggressive response to fluoxetine: a pilot study. Biol Psychiatry 1997;42(7):546-52.

Cochran JK, Wood PB, Arneklev BJ. Is the religiosity-delinquency relationship spurious? Social control theories. J Res Crime Delinq 1994;31(1):92-123.

Cockburn A. The best years of their lives. New Statesman Soc 1990;3:25-6.

Cohen E. The violent adolescent: theoretical and clinical considerations. Am J Psychoanal 2002;62(3):209-12.

Cohen RA, Rosenbaum A, Kane RL, et al. Neuropsychological correlates of domestic violence. Violence Vict 1999;14(4):397-411.

Cohen S, Lang C. Forum on youth violence in minority communities. Application of the principles of community-based programs. Public Health Rep 1991;106(3):269-70.

Cohen S, Wilson-Brewer R. Violence Prevention for Young Adolescents: The State of the Art of Program Evaluation. Working Papers. In: Proceedings of the Carnegie Corporation Conference on Violence Prevention for Young Adolescents; 1990; Washington, D.C.; 1990.

Coie JD, Cillessen AHN, Dodge KA, et al. It takes two to fight: A test of relational factors and a method for assessing aggressive dyads. Dev Psychol 1999;35(5):1179-88.

Coker AL, McKeown RE, Sanderson M, et al. Severe dating violence and quality of life among south carolina high school students. Am J Prev Med 2000;19(4):220-7.

Colder CR, Lochman JE, Wells KC. The moderating effects of children's fear and activity level on relations between parenting practices and childhood symptomatology. J Abnorm Child Psychol 1997;25(3):251-63.

Colder CR, Mott J, Levy S, et al. The relation of perceived neighborhood danger to childhood aggression: A test of mediating mechanisms. Am J Community Psychol 2000;28(1):83-103.

Cole DA, Maxwell SE, Martin JM, et al. The development of multiple domains of child and adolescent self-concept: a cohort sequential longitudinal design. Child Dev 2001;72(6):1723-46.

Coleman M, Pfeiffer S, Oakland T. Aggression replacement training with behaviorally disordered adolescents. Behav Disord 1992;18(1):54-66.

Coles CJ, Greene AF, Braithwaite HO. The relationship between personality, anger expression, and perceived family control among incarcerated male juveniles. Adolescence 2002;37(146):395-409.

Collinsworth HJ. Adolescent violence. J La State Med Soc 2000;152(10):483-4.

Colsman M, Wulfert E. Conflict Resolution Style as an Indicator of Adolescents' Substance Use and Other Problem Behaviors. Addict Behav 2002;27(4):633-48.

Commission for the Prevention of Youth Violence. Youth and violence. Medicine, nursing, and public health: connecting the dots to prevent violence. Accessed: May 2004. http://www.ama-assn.org/ama/upload/mm/386/fullreport.pdf

Compton R. Discovering the promise of curriculum integration: The National Curriculum Integration Project. Confl Resolut Q 2002;19(4):447-64.

Connolly J, Pepler D, Craig W, et al. Dating experiences of bullies in early adolescence. Child Maltreat 2000;5(4):299-310.

Connor DE, Edwards G, Fletcher KE, et al. Correlates of comorbid psychopathology in children with ADHD. J Am Acad Child Adolesc Psychiatry 2003;42(2):193-200.

Connor DF, Barkley RA, Davis HT. A pilot study of methylphenidate, clonidine, or the combination in ADHD comorbid with aggressive oppositional defiant or conduct disorder. Clin Pediatr (Phila) 2000;39(1):15-25.

Connor DF, Melloni RH, Harrison RJ. Overt categorical aggression in referred children and adolescents. J Am Acad Child Adolesc Psychiatry 1998;37(1):66-73.

Connor DF, Melloni RHJ, Harrison RJ. Overt categorical aggression in referred children and adolescents. J Am Acad Child Adolesc Psychiatry 1998;37(1):66-73.

Connor DF, Ozbayrak KR, Benjamin S, et al. A pilot study of nadolol for overt aggression in developmentally delayed individuals. J Am Acad Child Adolesc Psychiatry 1997;36(6):826-34.

Conroy DE, Silva JM, Newcomer RR, et al. Personal and participatory socializers of the perceived legitimacy of aggressive behavior in sport. Aggress Behav 2001;27(6):405-18.

Conseur A, Rivara FP, Barnoski R, et al. Maternal and perinatal risk factors for later delinquency. Pediatrics 1997;99(6):785-90.

Constantino JN, Liberman M, Kincaid M. Effects of serotonin reuptake inhibitors on aggressive behavior in psychiatrically hospitalized adolescents: results of an open trial. J Child Adolesc Psychopharmacol 1997;7(1):31-44.

Constantino JN, Liberman M, Kincaid M. Effects of serotonin reuptake inhibitors on aggressive behavior in psychiatrically hospitalized adolescents: results of an open trial. J Child Adolesc Psychopharmacol 1997;7(1):31-44.

Conway KP, McCord J. A longitudinal examination of the relation between co-offending with violent accomplices and violent crime. Aggress Behav 2002;28(2):97-108.

Coohey C. The role of friends, in-laws, and other kin in father-perpetrated child physical abuse. Child Welfare 2000;79(4):373-402.

Cook PJ, Juarez P, Lee RK, et al. Weapons and minority youth violence. Public Health Rep 1991;106(3):254-8.

Cook PJ, Laub JH. The unprecedented epidemic in youth violence. In: Tonry M, Moore MH, editors. Youth violence: Crime and justice. Chicago: University of Chicago Press; 1998.

Cookson HM. Alcohol use and offence type in young offenders. Br J Criminol 1992;32(3):352-60.

Cooley-Quille MR, Turner SM, Beidel DC. Emotional impact of children's exposure to community violence: a preliminary study. J Am Acad Child Adolesc Psychiatry 1995;34(10):1362-8.

Cooper H, Hedges LV, editors. The handbook of research synthesis. New York: Russell Sage Foundation; 1994. Chapter 14, Vote-counting procedure in meta-analysis.

Coppens NM, Gentry LK. Video analysis of playground injury-risk situations. Res Nurs Health 1991;14(2):129-36.

Corbett M, Duggan C, Larkin E. Substance misuse and violence: A comparison of special hospital inpatients diagnosed with either schizophrenia or personality disorder. Crim Behav Ment Health 1998;8(4):311-21.

Cornell DG. Prior adjustment of violent juvenile offenders. Law Hum Behav 1990;14(6):569-77.

Cornell DG. Juvenile homicide: A growing national problem. Behav Sci Law 1993;11(4):389-96.

Cornell DG, Loper AB. Assessment of violence and other high-risk behaviors with a school survey. School Psych Rev 1998;27(2):317-30.

Cornell DG, Peterson CS, Richards H. Anger as a predictor of aggression among incarcerated adolescents. J Consult Clin Psychol 1999;67(1):108-15.

Cornell DG, Wilson LA. The PIQ greater than VIQ discrepancy in violent and nonviolent delinquents. J Clin Psychol 1992;48(2):256-61.

Cortoni F, Marshall WL. Sex as a coping strategy and its relationship to juvenile sexual history and intimacy in sexual offenders. Sex Abuse 2001;13(1):27-43.

Corwyn RF, Benda BB. Violent youths in southern public schools in America. Int J Adolesc Youth 2001;10(1-2):69-90.

Costello BJ, Dunaway RG. Egotism and delinquent behavior. J Interpers Violence 2003;18(5):572-90.

Cota-Robles S, Neiss M, Rowe DC. The role of puberty in violent and nonviolent delinquency among Anglo American, Mexican American, and African American boys. J Adolesc Res 2002;17(4):364-76.

Cotten NU, Resnick J, Browne DC, et al. Aggression and fighting behavior among African-American adolescents: individual and family factors. Am J Public Health 1994;84(4):618-22.

Cotton P. Violence decreases with gang truce. JAMA 1992;268(4):443-4.

Cottrol C, Frances R. Substance abuse, comorbid psychiatric disorder, and repeated traumatic injuries. Hosp Community Psychiatry 1993;44(8):715-6.

Courtenay WH. Youth violence? Let's call it what it is. J Am Coll Health 1999;48(3):141-2.

Cousins LH. Toward a sociocultural context for understanding violence and disruption in Black urban schools and communities. J Sociol Soc Welf 1997;24(2):41-63.

Cousins LH. Moral markets for troubling youths: A disruption! Child Glob J Child Res 2001;8(2):193-211.

Cousins LH, Mabrey T. Re-gendering social work practice and education: The case for African-American girls. J Hum Behav Soc Environ 1998;1(2-3):91-104.

Cowie H, Olafsson R. The role of peer support in helping the victims of bullying in a school with high levels of aggression. Sch Psychol Int 2000;21(1):79-95.

Cox RD, Schopler E. Aggression and self-injurious behaviors in persons with autism: The TEACCH approach. Acta Paedopsychiatr 1993;56(2):85-90.

Coyne-Beasley T, Schoenbach VJ, Herman-Giddens ME. The epidemiology of adolescent homicide in North Carolina from 1990 to 1995. Arch Pediatr Adolesc Med 1999;153(4):349-56.

Craig WM. The relationship among bullying, victimization, depression, anxiety, and aggression in elementary school children. Pers Individ Dif 1998;24(1):123-30.

Craig WM, Pepler D, Atlas R. Observations of bullying in the playground and in the classroom. Sch Psychol Int 2000;21(1):22-36.

Cramer E, McFarlane J. Pornography and abuse of women. Public Health Nurs 1994;11(4):268-72.

Crane-Ross D, Tisak MS, Tisak J. Aggression and conventional rule violation among adolescents: Social-reasoning predictors of social behavior. Aggress Behav 1998;24(5):347-65.

Crick NR. Engagement in gender normative versus nonnormative forms of aggression: Links to social-psychological adjustment. Dev Psychol 1997;33(4):610-7.

Crick NR, Dodge KA. Social information-processing mechanisms on reactive and proactive aggression. Child Dev 1996;67(3):993-1002.

Crick NR, Grotpeter JK, Bigbee MA. Relationally and physically aggressive children's intent attributions and feelings of distress for relational and instrumental peer provocations. Child Dev 2002;73(4):1134-42.

Crimmins S, Langley S, Brownstein HH, et al. Convicted women who have killed children: A self-psychology perspective. J Interpers Violence 1997;12(1):49-69.

Crimmins SM, Cleary SD, Brownstein HH, et al. Trauma, drugs and violence among juvenile offenders. J Psychoactive Drugs 2000;32(1):43-54.

Crittenden PM, Craig SE. Developmental trends in the nature of child homicide. J Interpers Violence 1990;5(2):202-16.

Crowley TJ, Mikulich SK, MacDonald M, et al. Substance-dependent, conduct-disordered adolescent males: severity of diagnosis predicts 2-year outcome. Drug Alcohol Depend 1998;49(3):225-37.

Crowner ML, Douyon R, Convit A, et al. Akathisia and violence. Psychopharmacol Bull 1990;26(1):115-7.

Crowner ML, Douyon R, Convit A, et al. Videotape recording of assaults on a state hospital inpatient ward. J Neuropsychiatry Clin Neurosci 1991;3(2):S9-S14.

Crowner ML, Stepcic F, Peric G, et al. Typology of patient-patient assaults detected by videocameras. Am J Psychiatry 1994;151(11):1669-72.

Ctr NGCR. Bomb and arson crimes among American gang members: A behavioral science profile. J Gang Res 2001;9(1):1-38.

Cubbin C, Pickle LW, Fingerhut L. Social context and geographic patterns of homicide among US black and white males. Am J Public Health 2000;90(4):579-87.

Cuddy ME, Frame C. Comparison of aggressive and nonaggressive boys' self-efficacy and outcome expectancy beliefs. Child Study J 1991;21(2):135-52.

Cuffel BJ, Shumway M, Chouljian TL, et al. A longitudinal study of substance use and community violence in schizophrenia. J Nerv Ment Dis 1994;182(12):704-8.

Cummings AL, Leschied AW. Understanding aggression with adolescent girls: Implications for policy and practice. Can J Commun Ment Health 2001;20(2):43-57.

Cummings P, Koepsell TD, Grossman DC, et al. The association between the purchase of a handgun and homicide or suicide. Am J Public Health 1997;87(6):974-8.

Cunningham CE, Cunningham LJ, Martorelli V, et al. The effects of primary division, student-mediated conflict resolution programs on playground aggression. J Child Psychol Psychiatry 1998;39(5):653-62.

Cunningham PB, Henggeler SW. Implementation of an empirically based drug and violence prevention and intervention program in public school settings. J Clin Child Psychol 2001;30(2):221-32.

Cunningham PB, Henggeler SW, Limber SP, et al. Patterns and correlates of gun ownership among nonmetropolitan and rural middle school students. J Clin Child Psychol 2000;29(3):432-42.

Curtner-Smith ME. Mechanisms by which family processes contribute to school-age boy's bullying. Child Study J 2000;30(3):169-86.

Dabbs JM, Jurkovic GJ, Frady RL. Salivary testosterone and cortisol among late adolescent male offenders. J Abnorm Child Psychol 1991;19(4):469-78.

Daderman AM, Edman G. Flunitrazepam abuse and personality characteristics in male forensic psychiatric patients. Psychiatry Res 2001;103(1):27-42.

Dahlberg LL, Potter LB. Youth violence: Developmental pathways and prevention challenges. Am J Prev Med 2001;20(Suppl1):3-14.

Daldin H. Assaultive behavior in the analysis of children. Psychoanal Psychol 1992;9(4):477-88.

Daly M, Wilson M. Killing the competition: Female/female and male/male homicide. Hum Nat 1990;1(1):81-107.

Daly M, Wilson M, Salmon CA, et al. Siblicide and seniority. Homicide Stud 2001;5(1):30-45.

Daly RC, Su T-P, Schmidt PJ, et al. Neuroendocrine and behavioral effects of high-dose anabolic steroid administration in male normal volunteers. Psychoneuroendocrinology 2003;28(3):317-31.

Danov R, Bucci W. Attachment processes among violence-prone minority youths and their caretakers. NYS Psychol 2002;14(1):28-32.

Darby PJ, Allan WD, Kashani JH, et al. Analysis of 112 juveniles who committed homicide: Characteristics and a closer look at family abuse. J Fam Violence 1998;13(4):365-75.

David C, Steele R, Forehand R, et al. The role of family conflict and marital conflict in adolescent functioning. J Fam Violence 1996;11(1):81-91.

Davidson P, Koziol-McLain J, Harrison L, et al. Intoxicated ED patients: a 5-year follow-up of morbidity and mortality. Ann Emerg Med 1997;30(5):593-7.

Davidson PW, Cain NN, Sloane-Reeves JE, et al. Characteristics of community-based individuals with mental retardation and aggressive behavioral disorders. Am J Ment Retard 1994;98(6):704-16.

Davidson PW, Others A. Characteristics of children and adolescents with mental retardation and frequent outwardly directed aggressive behavior. Am J Ment Retard 1996;101(3):244-55.

Davis BT, Hops H, Alpert A, et al. Child responses to parental conflict and their effect on adjustment: A study of triadic relations. J Fam Psychol 1998;12(2):163-77.

Davis DL, Boster LH. Cognitive-behavioral-expressive interventions with aggressive and resistant youths. Child Welfare 1992;71(6):557-73.

Davis DL, Boster LH. Cognitive-behavioral-expressive interventions with aggressive and resistant youth. Resid Treat Child Youth 1993;10(4):55-68.

Davis E, Beverly C. Youth violence: An action research project. J Multicult Soc Work 1991;1(3):33-44.

Davis TC, Byrd RS, Arnold CL, et al. Low literacy and violence among adolescents in a summer sports program. J Adolesc Health 1999;24(6):403-11.

Davis TC, Peck GQ, Storment JM. Acquaintance rape and the high school student. J Adolesc Health 1993;14(3):220-4.

Dawkins MP. Drug use and violent crime among adolescents. Adolescence 1997;32(126):395-405.

Dawson DA. Alternative measures and models of hazardous consumption. J Subst Abuse 2000;12(1-2):79-91.

Dawson J. Vortex of evil. New Statesman Soc 1990;3:12-4.

Day DM, Bream LA, Pal A. Proactive and reactive aggression: An analysis of subtypes based on teacher perceptions. J Clin Child Psychol 1992;21(3):210-7.

Day HD, Franklin JM, Marshall DD. Predictors of aggression in hospitalized adolescents. J Psychol 1998;132(4):427-34.

Day K. Male mentally handicapped sex offenders. Br J Psychiatry 1994;165(5):630-9.

de Anda D. A qualitative evaluation of a mentor program for at-risk youth: The participants' perspective. Child Adolesc Social Work J 2001;18(2):97-117.

Deffenbacher JL, Swaim RC. Anger expression in Mexican American and White non-Hispanic adolescents. J Couns Psychol 1999;46(1):61-9.

Deibert GR, Miethe TD. Character contests and dispute-related offenses. Deviant Behav 2003;24(3):245-67.

Delva-Tauiliili J. Does brief Aikido training reduce aggression of youth? Percept Mot Skills 1995;80(1):297-8.

Delveaux KD, Daniels T. Children's social cognitions: Physically and relationally aggressive strategies and children's goals in peer conflict situations. Merrill Palmer Q 2000;46(4):672-92.

Dembo R. Predictors of recidivism to a juvenile assessment center: An expanded analysis. J Child Adolesc Subst Abus 1996;5(1):27-53.

Dembo R, Hughes P, Jackson L, et al. Crack cocaine dealing by adolescents in two public housing projects: A pilot study. Hum Organ 1993;52(1):89-96.

Dembo R, Schmeidler J, Nini-Gough B, et al. Predictors of recidivism to a juvenile assessment center: A three year study. J Child Adolesc Subst Abus 1998;7(3):57-77.

Dembo R, Turner G, Borden P, et al. Screening high risk youths for potential problems: Field application in the use of the Problem Oriented Screening Instrument for Teenagers (POSIT). J Child Adolesc Subst Abus 1994;3(4):69-93.

Dembo R, Turner G, Sue CC, et al. Predictors of recidivism to a juvenile assessment center. Int J Addict 1995;30(11):1425-52.

Dembo R, Williams L, La Voie L, et al. A longitudinal study of the relationships among alcohol use, marijuana/hashish use, cocaine use, and emotional/psychological functioning problems in a cohort of high-risk youths. Int J Addict 1990;25(11):1341-82.

Dembo R, Williams L, Schmeidler J, et al. Recidivism in a cohort of juvenile detainees: a 3 1/2-year follow-up. Int J Addict 1993;28(7):631-58.

Dembo R, Williams L, Wothke W, et al. The relationship between cocaine use, drug sales, and other delinquency among a cohort of high-risk youths over time. NIDA Res Monogr 1990;103:112-35.

Dembo R, Wothke W, Shemwell M, et al. A structural model of the influence of family problems and child abuse factors on serious delinquency among youths processed at a juvenile assessment center. J Child Adolesc Subst Abus 2000;10(1):17-31.

Dennis D, Massie JE, Wycoff-Horn M, et al. Weapon carrying among rural southern Illinois elementary school children. J Health Care Poor Underserved 2002;13(4):413-24.

Denton JS, Filkins JA, Stephenson D, et al. Criminal consequences of commotio cordis. Am J Cardiol 2002;90(10):1181-2; Discussion 2.

Dery M, Toupin J, Pauze R, et al. Neuropsychological characteristics of adolescents with conduct disorder: association with attention-deficit-hyperactivity and aggression. J Abnorm Child Psychol 1999;27(3):225-36.

Deschenes EP, Esbensen F-A. Violence and gangs: Gender differences in perceptions and behavior. J Quant Criminol 1999;15(1):63-96.

DeVoe J, Peter K, Kaufman P, et al. Indicators of school crime and safety:2002. NCES Publication 2003009. Accessed: May 2004. http://nces.ed.gov/pubs2003/schoolcrime/

DiClemente RJ, Wingood GM, Crosby R, et al. Parental monitoring: association with adolescents' risk behaviors. Pediatrics 2001;107(6):1363-8.

Diego MA, Field T, Hernandez-Reif M, et al. Aggressive adolescents benefit from massage therapy. Adolescence 2002;37(147):597-607.

DiLiberto L, Katz RC, Beauchamp KL, et al. Using Articulated Thoughts in Simulated Situations to assess cognitive activity in aggressive and nonaggressive adolescents. J Child Fam Stud 2002;11(2):179-89.

DiLillo D, Giuffre D, Tremblay GC, et al. A closer look at the nature of intimate partner violence reported by women with a history of child sexual abuse. J Interpers Violence 2001;16(2):116-32.

Dimsdale JE. The Nacirema revisited. Ann Behav Med 2001;23(1):75-6.

DiNapoli PP. Adolescent violent behavior and ego

development. J Adolesc Health 2002;31(6):446-8.

DiNapoli PP. Guns and dolls: an exploration of violent behavior in girls. ANS Adv Nurs Sci 2003;26(2):140-8.

Ding CS, Nelsen EA, Lassonde CT. Correlates of gun involvement and aggressiveness among adolescents. Youth Soc 2002;34(2):195-213.

Dishion TJ, Eddy M, Haas E, et al. Friendships and violent behavior during adolescence. Soc Dev 1997;6(2):207-23.

Dodge KA, Bates JE, Pettit GS. Mechanisms in the cycle of violence. Science 1990;250(4988):1678-83.

Dodge KA, Lansford JE, Burks VS, et al. Peer rejection and social information-processing factors in the development of aggressive behavior problems in children. Child Dev 2003;74(2):374-93.

Dodge KA, Lochman JE, Harnish JD, et al. Reactive and proactive aggression in school children and psychiatrically impaired chronically assaultive youth. J Abnorm Psychol 1997;106(1):37-51.

Dodge KA, Price JM, Bachorowski J-A. Hostile attributional biases in severely aggressive adolescents. J Abnorm Psychol 1990;99:385-92.

Dodge KA, Price JM, Bachorowski JA, et al. Hostile attributional biases in severely aggressive adolescents. J Abnorm Psychol 1990;99(4):385-92.

Dogra A, Veeraraghavan V. A study of psychological intervention of children with aggressive conduct disorder. Indian J Clin Psychol 1994;21(1):28-32.

Dolin IH, Kelly DB, Beasley TM. Chronic self-destructive behavior in normative and delinquent adolescents. J Adolesc 1992;15:57-66.

Dorn LD, Burgess ES, Dichek HL, et al. Thyroid hormone concentrations in depressed and nondepressed adolescents: Group differences and behavioral relations. J Am Acad Child Adolesc Psychiatry 1996;35(3):299-306.

Dornbusch SM, Erickson KG, Laird J, et al. The relation of family and school attachment to adolescent deviance in diverse groups and communities. J Adolesc Res 2001;16(4):396-422.

Dornbusch SM, Lin I-C, Munroe PT, et al. Adolescent polydrug use and violence in the United States. Int J Adolesc Med Health 1999;11(3-4):197-219.

Doswell WM. After Littleton. Am J Nurs 1999;99(10):9.

Doumas D, Margolin G, John RS. The intergenerational transmission of aggression across three generations. J Fam Violence 1994;9(2):157-75.

Dowd MD. Consequences of violence. Premature death, violence recidivism, and violent criminality. Pediatr Clin North Am 1998;45(2):333-40.

Dowd MD, Knapp JF, Fitzmaurice LS. Pediatric firearm injuries, Kansas City, 1992: a population-based study. Pediatrics 1994;94(6 Pt 1):867-73.

Dowdell E, Burgess, Santucci ME. The relationship between health risk behaviors and fear in one urban seventh grade class. J Pediatr Nurs 2003;18(3):187-94.

Downey G, Walker E. Distinguishing family-level and child-level influences on the development of depression and aggression in children at risk. Dev Psychopathol 1992;4(1):81-95.

Drake ME, Hietter SA, Pakalnis A. EEG and evoked potentials in episodic-dyscontrol syndrome. Neuropsychobiology 1992;26(3):125-8.

Dukarm CP, Byrd RS, Auinger P, et al. Illicit substance use, gender, and the risk of violent behavior among adolescents. Arch Pediatr Adolesc Med 1996;150(8):797-801.

Dukes RL, Martinez RO, Stein JA. Precursors and consequences of membership in youth gangs. Youth Soc 1997;29(2):139-65.

Duncan RD. Peer and sibling aggression: An investigation of intra- and extra-familial bullying. J Interpers Violence 1999;14(8):871-86.

Duncan RD, Kennedy WA, Smith DW. Comparison of conduct-disordered behavior in crack-dealing versus nondealing juvenile offenders. Psychol Rep 2000;86(3 Pt 2):1089-96.

Duncan SC, Duncan TE, Strycker LA, et al. Relations between youth antisocial and prosocial activities. J Behav Med 2002;25(5):425-38.

Dunlap G, Robbins FR, Darrow MA. Parents' reports of their children's challenging behaviors: results of a statewide survey. Ment Retard 1994;32(3):206-12.

Durant RH, Altman D, Wolfson M, et al. Exposure to violence and victimization, depression, substance use, and the use of violence by young adolescents. J Pediatr 2000;137(5):707-13.

Durant RH, Barkin S, Krowchuk DP. Evaluation of a peaceful conflict resolution and violence prevention curriculum for sixth-grade students. J Adolesc Health 2001;28(5):386-93.

DuRant RH, Cadenhead C, Pendergrast RA, et al. Factors associated with the use of violence among urban black adolescents. Am J Public Health 1994;84(4):612-7.

Durant RH, Getts AG, Cadenhead C, et al. The association between weapon carrying and the use of violence among

adolescents living in and around public housing. J Adolesc Health 1995;17(6):376-80.

DuRant RH, Getts AG, Cadenhead C, et al. The association between weapon-carrying and the use of violence among adolescents living in or around public housing. J Adolesc 1995;18(5):579-92.

DuRant RH, Kahn J, Beckford PH, et al. The association of weapon carrying and fighting on school property and other health risk and problem behaviors among high school students. Arch Pediatr Adolesc Med 1997;151(4):360-6.

Durant RH, Knight J, Goodman E. Factors associated with aggressive and delinquent behaviors among patients attending an adolescent medicine clinic. J Adolesc Health 1997;21(5):303-8.

DuRant RH, Krowchuk DP, Kreiter S, et al. Weapon carrying on school property among middle school students. Arch Pediatr Adolesc Med 1999;153(1):21-6.

DuRant RH, Krowchuk DP, Sinal SH. Victimization, use of violence, and drug use at school among male adolescents who engage in same-sex sexual behavior. J Pediatr 1998;133(1):113-8.

Durant RH, Pendergrast RA, Cadenhead C. Exposure to violence and victimization and fighting behavior by urban black adolescents. J Adolesc Health 1994;15(4):311-8.

DuRant RH, Smith JA, Kreiter SR, et al. The relationship between early age of onset of initial substance use and engaging in multiple health risk behaviors among young adolescents. Arch Pediatr Adolesc Med 1999;153(3):286-91.

DuRant RH, Treiber F, Getts A, et al. Comparison of two violence prevention curricula for middle school adolescents. J Adolesc Health 1996;19(2):111-7.

Dutton DG, Hart SD. Risk markers for family violence in a federally incarcerated population. Int J Law Psychiatry 1992;15(1):101-12.

Dykeman BF. The social cognitive treatment of anger and aggression in four adolescents with conduct disorder. J Instr Psychol 1995;22(2):194-200.

Dykeman BF. The effects of family conflict resolution on children's classroom behavior. J Instr Psychol 2003;30(1):41-6.

Dykeman C, Daehlin W, Doyle S, et al. Psychological predictors of school-based violence: Implications for school counselors. Sch Couns 1996;44(1):35-47.

Eargle AE, Guerra NG, Tolan PH. Preventing aggression in inner-city children: Small group training to change cognitions, social skills, and behavior. J Child Adolesc Group Ther 1994;4(4):229-42.

Earls F. Understanding and controlling violence. J Health Care Poor Underserved 1991;2(1):156-64; Discussion 65-6.

Easley M. Domestic violence. Ann Emerg Med 1996;27(6):762-3.

Eckenrode J, Ganzel B, Henderson CR, et al. Preventing child abuse and neglect with a program of nurse home visitation: the limiting effects of domestic violence. JAMA 2000;284(11):1385-91.

Eckstein M, Hutson HR. Street gangs: save yourself while saving a life. Emerg Med Serv 1994;23(7):18, 20, 2.

Eddy JM, Reid JB, Fetrow RA. An elementary school-based prevention program targeting modifiable antecedents of youth delinquency and violence: Linking the Interests of Families and Teachers (LIFT). J Emot Behav Disord 2000;8(3):165-76.

Edens RM, Smryl T. Reducing disruptive classroom behaviors in physical education: A pilot study. J Real Ther 1994;13(2):40-4.

Edwards WJ. A measurement of delinquency differences between a delinquent and nondelinquent sample: what are the implications? Adolescence 1996;31(124):973-89.

Egan SK, Monson TC, Perry DG. Social-cognitive influences on change in aggression over time. Dev Psychol 1998;34(5):996-1006.

Egeland B, Susman-Stillman A. Dissociation as a mediator of child abuse across generations. Child Abuse Negl 1996;20(11):1123-32.

Egeland B, Yates T, Appleyard K, et al. The long-term consequences of maltreatment in the early years: A developmental pathway model to antisocial behavior. Child Serv (Mahwah NJ) 2002;5(4):249-60.

Einfeld S, Hall W, Levy F. Hyperactivity and the fragile x syndrome. J Abnorm Child Psychol 1991;19(3):253-62.

Eisenman R. Denigration of a victim in group psychotherapy by violent vs seductive sex offenders. Psychol Rep 1993;72(2):413-4.

Eitle D, Turner RJ. Exposure to community violence and young adult crime: The effects of witnessing violence, traumatic victimization, and other stressful life events. J Res Crime Delinq 2002;39(2):214-37.

Elander J, Simonoff E, Pickles A, et al. A longitudinal study of adolescent and adult conviction rates among children referred to psychiatric services for behavioural or emotional problems. Crim Behav Ment Health 2000;10(1):40-59.

Elhassani SB. Domestic violence: a perinatal and pediatric risk factor. J S C Med Assoc 1995;91(3):114-5.

Elias MJ, Gara MA, Schuyler TF, et al. The promotion of social competence: Longitudinal study of a preventive school-based program. Am J Orthopsychiatry 1991;61(3):409-17.

Ellickson P, Saner H, McGuigan KA. Profiles of violent youth: substance use and other concurrent problems. Am J Public Health 1997;87(6):985-91.

Ellickson PL, McGuigan KA. Early predictors of adolescent violence. Am J Public Health 2000;90(4):566-72.

Ellickson PL, Tucker JS, Klein DJ. High-risk behaviors associated with early smoking: results from a 5-year follow-up. J Adolesc Health 2001;28(6):465-73.

Ellickson PL, Tucker JS, Klein DJ. Ten-year prospective study of public health problems associated with early drinking. Pediatrics 2003;111(5 Pt 1):949-55.

Ellickson PL, Tucker JS, Klein DJ. Ten-year prospective study of public health problems associated with early drinking. Pediatrics 2003;111(5 Pt 1):949-55.

Ellis RA, Gormley M, Ellis GD, et al. Harm by her own hand: A study of internalized violence among female juveniles. J Hum Behav Soc Environ 2003;6(3):75-90.

Ellis RA, Gormley M, Ellis GD, et al. Harm by her own hand: A study of internalized violence among female juveniles. J Hum Behav Soc Environ 2003;6(3):75-90.

Elze DE, Stiffman AR, Dore P. The association between types of violence exposure and youths' mental health problems. Int J Adolesc Med Health 1999;11(3-4):221-55.

Embry DD, Flannery DJ, Vazsonyi AT, et al. Peacebuilders: a theoretically driven, school-based model for early violence prevention. Am J Prev Med 1996;12(5 Suppl):91-100.

Emde K. Cops & docs: a gun violence injury prevention program. Int J Trauma Nurs 2002;8(2):54-6.

Emerick RL, Dutton WA. The effect of polygraphy on the self report of adolescent sex offenders: Implications for risk assessment. Ann Sex Res 1993;6(2):83-103.

Emerson E, Shelton D. Using creative arts to build coping skills to reduce domestic violence in the lives of female juvenile offenders. Issues Ment Health Nurs 2001;22(2):181-95.

Epps K. The residential treatment of adolescent sex offenders. Issues Criminol Legal Psychol 1991;1(17):58-67.

Epps KJ, Haworth R, Swaffer T. Attitudes toward women and rape among male adolescents convicted of sexual versus nonsexual crimes. J Psychol 1993;127(5):501-6.

Epstein JA, Botvin GJ, Diaz T, et al. Aggression, victimization and problem behavior among inner-city minority adolescents. J Child Adolesc Subst Abus 2000;9(3):51-66.

Epstein MH, Cullinan D, Quinn KP, et al. Characteristics of children with emotional and behavioral disorders in community-based programs designed to prevent placement in residential facilities. J Emot Behav Disord 1994;2(1):51-7.

Erkut S, Szalacha LA, Alarcon O, et al. Stereotyped perceptions of adolescents' health risk behaviors. Cultur Divers Ethnic Minor Psychol 1999;5(4):340-9.

Ernst M, Zametkin AJ, Pascualvaca D, et al. Adrenergic and noradrenergic plasma levels in Lesch-Nyhan disease. Neuropsychopharmacology 2000;22(3):320-6.

Eron L, Huesmann R, Spindler A, et al. A cognitive-ecological approach to preventing aggression in urban settings: Initial outcomes for high-risk children. J Consult Clin Psychol 2002;70(1):179-94.

Eron LD. Media violence. Pediatr Ann 1995;24(2):84-7.

Escarela G, Francis B, Soothill K. Competing risks, persistence and desistance in analyzing recidivism. J Quant Criminol 2000;16(4):385-414.

Escobar-Chaves SL, Tortolero SR, Markham C, et al. Violent behavior among urban youth attending alternative schools. J Sch Health 2002;72(9):357-62.

Eslea M, Smith PK. The long-term effectiveness of anti-bullying work in primary schools. Educ Res 1998;40(2):203-18.

Espelage DL, Bosworth K, Simon TR. Examining the social context of bullying behaviors in early adolescence. J Couns Dev 2000;78(3):326-33.

Espelage DL, Bosworth K, Simon TR. Short-term stability and prospective correlates of bullying in middle-school students: an examination of potential demographic, psychosocial, and environmental influences. Violence Vict 2001;16(4):411-26.

Espelage DL, Holt MK, Henkel RR. Examination of peer-group contextual effects on aggression during early adolescence. Child Dev 2003;74(1):205-20.

Espelage DL, Holt MK, Henkel RR. Examination of peer-group contextual effects on aggression during early adolescence. Child Dev 2003;74(1):205-20.

Etscheidt S. Reducing aggressive behavior and improving self-control: A cognitive-behavioral training program for behaviorally disordered adolescents. Behav Disord 1991;16(2):107-15.

Evans GD, Rey J, Hemphill MM, et al. Academic-community collaboration. An ecology for early childhood violence prevention. Am J Prev Med 2001;20(1 Suppl):22-30.

Evans JP, Taylor J. Understanding violence in contemporary and earlier gangs: An exploratory application of the theory of reasoned action. J Black Psychol 1995;21(1):71-81.

Evans W, Mason A. Factors associated with gang involvement among incarcerated youth. J Gang Res 1996;3(4):31-40.

Evans WP, Fitzgerald C, Weigel D. Are rural gang members similar to their urban peers? Implications for rural communities. Youth Soc 1999;30(3):267-82.

Evans WP, Fitzgerald C, Weigel D, et al. Are rural gang members similar to their urban peers? Implications for rural communities. Youth Soc 1999;30(3):267-82.

Everett SA, Price JH. Students' perceptions of violence in the public schools: the MetLife survey. J Adolesc Health 1995;17(6):345-52.

Ezell ME, Cohen LE. Age, crime, and crime control policies: A longitudinal analysis of youthful, serious, chronic offenders with implications for the "Three Strikes" legislation. Stud Crime Crime Prev 1997;6(2):169-99.

Fackler ML. Firearm violence among youth. Ann Emerg Med 1997;29(3):425-6.

Fagan J. Policing guns and youth violence. Future Child 2002;12(2):132-51.

Fagan J, Chin KL. Violence as regulation and social control in the distribution of crack. NIDA Res Monogr 1990;103:8-43.

Famularo R, Kinscherff R, Fenton T, et al. Child maltreatment histories among runaway and delinquent children. Clin Pediatr (Phila) 1990;29(12):713-8.

Fanshel D, Finch SJ, Grundy JF. Testing the measurement properties of risk assessment instruments in child protective services. Child Abuse Negl 1994;18(12):1073-84.

Farber EW, Burge-Callaway K. Differences in anger, hostility, and interpersonal aggressiveness in Type A and Type B adolescents. J Clin Psychol 1998;54(7):945-52.

Farmer JA. Juvenile exploitation of juvenile correctional workers: A content analysis. J Correct Educ 1990;41(3):118-19.

Farrell AD, Bruce SE. Impact of exposure to community violence on violent behavior and emotional distress among urban adolescents. J Clin Child Psychol 1997;26(1):2-14.

Farrell AD, Kung EM, White KS, et al. The structure of self-reported aggression, drug use, and delinquent behaviors during early adolescence. J Clin Child Psychol 2000;29(2):282-92.

Farrell AD, Meyer AL. The effectiveness of a school-based curriculum for reducing violence among urban sixth-grade students. Am J Public Health 1997;87(6):979-84.

Farrell AD, Meyer AL, Dahlberg LL. Richmond youth against violence: a school-based program for urban adolescents. Am J Prev Med 1996;12(5 Suppl):13-21.

Farrell AD, Meyer AL, Sullivan TN, et al. Evaluation of the responding in peaceful and positive ways (RIPP) seventh grade violence prevention curriculum. J Child Fam Stud 2003;12(1):101-20.

Farrell AD, Meyer AL, Sullivan TN, et al. Evaluation of the responding in peaceful and positive ways (RIPP) seventh grade violence prevention curriculum. J Child Fam Stud 2003;12(1):101-20.

Farrell AD, Meyer AL, White KS. Evaluation of Responding in Peaceful and Positive Ways (RIPP): a school-based prevention program for reducing violence among urban adolescents. J Clin Child Psychol 2001;30(4):451-63.

Farrell M. Personality and anti-social behaviour among emotionally/behaviourally disturbed boys. Pers Individ Dif 1992;13(5):511-7.

Fatum WR, Hoyle JC. Is it violence? School violence from the student perspective: Trends and interventions. Sch Couns 1996;44(1):28-34.

Faulkner AH, Cranston K. Correlates of same-sex sexual behavior in a random sample of Massachusetts high school students. Am J Public Health 1998;88(2):262-6.

Federal Bureau of Investigations. Uniform crime report. Accessed: May 2004. http://www.fbi.gov/ucr/99cius.htm.

Fehon DC, Grilo CM, Lipschitz DS. Gender differences in violence exposure and violence risk among adolescent inpatients. J Nerv Ment Dis 2001;189(8):532-40.

Feigelman S, Howard DE, Li X, et al. Psychosocial and environmental correlates of violence perpetration among African-American urban youth. J Adolesc Health 2000;27(3):202-9.

Feigelman W, Hyman MM, Amann K, et al. Correlates of persisting drug use among former youth multiple drug abuse patients. J Psychoactive Drugs 1990;22(1):63-75.

Feiring C, Deblinger E, Hoch-Espada A, et al. Romantic relationship aggression and attitudes in high school students: The role of gender, grade, and attachment and emotional styles. J Youth Adolesc 2002;31(5):373-85.

Feldman SS, Gowen LK. Conflict negotiation tactics in romantic relationships in high school students. J Youth Adolesc 1998;27(6):691-717.

Felkenes GT, Becker HK. Female gang members: A growing issue for policy makers. J Gang Res 1995;2(4):1-10.

Felson RB. "Kick 'em when they're down": Explanations of the relationship between stress and interpersonal aggression and violence. Sociol Q 1992;33(1):1-16.

Felson RB. Pubertal development, social factors, and delinquency among adolescent boys. Criminology 2002;40(4):967-88.

Felson RB, Liska AE, South SJ, et al. The subculture of violence and delinquency: Individual vs. school context effects. Soc Forces 1994;73(1):155-73.

Felson RB, Messner SF. The control motive in intimate partner violence. Soc Psychol Q 2000;63(1):86-94.

Fendrich M, Mackesy-Amiti ME, Goldstein P, et al. Substance involvement among juvenile murderers: comparisons with older offenders based on interviews with prison inmates. Int J Addict 1995;30(11):1363-82.

Ferman J. Integrated mental health and substance abuse services to at-risk families. The Family Health Program of the Center for Mental Health, Inc., Washington, D.C. Psychiatr Serv 1996;47(10):1112-4.

Fetsch RJ, Schultz CJ, Wahler JJ. A preliminary evaluation of the Colorado RETHINK Parenting and Anger Management program. Child Abuse Negl 1999;23(4):353-60.

Field T. American adolescents touch each other less and are more aggressive toward their peers as compared with French adolescents. Adolescence 1999;34(136):753-8.

Fiester L, Nathanson SP, Visser L, et al. Lessons learned from three violence prevention projects. J Sch Health 1996;66(9):344-6.

Figueroa EF, Silk KR, Huth A, et al. History of childhood sexual abuse and general psychopathology. Compr Psychiatry 1997;38(1):23-30.

Fine PR, Roseman JM, Constandinou CM, et al. Homicide among black males in Jefferson County, Alabama 1978-1989. J Forensic Sci 1994;39(3):674-84.

Finkelstein JW, Susman EJ, Chinchilli VM, et al. Estrogen or testosterone increases self-reported aggressive behaviors in hypogonadal adolescents. J Clin Endocrinol Metab 1997;82(8):2433-8.

Finkelstein JW, Von Eye A, Preece MA. The relationship between aggressive behavior and puberty in normal adolescents: a longitudinal study. J Adolesc Health 1994;15(4):319-26.

Finzi R, Ram A, Har-Even D, et al. Attachment styles and aggression in physically abused and neglected children. J Youth Adolesc 2001;30(6):769-86.

Firestone P, Bradford JM, Greenberg DM, et al. Homicidal sex offenders: psychological, phallometric, and diagnostic features. J Am Acad Psychiatry Law 1998;26(4):537-52.

Firestone P, Bradford JM, Greenberg DM, et al. Differentiation of homicidal child molesters, nonhomicidal child molesters, and nonoffenders by phallometry. Am J Psychiatry 2000;157(11):1847-50.

Fishbein DH, Reuland M. Psychological correlates of frequency and type of drug use among jail inmates. Addictive Behaviors Addict Behav 1994;19(6):583-98.

Fitzmaurice LS, Gaddis GM, Knapp JF. Firearms injuries in children: an increase in violent intent, frequency and severity. Mo Med 1993;90(5):233-7.

Fitzpatrick KM. Aggression and environmental risk among low-income African-American youth. J Adolesc Health 1997;21(3):172-8.

Fitzpatrick KM. Fighting among America's youth: a risk and protective factors approach. J Health Soc Behav 1997;38(2):131-48.

Flanagan P, Coll CG, Andreozzi L, et al. Predicting maltreatment of children of teenage mothers. Arch Pediatr Adolesc Med 1995;149(4):451-5.

Flannery DJ, Singer M, Williams L, et al. Adolescent violence exposure and victimization at home: Coping and psychological trauma symptoms. Int Rev Vict 1998;6(1):29-48.

Flannery DJ, Williams LL, Vazsonyi AT. Who are they with and what are they doing? Delinquent behavior, substance use, and early adolescents' after-school time. Am J Orthopsychiatry 1999;69(2):247-53.

Flannery RB, Rachlin S, Walker A, et al. Characteristics of repetitively assaultive patients: ten year analysis of the Assaulted Staff Action Program (ASAP). Int J Emerg Ment Health 2002;4(3):173-9.

Flannery RB, Rachlin S, Walker AP. Characteristics of assaultive patients with schizophrenia versus personality disorder: six year analysis of the Assaulted Staff Action Program (ASAP). J Forensic Sci 2002;47(3):558-61.

Flannery RB, Stevens V, Juliano J, et al. Past violence and substance use disorder and subsequent violence towards others: six year analysis of the Assaulted Staff Action Program (ASAP). Int J Emerg Ment Health 2000;2(4):241-7.

Flay BR, Allred CG, Ordway N. Effects of the Positive Action program on achievement and discipline: two matched-control comparisons. Prev Sci 2001;2(2):71-89.

Fleming CB, Catalano RF, Oxford ML, et al. A test of generalizability of the social development model across gender and income groups with longitudinal data from the elementary school developmental period. J Quant Criminol 2002;18(4):423-39.

Fleming J, Barner CI, Hudson B, et al. Anger, violence, and academic performance: A wtudy of troubled minority youth. Urban Educ 2000;35(2):175-204.

Fling S, Smith L, Rodriguez T, et al. Videogames, aggression, and self-esteem: A survey. Soc Behav Pers 1992;20(1):39-45.

Flitcraft A. Clinical violence intervention: opportunities and barriers. Bull N Y Acad Med 1996;73(1):124-9.

Fontaine RG, Salzer Burks V, Dodge KA. Response decision processes and externalizing behavior problems in adolescents. Dev Psychopathol 2002;14(1):107-22.

Ford ME, Linney JA. Comparative analysis of juvenile sexual offenders, violent nonsexual offenders, and status offenders. J Interpers Violence 1995;10(1):56-70.

Forth AE. Psychopathy in adolescent offenders: Assessment, family background, and violence. Issues Criminol Legal Psychol 1995;No 24:42-4.

Forth AE, Mailloux DL. Psychopathy in youth: what do we know? In: Gacono CB, editor. The clinical and forensic assessment of psychopathy: a practitioners guide. Mahwah, New Jersey: Lawrence Erlbaum; 2000.

Foshee VA. Gender differences in adolescent dating abuse prevalence, types and injuries. Health Educ Res 1996;11(3):275-86.

Foshee VA, Bauman KE, Arriaga XB, et al. An evaluation of Safe Dates, an adolescent dating violence prevention program. Am J Public Health 1998;88(1):45-50.

Foshee VA, Bauman KE, Greene WF, et al. The Safe Dates program: 1-year follow-up results. Am J Public Health 2000;90(10):1619-22.

Foshee VA, Bauman KE, Linder GF. Family violence and the perpetration of adolescent dating violence: examining social learning and social control processes. J Marriage Fam 1999;61(2):331-42.

Foshee VA, Linder F, MacDougall JE, et al. Gender differences in the longitudinal predictors of adolescent dating violence. Prev Med 2001;32(2):128-41.

Foshee VA, Linder GF, Bauman KE, et al. The Safe Dates Project: theoretical basis, evaluation design, and selected baseline findings. Am J Prev Med 1996;12(5 Suppl):39-47.

Franke TM. The role of attachment as a protective factor in adolescent violent behavior. Adolesc Fam Health 2000;1(1):40-51.

Franke TM. Adolescent violent behavior: an analysis across and within racial/ethnic groups. J Multicult Soc Work 2000;8(1/2):47-70.

Franklin RD, Allison DB, Sutton TR. Alcohol, substance abuse, and violence among North Carolina prison admissions, 1988. J Offender Rehabil 1992;17(3-4):101-11.

Fras I, Major LF. Clinical experience with risperidone. J Am Acad Child Adolesc Psychiatry 1995;34(7):833.

French DC, Jansen EA, Pidada S. United States and Indonesian children's and adolescents' reports of relational aggression by disliked peers. Child Dev 2002;73(4):1143-50.

Frey KS, Hirschstein MK, Guzzo BA. Second Step: Preventing aggression by promoting social competence. J Emot Behav Disord 2000;8(2):102-12.

Friday JC. The psychological impact of violence in underserved communities. J Health Care Poor Underserved 1995;6(4):403-9.

Fried S. Bullies & victims: Children abusing children. Am J Dance Ther 1997;19(2):127-33.

Friedman AS, Kramer S, Kreisher C. Childhood predictors of violent behavior. J Clin Psychol 1999;55(7):843-55.

Friedman AS, Terras A, Glassman K. Multimodel substance use intervention program for male delinquents. J Child Adolesc Subst Abus 2002;11(4):43-65.

Friedman AS, Utada AT. Effects of two group interaction models on substance-using adjudicated adolescent males. J Community Psychol 1992:106-17.

Fritsch EJ, Caeti TJ, Taylor RW. Gang suppression through saturation patrol, aggressive curfew and truancy enforcement: A quasi-experimental test of the Dallas anti-gang initiative. Crime Delinq 1999;45(1):122-39.

Fritsch RC, Heinssen RK, Delga I, et al. Predicting hospital adjustment by adolescent inpatients. Hosp Community Psychiatry 1992;43(1):49-53.

Fromuth ME, Burkhart BR, Jones CW. Hidden child molestation: An investigation of adolescent perpetrators in a nonclinical sample. J Interpers Violence 1991;6(3):376-84.

Frydman M. Television, aggressiveness and violence. Int J Adolesc Med Health 1999;11(3-4):335-44.

Frye V, Wilt S. Femicide and social disorganization. Violence Against Women 2001;7(3):335-51.

Fulginiti VA. Violence and children in the United States. Am J Dis Child 1992;146(6):671-2.

Fulwiler C, Grossman H, Forbes C, et al. Early-onset substance abuse and community violence by outpatients with chronic mental illness. Psychiatr Serv 1997;48(9):1181-5.

Fulwiler C, Ruthazer R. Premorbid risk factors for violence in adult mental illness. Compr Psychiatry 1999;40(2):96-100.

Funk JB, Hagan J, Schimming J, et al. Aggression and psychopathology in adolescents with a preference for violent electronic games. Aggress Behav 2002;28(2):134-44.

Furlong M, Casas JM, Corral C, et al. Drugs and school violence. Educ Treat Child 1997;20(3):263-80.

Gabel S, Shindledecker R. Aggressive behavior in youth: characteristics, outcome, and psychiatric diagnoses. J Am Acad Child Adolesc Psychiatry 1991;30(6):982-8.

Gabel S, Shindledecker R. Behavior problems in sons and daughters of substance abusing parents. Child Psychiatry Hum Dev 1992;23(2):99-115.

Gabel S, Shindledecker R. Adolescent psychiatric inpatients: Characteristics, outcome, and comparison between discharged patients from a specialized adolescent unit and nonspecialized units. J Youth Adolesc 1992;21(4):391-407.

Gabel S, Shindledecker R. Parental substance abuse and its relationship to severe aggression and antisocial behavior in youth. Am J Addict 1993;2(1):48-58.

Gabel S, Swanson AJ, Shindledecker R. Aggressive children in a day treatment program: Changed outcome and possible explanations. Child Abuse Negl 1990;14(4):515-23.

Gabriel RM, Hopson T, Haskins M, et al. Building relationships and resilience in the prevention of youth violence. Am J Prev Med 1996;12(5 Suppl):48-55.

Gadow KD, Nolan EE, Sverd J. Methylphenidate in hyperactive boys with comorbid tic disorder: II. Short-term behavioral effects in school settings. J Am Acad Child Adolesc Psychiatry 1992;31(3):462-71.

Gadow KD, Nolan EE, Sverd J, et al. Methylphenidate in aggressive-hyperactive boys: I. Effects on peer aggression in public school settings. J Am Acad Child Adolesc Psychiatry 1990;29(5):710-8.

Gaertner L, Foshee V. Commitment and the perpetration of relationship violence. Pers Relatsh 1999;6(2):227-39.

Gagne M-H, Lavoie F. Young people's views on the causes of violence in adolescents' romantic relationships. Can Ment Health 1993;41(3):11-5.

Gainer PS, Webster DW, Champion HR. A youth violence prevention program. Description and preliminary evaluation. Arch Surg 1993;128(3):303-8.

Gardner W, Lidz CW, Mulvey EP, et al. Clinical versus actuarial predictions of violence of patients with mental illnesses. J Consult Clin Psychol 1996;64(3):602-9.

Garnefski N, Okma S. Addiction-risk and aggressive/criminal behavior in adolescence: Influence of family, school and peers. J Adolesc 1996;19(6):503-12.

Garrison J, Barry VJ. Family violence. J Am Dent Assoc 1994;125(4):360, 2.

Garrison WT, Ecker B, Friedman M, et al. Aggression and counteraggression during child psychiatric hospitalization. J Am Acad Child Adolesc Psychiatry 1990;29(2):242-50.

Gartner R-. Family structure, welfare spending, and child homicide in developed democracies. J Marriage Fam 1991;53:231-40.

Gartstein MA, Noll RB, Vannatta K. Childhood aggression and chronic illness: Possible protective mechanisms. J Appl Dev Psychol 2000;21(3):315-33.

Garvey K, al. e. Alliance working to stop youth violence. WMJ 2002;101(6):22-3.

Gelles RJ. Poverty and violence toward children. Am Behav Sci 1992;35(3):258-74.

Gentry J, Eron LD. American Psychological Association Commission on Violence and Youth. Am Psychol 1993;48(2):89.

Gerra G, Zaimovic A, Ampollini R, et al. Experimentally induced aggressive behavior in subjects with 3,4-methylenedioxy-methamphetamine ("Ecstasy") use history: psychobiological correlates. J Subst Abuse 2001;13(4):471-91.

Gerstein LH, Briggs JR. Psychological and sociological discriminants of violent and nonviolent serious juvenile offenders. J Addict Offender Couns 1993;14(1):2-13.

Giancola PR, Martin CS, Tarter RE, et al. Executive cognitive functioning and aggressive behavior in preadolescent boys at high risk for substance abuse/dependence. J Stud Alcohol 1996;57(4):352-9.

Giancola PR, Mezzich AC. Executive cognitive functioning mediates the relation between language competence and antisocial behavior in conduct-disordered adolescent females. Aggress Behav 2000;26(5):359-75.

Giancola PR, Mezzich AC, Clark DB, et al. Cognitive distortions, aggressive behavior, and drug use in adolescent

boys with and without a family history of a substance use disorder. Psychol Addict Behav 1999;13(1):22-32.

Giancola PR, Mezzich AC, Tarter RE. Disruptive, delinquent and aggressive behavior in female adolescents with a psychoactive substance use disorder: relation to executive cognitive functioning. J Stud Alcohol 1998;59(5):560-7.

Giancola PR, Mezzich AC, Tarter RE. Executive cognitive functioning, temperament, and antisocial behavior in conduct-disordered adolescent females. J Abnorm Psychol 1998;107(4):629-41.

Giancola PR, Moss HB, Martin CS, et al. Executive cognitive functioning predicts reactive aggression in boys at high risk for substance abuse: A prospective study. Alcoholism: Clinical & Experimental Research 1996;20(4):740-4.

Giancola PR, Parker AM. A six-year prospective study of pathways toward drug use in adolescent boys with and without a family history of a substance use disorder. J Stud Alcohol 2001;62(2):166-78.

Giancola PR, Shoal GD, Mezzich AC. Constructive thinking, executive functioning, antisocial behavior, and drug use involvement in adolescent females with a substance use disorder. Exp Clin Psychopharmacol 2001;9(2):215-27.

Gierowski JK. The influence of the type and level of aggression on homicidal behavior. Psychiatr Pol 1996;30(3, Suppl):27-37.

Ginsberg C. Violence-related attitudes and behaviors of high school students--New York City, 1992. MMWR Morb Mortal Wkly Rep 1993;42(40):773-7.

Ginsberg C. Violence-related attitudes and behaviors of high school students--New York City, 1992. J Sch Health 1993;63(10):438-40.

Giordano PC, Cernkovich SA, Groat HT, et al. The quality of adolescent friendships: long-term effects? J Health Soc Behav 1998;39(1):55-71.

Giordano PC, Millhollin TJ, Cernkovich SA. Delinquency, identity, and women's involvement in relationship violence. Criminology 1999;37(1):17-40.

Giuliano JD. A peer education program to promote the use of conflict resolution skills among at-risk school age males. Public Health Rep 1994;109(2):158-61.

Gjone H, Stevenson J. A longitudinal twin study of temperament and behavior problems: Common genetic or environmental influences? J Am Acad Child Adolesc Psychiatry 1997;36(10):1448-56.

Glod CA, Teicher MH, Butler M, et al. Modifying quiet room design enhances calming of children and adolescents. J Am Acad Child Adolesc Psychiatry 1994;33(4):558-66.

Goddard HW, Goff BG, Melancon MV, et al. Profiles of delinquency: A comparison of delinquent behavioral groups. J Soc Behav Pers 2000;15(1):19-50.

Goetting A. Child victims of homicide: a portrait of their killers and the circumstances of their deaths. Violence Vict 1990;5(4):287-96.

Goetting A. Female victims of homicide: a portrait of their killers and the circumstances of their deaths. Violence Vict 1991;6(2):159-68.

Goldstein AP, Glick B. Aggression replacement training: Curriculum and evaluation. Simul Gaming 1994;25(1):9-26.

Goodman G, Hull JW, Clarkin JF, et al. Childhood antisocial behaviors as predictors of psychotic symptoms and DSM-III-R borderline criteria among inpatients with borderline personality disorder. J Personal Disord 1999;13(1):35-46.

Goodwin MP, Roscoe B. Sibling violence and agonistic interactions among middle adolescents. Adolescence 1990;25(98):451-67.

Goren S, Singh NN, Best AM. The aggression-coercion cycle: Use of seclusion and restraint in a child psychiatric hospital. J Child Fam Stud 1993;2(1):61-73.

Gorenstein EE. Neuropsychology of juvenile delinquency. Forensic Rep 1990;3(1):15-48.

Gorman-Smith D, Tolan P. The role of exposure to community violence and developmental problems among inner-city youth. Dev Psychopathol 1998;10(1):101-16.

Gorman-Smith D, Tolan PH, Sheidow AJ, et al. Partner violence and street violence among urban adolescents: Do the same family factors relate? J Res Adolesc 2001;11(3):273-95.

Gorman-Smith D, Tolan PH, Zelli A, et al. The relation of family functioning to violence among inner-city minority youths. J Fam Psychol 1996;10(2):115-29.

Gover AR. The effects of child maltreatment on violent offending among institutionalized youth. Violence Vict 2002;17(6):655-68.

Graham S, Hudley C, Williams E. Attributional and emotional determinants of aggression among African-American and Latino young adolescents. Dev Psychol 1992;28(4):731-40.

Graham-Bermann SA, Cutler SE, Litzenberger BW, et al. Perceived conflict and violence in childhood sibling relationships and later emotional adjustment. J Fam Psychol 1994;8(1):85-97.

Grange JT, Corbett SW. Violence against emergency medical services personnel. Prehosp Emerg Care 2002;6(2):186-90.

Granger DA, Weisz JR, McCracken JT, et al. Testosterone and conduct problems. J Am Acad Child Adolesc Psychiatry 1994;33(6):908.

Granic I, Butler S. The relation between anger and antisocial beliefs in young offenders. Pers Individ Dif 1998;24(6):759-65.

Granic I, Dishion TJ. Deviant talk in adolescent friendships: A step toward measuring a pathogenic attractor process. Soc Dev 2003;12(3):314-34.

Grann M. The PCL-R and gender. Eur J Psychol Assess 2000;16(3):147-9.

Gray C, Chisholm D, Smith P, et al. The role of the child psychiatric ward in health care: Experiences with different types of admissions over a period of twenty-one years. Ir J Psychol Med 1992;9(1):17-23.

Gray HM, Foshee V. Adolescent dating violence: Differences between one-sided and mutually violent profiles. J Interpers Violence 1997;12(1):126-41.

Greco CM, Cornell DG. Rorschach object relations of adolescents who committed homicide. J Pers Assess 1992;59(3):574-83.

Greenberg DM, Bradford JM, Curry S. A comparison of sexual victimization in the childhoods of pedophiles and hebephiles. J Forensic Sci 1993;38(2):432-6.

Greene LW, Smith MS, Peters SR. "I have a future" comprehensive adolescent health promotion: cultural considerations in program implementation and design. J Health Care Poor Underserved 1995;6(2):267-81; Discussion 82-3.

Gretton HM, McBride M, Hare RD, et al. Psychopathy and recidivism in adolescent sex offenders. Crim Justice Behav 2001;28(4):427-49.

Grietens H, Rink J, Hellinckx W. Nonbehavioral correlates of juvenile delinquency: Communications of detained and nondetained young people about social limits. J Adolesc Res 2003;18(1):68-89.

Griffin KW, Botvin GJ, Scheier LM, et al. Parenting practices as predictors of substance use, delinquency, and aggression among urban minority youth: Moderating effects of family structure and gender. Psychol Addict Behav 2000;14(2):174-84.

Griffin KW, Scheier LM, Botvin GJ, et al. Interpersonal aggression in urban minority youth: Mediators of perceived neighborhood, peer, and parental influences. J Community Psychol 1999;27(3):281-98.

Grimm KT. Violence against infants. Mt Sinai J Med 1996;63(2):101-2.

Grisso JA, Schwarz DF, Hirschinger N, et al. Violent injuries among women in an urban area. N Engl J Med 1999;341(25):1899-905.

Grizenko N, Pawliuk N. Risk and protective factors for disruptive behavior disorders in children. Am J Orthopsychiatry 1994;64(4):534-44.

Groebel J. Media violence and children. Educ Media Int 1998;35(3):216-27.

Grossman LS, Haywood TW, Cavanaugh JL, et al. State psychiatric hospital patients with past arrests for violent crimes. Psychiatr Serv 1995;46(8):790-5.

Gruber E, DiClemente RJ, Anderson MM, et al. Early drinking onset and its association with alcohol use and problem behavior in late adolescence. Prev Med 1996;25(3):293-300.

Grunbaum JA, Basen-Engquist K. Comparison of health risk behaviors between students in a regular high school and students in an alternative high school. J Sch Health 1993;63(10):421-5.

Grunbaum JA, Basen-Engquist K, Pandey D. Association between violent behaviors and substance use among Mexican-American and non-Hispanic white high school students. J Adolesc Health 1998;23(3):153-9.

Grunbaum JA, Kann L, Kinchen SA, et al. Youth risk behavior surveillance--United States, 2001. J Sch Health 2002;72(8):313-28.

Grunbaum JA, Lowry R, Kann L. Prevalence of health-related behaviors among alternative high school students as compared with students attending regular high schools. J Adolesc Health 2001;29(5):337-43.

Guagliardo MF, Huang Z, D'Angelo LJ. Fathering pregnancies: marking health-risk behaviors in urban adolescents. J Adolesc Health 1999;24(1):10-5.

Guarnaccia V, Curry K. Contingent reinforcement effects on movement responses of prison inmates to the Holtzman Inkblot Technique. J Pers Assess 1990;55(1-2):263-9.

Guerra NG. Violence prevention. Prev Med 1994;23(5):661-4.

Guerra NG, Huesmann LR, Tolan PH, et al. Stressful events and individual beliefs as correlates of economic disadvantage and aggression among urban children. J Consult Clin Psychol 1995;63(4):518-28.

Guerra NG, Huesmann LR, Zelli A. Attributions for social failure and aggression in incarcerated delinquent youth. J Abnorm Child Psychol 1990;18(4):347-55.

Guerra NG, Huesmann LR, Zelli A. Attributions for social failure and adolescent aggression. Aggress Behav 1993;19(6):421-34.

Guilleminault C, Moscovitch A, Leger D. Forensic sleep medicine: nocturnal wandering and violence. Sleep 1995;18(9):740-8.

Gundersen L. Intimate-partner violence: the need for primary prevention in the community. Ann Intern Med 2002;136(8):637-40.

Gupta VB, Nwosa NM, Nadel TA, et al. Externalizing behaviors and television viewing in children of low-income minority parents. Clin Pediatr (Phila) 2001;40(6):337-41.

Guterman NB, Cameron M, Hahm HC. Community violence exposure and associated behavior problems among children and adolescents in residential treatment. J Aggress Maltreat Trauma 2003;6(2):111-35.

Haapasalo J, Hamalainen T. Childhood family problems and current psychiatric problems among young violent and property offenders. J Am Acad Child Adolesc Psychiatry 1996;35(10):1394-401.

Haapasalo J, Kankkonen M. Self-reported childhood abuse among sex and violent offenders. Arch Sex Behav 1997;26(4):421-31.

Haapasalo J, Tremblay RE. Physically aggressive boys from ages 6 to 12: Family background, parenting behavior, and prediction of delinquency. J Consult Clin Psychol 1994;62(5):1044-52.

Haemaelaeinen M, Pulkkinen L. Aggressive and non-prosocial behaviour as precursors of criminality. Stud Crime Crime Prev 1995;4(1):6-21.

Haemaelaeinen M, Pulkkinen L. Problem behavior as a precursor of male criminality. Dev Psychopathol 1996;8(2):443-55.

Hagan MP. An analysis of adolescent perpetrators of homicide and attempted homicide upon return to the community. Int J Offender Ther Comp Criminol 1997;41:250-9.

Hagan MP, Cho ME. A comparison of treatment outcomes between adolescent rapists and child sexual offenders. Int J Offender Ther Comp Criminol 1996;40(2):113-22.

Hagan MP, Cho ME, Jensen JA, et al. An assessment of the effectiveness of an intensive treatment program for severely mentally disturbed juvenile offenders. Int J Offender Ther Comp Criminol 1997;41(4):340-50.

Hagan MP, Gust-Brey KL. A ten-year longitudinal study of adolescent rapists upon return to the community. Int J Offender Ther Comp Criminol 1999;43(4):448-58.

Hagan MP, Gust-Brey KL. A ten-year longitudinal study of adolescent perpetrators of sexual assault against children. J Offender Rehabil 2000;31(1-2):117-26.

Hagan MP, Gust-Brey KL, Cho ME. Eight-year comparative analyses of adolescent rapists, adolescent child molesters, other adolescent delinquents, and the general population. Int J Offender Ther Comp Criminol 2001;45(3):314-24.

Hagan MP, Gust-Brey KL, Cho ME, et al. Eight-year comparative analyses of adolescent rapists, adolescent child molesters, other adolescent delinquents, and the general population. Int J Offender Ther Comp Criminol 2001;45(3):314-24.

Hagan MP, King RP, Patros RL. Recidivism among adolescent perpetrators of sexual assault against children. J Offender Rehabil 1994;21(1-2):127-37.

Hagan MP, King RP, Patros RL. The efficacy of a serious sex offenders treatment program for adolescent rapists. Int J Offender Ther Comp Criminol 1994;38(2):141-50.

Hagan MP, King SL. Dx = extremely dangerous: Prognostic validity for future violence. J Offender Rehabil 1998;27(1-2):23-35.

Hailer JA, Hart CB. A new breed of warrior: The emergence of American Indian youth gangs. J Gang Res 1999;7(1):23-33.

Hallberg J. Boys and their toys. Minn Med 2000;83(9):14-7.

Halliday-Boykins CA, Graham S. At both ends of the gun: testing the relationship between community violence exposure and youth violent behavior. J Abnorm Child Psychol 2001;29(5):383-402.

Halperin JM, McKay KE, Newcorn JH. Development, reliability, and validity of the children's aggression scale-parent version. J Am Acad Child Adolesc Psychiatry 2002;41(3):245-52.

Halperin JM, Newcorn JH, Matier K, et al. Impulsivity and the initiation of fights in children with disruptive behavior disorders. J Child Psychol Psychiatry 1995;36(7):1199-211.

Halpern CT, Udry JR, Campbell B, et al. Relationships between aggression and pubertal increases in testosterone: A panel analysis of adolescent males. Soc Biol 1993;40(1-2):8-24.

Halpern R. The role of after-school programs in the lives of inner-city children: a study of the "urban youth network". Child Welfare 1992;71(3):215-30.

Hammett M, Powell KE, O'Carroll PW, et al. Homicide surveillance--United States, 1979-1988. MMWR CDC Surveill Summ 1992;41(3):1-33.

Hammig BJ, Dahlberg LL, Swahn MH. Predictors of injury from fighting among adolescent males. Inj Prev 2001;7(4):312-5.

Hammock G, O'Hearn R. Psychological aggression in dating relationships: predictive models for males and females. Violence Vict 2002;17(5):525-40.

Hammond WR, Yung BR. Preventing violence in at-risk African-American youth. J Health Care Poor Underserved 1991;2(3):359-73.

Hanlon TE, Bateman RW, Simon BD, et al. An early community-based intervention for the prevention of substance abuse and other delinquent behavior. J Youth Adolesc 2002;31(6):459-71.

Hanna GL, Yuwiler A, Coates JK. Whole blood serotonin and disruptive behaviors in juvenile obsessive-compulsive disorder. J Am Acad Child Adolesc Psychiatry 1995;34(1):28-35.

Hannon L. AFDC and homicide. J Sociol Soc Welf 1997;24(4):125-36.

Hannon L, DeFronzo J, Prochnow J. Moral commitment and the effects of social influences on violent delinquency. Violence Vict 2001;16(4):427-39.

Hanson RF. Adolescent dating violence: prevalence and psychological outcomes. Child Abuse Negl 2002;26(5):449-53.

Hanson RK, Bussiere MT. Predicting relapse: a meta-analysis of sexual offender recidivism studies. J Consult Clin Psychol 1998;66(2):348-62.

Harden PW, Pihl RO, Vitaro F, et al. Stress response in anxious and nonanxious disruptive boys. J Emot Behav Disord 1995;3(3):183-90.

Hardy MS. Physical aggression and sexual behavior among siblings: A retrospective study. J Fam Violence 2001;16(3):255-68.

Harmon-Jones E, Barratt ES, Wigg C. Impulsiveness, aggression, reading, and the P300 of the event-related potential. Pers Individ Dif 1997;22(4):439-45.

Harper GW, Robinson WL. Pathways to risk among inner-city African-American adolescent females: the influence of gang membership. Am J Community Psychol 1999;27(3):383-404.

Harrington NG, Giles SM, Hoyle RH, et al. Evaluation of the All Stars character education and problem behavior prevention program: effects on mediator and outcome variables for middle school students. Health Educ Behav 2001;28(5):533-46.

Harris P. The nature and extent of aggressive behaviour amongst people with learning difficulites (mental handicap) in a single health district. J Intellect Disabil Res 1993;37(3):221-4.

Harrison LD, Erickson PG, Adlaf E, et al. The drugs-violence nexus among American and Canadian youth. Subst Use Misuse 2001;36(14):2065-86.

Harrison PA, Luxenberg MG. Comparisons of alcohol and other drug problems among Minnesota adolescents in 1989 and 1992. Arch Pediatr Adolesc Med 1995;149(2):137-44.

Harry B, Pierson TR, Kuznetsov A. Correlates of sex offender and offense traits by victim age. J Forensic Sci 1993;38(5):1068-74.

Harty-Golder B. Domestic violence. J Fla Med Assoc 1994;81(10):697-8.

Hartz DT. Comparative conflict resolution patterns among parent-teen dyads of four ethnic groups in Hawaii. Child Abuse Negl 1995;19(6):681-9.

Hastings TL, Kelley ML. Development and validation of the Screen for Adolescent Violence Exposure (SAVE). J Abnorm Child Psychol 1997;25(6):511-20.

Hausman A, Pierce G, Briggs L. Evaluation of comprehensive violence prevention education: effects on student behavior. J Adolesc Health 1996;19(2):104-10.

Hausman AJ, Spivak H, Prothrow-Stith D. Adolescents' knowledge and attitudes about and experience with violence. J Adolesc Health 1994;15(5):400-6.

Hawke JM, Jainchill N, De Leon G. Posttreatment victimization and violence among adolescents following residential drug treatment. Child Maltreat 2003;8(1):58-71.

Hawke JM, Jainchill N, De Leon G. Posttreatment victimization and violence among adolescents following residential drug treatment. Child Maltreat 2003;8(1):58-71.

Hawkins JD, Catalano RF, Kosterman R, et al. Preventing adolescent health-risk behaviors by strengthening protection during childhood. Arch Pediatr Adolesc Med 1999;153(3):226-34.

Hawkins SR, Campanaro A, Pitts TB, et al. Weapons in an affluent suburban school. J Sch Violence 2002;1(1):53-65.

Haynes NM. Creating safe and caring school communities: Comer School Development Program schools. J Negro Educ 1996;65(3):308-14.

Haynie DL, Alexander C, Walters SR. Considering a decision-making approach to youth violence prevention programs. J Sch Health 1997;67(5):165-70.

Haynie DL, Nansel T, Eitel P, et al. Bullies, victims, and bully/victims: Distinct groups of at-risk youth. J Early Adolesc 2001;21(1):29-49.

Heads TC, Taylor PJ, Leese M. Childhood experiences of patients with schizophrenia and a history of violence: A special hospital sample. Crim Behav Ment Health 1997;7(2):117-30.

Heath E, Kosky R. Are children who steal different from those who are aggressive? Child Psychiatry Hum Dev 1992;23(1):9-18.

Heath L, Kruttschnitt C, Ward D. Television and violent criminal behavior: beyond the Bobo doll. Violence Vict 1986;1(3):177-90.

Heaven PCL. Personality and self-reported delinquency: Analysis of the "Big Five" personality dimensions. Pers Individ Dif 1996;20(1):47-54.

Heck C, Walsh A. The effects of maltreatment and family structure on minor and serious delinquency. Int J Offender Ther Comp Criminol 2000;44(2):178-93.

Heide KM. Weapons used by juveniles and adults to kill parents. Behav Sci Law 1993;11(4):397-405.

Heide KM. Parents who get killed and the children who kill them. J Interpers Violence 1993;8(4):531-44.

Heide KM, Spencer E, Thompson A, et al. Who's in, who's out, and who's back: follow-up data on 59 juveniles incarcerated in adult prison for murder or attempted murder in the early 1980s. Behav Sci Law 2001;19(1):97-108.

Heimer K. Socioeconomic status, subcultural definitions, and violent delinquency. Soc Forces 1997;75(3):799-833.
Hemenway D. Lethal violence in the schools. J Health Polit Policy Law 2002;27(2):267-71.

Hemmings A. Youth culture of hostility: Discourses of money, respect, and difference. Int J Qual Stud Educ 2002;15(3):291-307.

Hendricks-Matthews MK. A survey on violence education: a report of the STFM Violence Education Task Force. Fam Med 1991;23(3):194-7.

Hendrix K, Molloy PJ. Forum on youth violence in minority communities. Interventions in early childhood. Public Health Rep 1991;106(3):275-6.

Henggeler SW, Clingempeel WG, Brondino MJ, et al. Four-year follow-up of multisystemic therapy with substance-abusing and substance-dependent juvenile offenders. J Am Acad Child Adolesc Psychiatry 2002;41(7):868-74.

Henggeler SW, Melton GB, Brondino MJ, et al. Multisystemic therapy with violent and chronic juvenile offenders and their families: The role of treatment fidelity in successful dissemination. J Consult Clin Psychol 1997;65(5):821-33.

Henggeler SW, Melton GB, Smith LA, et al. Assessing violent offending in serious juvenile offenders. J Abnorm Child Psychol 1993;21(3):233-43.

Hennes H. A review of violence statistics among children and adolescents in the United States. Pediatr Clin North Am 1998;45(2):269-80.

Henry B, Others A. Temperamental and familial predictors of violent and nonviolent criminal convictions: Age 3 to age 18. Dev Psychol 1996;32(4):614-23.

Henry DB, Tolan PH, Gorman-Smith D. Longitudinal family and peer group effects on violence and nonviolent delinquency. J Clin Child Psychol 2001;30(2):172-86.

Herkimer County Rural Health Network. Communities that care: Identifying risk and protective factors that impact youth behaviors. Accessed: May 2004. http://www.herkimerhealthnet.com/dprofile/pdf/dprofile/CommunitiesThatCare.pdf.

Herkov MJ, Gynther MD, Thomas S, et al. MMPI differences among adolescent inpatients, rapists, sodomists, and sexual abusers. J Pers Assess 1996;66(1):81-90.

Hernandez JT, Lodico M, DiClemente RJ. The effects of child abuse and race on risk-taking in male adolescents. J Natl Med Assoc 1993;85(8):593-7.

Herrenkohl RC, Egolf BP, Herrenkohl EC. Preschool antecedents of adolescent assaultive behavior: a longitudinal study. Am J Orthopsychiatry 1997;67(3):422-32.

Herrenkohl RC, Egolf BP, Herrenkohl EC. Preschool antecedents of adolescent assaultive behavior: a longitudinal study. Am J Orthopsychiatry 1997;67:422-32.

Herrenkohl TI, Guo J, Kosterman R, et al. Early adolescent predictors of youth violence as mediators of childhood risks. J Early Adolesc 2001;21(4):447-69.

Herrenkohl TI, Hill KG, Chung I-J, et al. Protective factors against serious violent behavior in adolescence: A prospective study of aggressive children. Soc Work Res 2003;27(3):179-91.

Herrenkohl TI, Huang B, Kosterman R, et al. A comparison of social development processes leading to violent behavior in late adolescence for childhood initiators and adolescent initiators of violence. J Res Crime Delinq 2001;38(1):45-63.

Herrenkohl TI, Huang B, Tajima EA, et al. Examining the link between child abuse and youth violence: An analysis of mediating mechanisms. J Interpers Violence 2003;18(10):1189-208.

Herrenkohl TI, Maguin E, Hill KG, et al. Developmental risk factors for youth violence. J Adolesc Health 2000;26(3):176-86.

Herrera VM, McCloskey LA. Gender differences in the risk for delinquency among youth exposed to family violence. Child Abuse Negl 2001;25(8):1037-51.

Herrera VM, McCloskey LA. Sexual abuse, family violence, and female delinquency: Findings from a longitudinal study. Violence Vict 2003;18(3):319-34.

Herrmann DS, McWhirter JJ. Anger & aggression management in young adolescents: An experimental validation of the SCARE program. Educ Treat Child 2003;26(3):273-302.

Hess P. The gang's all here. Emerg Med Serv 1994;23(7):44-5, 7-54, 6.

Hickey DC. Public health and violence. J Tenn Med Assoc 1994;87(5):197-8.

Hicks MM, Rogers R, Cashel M. Predictions of violent and total infractions among institutionalized male juvenile offenders. J Am Acad Psychiatry Law 2000;28(2):183-90.

Hill SC, Drolet JC. School-related violence among high school students in the United States, 1993-1995. J Sch Health 1999;69(7):264-72.

Hillbrand M, Spitz RT, Foster HG, et al. Creatine kinase elevations and aggressive behavior in hospitalized forensic patients. Psychiatr Q 1998;69(1):69-82.

Hilton NZ, Harris GT, Rice ME. The functions of aggression by male teenagers. J Pers Soc Psychol 2000;79(6):988-94.

Hinshaw SP, Melnick SM. Peer relationships in boys with attention-deficit hyperactivity disorder with and without comorbid aggression. Dev Psychopathol 1995;7(4):627-47.

Hinton PM. Domestic violence. J Fla Med Assoc 1996;83(3):211-2.

Hirose S, Ashby J, Charles R., Mills MJ. Effectiveness of ECT combined with risperidone against aggression in schizophrenia. J ECT 2001;17(1):22-6.

Hixon AL. Preventing street gang violence. Am Fam Physician 1999;59(8):2121-2, 5, 32.

Hobbie C. Violence prevention. J Pediatr Health Care 1995;9(5):234-6.

Hodge S, Canter D. Victims and perpetrators of male sexual assault. J Interpers Violence 1998;13(2):222-39.

Hodges K. Domestic violence--a health crisis. N C Med J 1993;54(5):213-6.

Hodgins S, Lapalme M, Toupin J. Criminal activities and substance use of patients with major affective disorders and schizophrenia: a 2-year follow-up. J Affect Disord 1999;55(2-3):187-202.

Hoekelman RA. Causes of death among the young. Pediatr Ann 1992;21(7):407-8.

Holden GW, Ritchie KL. Linking extreme marital discord, child rearing, and child behavior problems: evidence from battered women. Child Dev 1991;62(2):311-27.

Holmes SR, Brandenburg-Ayres SJ. Bullying behavior in school: A predictor of later gang involvement. J Gang Res 1998;5(2):1-6.

Honig J. Perceived health status in urban minority young adolescents. MCN Am J Matern Child Nurs 2002;27(4):233-7.

Hoover JH, Oliver R, Hazler RJ. Bullying: Perceptions of adolescent victims in the Midwestern USA. Sch Psychol Int 1992;13(1):5-16.

Hops H, Davis B, Leve C, et al. Cross-generational transmission of aggressive parent behavior: A prospective, mediational examination. J Abnorm Child Psychol 2003;31(2):161-9.

Horner RH, Day HM, Sprague JR, et al. Interspersed requests: a nonaversive procedure for reducing aggression and self-injury during instruction. J Appl Behav Anal 1991;24(2):265-78.

Horton A. The prevention of juvenile delinquency: New evidence to consider. J Hum Behav Soc Environ 1998;1(4):1-10.

Horton A. The prevention of school violence: New evidence to consider. J Hum Behav Soc Environ 2001;4(1):49-59.

Horton A. Violent crime: New evidence to consider. J Hum Behav Soc Environ 2002;5(2):77-88.

Howard D, Qiu Y, Boekeloo B. Personal and social contextual correlates of adolescent dating violence. J Adolesc Health 2003;33(1):9-17.

Howard DE, Cross SI, Li X, et al. Parent-youth concordance regarding violence exposure: relationship to youth psychosocial functioning. J Adolesc Health 1999;25(6):396-406.

Howard DE, Wang MQ. Risk profiles of adolescent girls who were victims of dating violence. Adolescence 2003;38(149):1-14.

Howard PE. Protecting our most precious resource. Del Med J 1997;69(7):327-8.

Howell AJ, Reddon JR, Enns RA. Immediate antecedents to adolescents' offenses. J Clin Psychol 1997;53(4):355-60.

Howell AJ, Reddon JR, Enns RA. Immediate antecedents

to adolescents' offenses. J Clin Psychol 1997;53:355-60.

Hsu LG, Starzynski J. Adolescent rapists and adolescent child sexual assaulters. Int J Offender Ther Comp Criminol 1990;34(1):23-30.

Huang B, Kosterman R, Catalano RF. Modeling mediation in the etiology of violent behavior in adolescence: a test of the social development model. Criminology 2001;39(1):75-107.

Huang B, White HR, Kosterman R, et al. Developmental associations between alcohol and interpersonal aggression during adolescence. J Res Crime Delinq 2001;38(1):64-83.

Huang DB, Cherek DR, Lane SD. Laboratory measurement of aggression in high school age athletes: Provocation in a nonsporting context. Psychol Rep 1999;85(3, Pt 2 [Spec Issue]):1251-62.

Hubbard JA, Dodge KA, Cillessen AHN, et al. The dyadic nature of social information processing in boys' reactive and proactive aggression. J Pers Soc Psychol 2001;80(2):268-80.

Hudley C, Friday J. Attributional bias and reactive aggression. Am J Prev Med 1996;12(5 Suppl):75-81.

Huefner DS. Another point of the suspension and expulsion cases. Except Child 1991;57(4):360-4; Discussion 4-8.

Huesmann LR, Maxwell CD, Eron L, et al. Evaluating a cognitive/ecological program for the prevention of aggression among urban children. Am J Prev Med 1996;12(5 Suppl):120-8.

Hughes SA, Deville C, Chalhoub M, et al. The Rorschach human anatomy response: Predicting sexual offending behavior in juveniles. J Psychiatry Law 1992;20(3):313-33.

Hulley SB, Cummings SR, Browner WS, et al. Designing clinical research: an epidemiologic approach, second edition. Philadelphia, PA: Lippincott Williams & Wilkins; 2001.

Hunt G, Joe-Laidler K. Situations of violence in the lives of girl gang members. Health Care Women Int 2001;22(4):363-84.

Hunter JA, Figueredo AJ. The influence of personality and history of sexual victimization in the prediction of juvenile perpetrated child molestation. Behav Modif 2000;24(2):241-63.

Hunter JA, Figueredo AJ, Malamuth NM, et al. Juvenile sex offenders: Toward the development of a typology. Sex Abuse 2003;15(1):27-48.

Hunter JA, Hazelwood RR, Slesinger D. Juvenile-perpetrated sex crimes: Patterns of offending and predictors of violence. J Fam Violence 2000;15(1):81-93.

Hutchins JJ. Prevention of handgun deaths. N J Med 1990; 87(4):283-5.

Hutchison IW, Hirschel JD, Pesackis CE. Family violence and police utilization. Violence Vict 1994;9(4):299-313.

Hutton M. Violence in America. Reaching epidemic proportions. J Fla Med Assoc 1995;82(10):667-8.

Hwang SD, Segal SP. Criminality of the mentally ill in sheltered care: are they more dangerous? Int J Law Psychiatry 1996;19(1):93-105.

Hyde CE, Harrower-Wilson C, Morris J. Violence, dissatisfaction and rapid tranquillisation in psychiatric intensive care. Psychiatr Bull R Coll Psychiatr 1998;22(8):477-80.

Ialongo NS, Vaden-Kiernan N, Kellam S. Early peer rejection and aggression: Longitudinal relations with adolescent behavior. J Dev Phys Disabil 1998;10(2):199-213.

Inciardi JA. The crack-violence connection within a population of hard-core adolescent offenders. NIDA Res Monogr 1990;103:92-111.

Ireland JL. Do juveniles bully more than young offenders? J Adolesc 2002;25(2):155-68.

Ireland JL. Official records of bullying incidents among young offenders: what can they tell us and how useful are they? J Adolesc 2002;25(6):669-79.

Jackson C, Foshee VA. Violence-related behaviors of adolescents: Relations with responsive and demanding parenting. J Adolesc Res 1998;13(3):343-59.

Jacobs WL, Kennedy WA, Meyer JB. Juvenile delinquents: A between-group comparison study of sexual and nonsexual offenders. Sex Abuse 1997;9(3):201-17.

Jaffee S, Caspi A, Moffitt TE, et al. Why are children born to teen mothers at risk for adverse outcomes in young adulthood? Results from a 20-yr longitudinal study. Dev Psychopathol 2001;13(2):377-97.

Jaffee S, Caspi A, Moffitt TE, et al. Why are children born to teen mothers at risk for adverse outcomes in young adulthood? Results from a 20-year longitudinal study. Dev Psychopathol 2001;13(2):377-97.

Jagers RJ, Mock LO. Culture and social outcomes among inner-city African American children: An Afrographic exploration. J Black Psychol 1993;19(4):391-405.

James E. Royal Society of Medicine: the roots of violence in children and young people. Med Confl Surviv 1999;15(4):420-2.

James WH, West C, Deters KE, et al. Youth dating violence. Adolescence 2000;35(139):455-65.

Jamieson S, Marshall WL. Attachment styles and violence in child molesters. J Sex Aggress 2000;5(2):88-98.

Jarjoura GR, May DC. Integrating criminological theories to explain violent forms of delinquency. Caribb J Criminol Soc Psychol 2000;5(1-2):81-102.

Jasinski JL. Physical violence among Anglo, African American, and Hispanic couples: Ethnic differences in persistence and cessation. Violence Vict 2001;16(5):479-90.

Jenkins PH. School delinquency and the school social bond. J Res Crime Delinq 1997;34:337-67.

Jenkins RS. Enhancing violence prevention in at-risk youth. J Health Care Poor Underserved 1992;3(2):270-1.

Jenson JM, Howard MO. Youth crime, public policy, and practice in the juvenile justice system: recent trends and needed reforms. Soc Work 1998;43(4):324-34.

Johnson CC, Myers L, Webber LS, et al. Assertiveness and cardiovascular disease risk factors in children and adolescents: The Bogalusa heart study. J Soc Behav Pers 1997;12(1):243-55.

Johnson JG, Cohen P, Smailes E, et al. Adolescent personality disorders associated with violence and criminal behavior during adolescence and early adulthood. Am J Psychiatry 2000;157(9):1406-12.

Johnson JG, Cohen P, Smailes EM, et al. Television viewing and aggressive behavior during adolescence and adulthood. Science 2002;295(5564):2468-71.

Johnson SD. The social context of youth violence: A study of African American youth. Int J Adolesc Med Health 1999;11(3-4):159-75.

Jones TS, Bodtker AM. Conflict education in a special needs population. Mediat Q 1999;17(2):109-24.

Jonson-Reid M, Barth RP. From maltreatment report to juvenile incarceration: the role of child welfare services. Child Abuse Negl 2000;24(4):505-20.

Jonson-Reid M, Barth RP. From placement to prison: the path to adolescent incarceration from child welfare supervised foster or group care. Child Youth Serv Rev 2000;22(7):493-516.

Jonson-Reid M, Bivens L. Foster youth and dating violence. J Interpers Violence 1999;14(12):1249-62.

Jonson-Reid M, Williams JH, Webster D. Severe emotional disturbance and violent offending among incarcerated adolescents. Soc Work Res 2001;25(4):213-22.

Jordan E, Cowan A, Roberts J. Knowing the rules: Discursive strategies in young children's power struggles. Early Child Res Q 1995;10(3):339-58.

Joshi P, Hamel L, Joshi ART, et al. Use of droperidol in hospitalized children. J Am Acad Child Adolesc Psychiatry 1998;37(2):228-30.

Jossi F. Stopping the violence. Healthplan 1998;39(3):95-100.

Jouriles EN, Norwood WD, McDonald R, et al. Physical violence and other forms of marital aggression: Links with children's behavior problems. J Fam Psychol 1996;10(2):223-34.

Kang SY, Magura S, Shapiro JL. Correlates of cocaine/crack use among inner-city incarcerated adolescents. Am J Drug Alcohol Abuse 1994;20(4):413-29.

Kann L, Kinchen SA, Williams BI, et al. Youth risk behavior surveillance--United States, 1999. State and local YRBSS coordinators. J Sch Health 2000;70(7):271-85.

Kann L, Kinchen SA, Williams BI, et al. Youth risk behavior surveillance--United States, 1999. MMWR CDC Surveill Summ 2000;49(5):1-32.

Kann L, Kinchen SA, Williams BI, et al. Youth risk behavior surveillance--United States, 1997. State and local YRBSS coordinators. J Sch Health 1998;68(9):355-69.

Kann L, Kinchen SA, Williams BI, et al. Youth risk behavior surveillance--United States, 1997. MMWR CDC Surveill Summ 1998;47(3):1-89.

Kann L, Warren CW, Harris WA, et al. Youth risk behavior surveillance--United States, 1995. J Sch Health 1996;66(10):365-77.

Kann L, Warren W, Collins JL, et al. Results from the national school-based 1991 Youth Risk Behavior Survey and progress toward achieving related health objectives for the nation. Public Health Rep 1993;108 Suppl 1:47-67.

Kaplan GA, Pamuk ER, Lynch JW, et al. Inequality in income and mortality in the United States: analysis of mortality and potential pathways. BMJ 1996;312(7037):999-1003.

Kaplan HB, Peck BM. Self-rejection, coping style, and mode of deviant response. Soc Sci Q 1992;73(4):903-19.

Kaplan HB, Tolle GCJ, Yoshida T. Substance use-induced diminution of violence: a countervailing effect in longitudinal perspective. Criminology 2001;39(1):205-24.

Kaplan SJ, Labruna V, Pelcovitz D, et al. Physically abused adolescents: behavior problems, functional impairment, and comparison of informants' reports. Pediatrics 1999;104(1 Pt 1):43-9.

Kaplan SJ, Pelcovitz D, Salzinger S, et al. Adolescent physical abuse: risk for adolescent psychiatric disorders.

Am J Psychiatry 1998;155(7):954-9.

Kaplan SL, Busner J, Kupietz S, et al. Effects of methylphenidate on adolescents with aggressive conduct disorder and ADDH: A preliminary report. J Am Acad Child Adolesc Psychiatry 1990;29(5):719-23.

Kashani JH, Darby PJ, Allan WD, et al. Intrafamilial homicide committed by juveniles: Examination of a sample with recommendations for prevention. J Forensic Sci 1997;42(5):873-8.

Kashani JH, Deuser W, Reid JC. Aggression and anxiety: a new look at an old notion. J Am Acad Child Adolesc Psychiatry 1991;30(2):218-23.

Kashani JH, Jones MR, Borduin CM, et al. Individual characteristics and peer relations of psychiatrically hospitalized aggressive youths: Implications for treatment. Child Psychiatry Hum Dev 2000;30(3):145-59.

Kashani JH, Shepperd JA. Aggression in adolescents: the role of social support and personality. Can J Psychiatry 1990;35(4):311-5.

Kassirer JP. Private arsenals and public peril. N Engl J Med 1998;338(19):1375-6.

Kastner JW. Clinical change in adolescent aggressive behavior: A group therapy approach. J Child Adolesc Group Ther 1998;8(1):23-33.

Katz RC, Marquette j. Psychosocial characteristics of young violent offenders: A comparative study. Crim Behav Ment Health 1996;6(4):339-48.

Kazdin AE, Crowley MJ. Moderators of treatment outcome in cognitively based treatment of antisocial children. Cognit Ther Res 1997;21(2):185-207.

Keiley MK, Howe TR, Dodge KA, et al. The timing of child physical maltreatment: a cross-domain growth analysis of impact on adolescent externalizing and internalizing problems. Dev Psychopathol 2001;13(4):891-912.

Kelder SH, Orpinas P, McAlister A, et al. The students for peace project: a comprehensive violence-prevention program for middle school students. Am J Prev Med 1996;12(5 Suppl):22-30.

Kellam SG, Ling X, Merisca R, et al. The effect of the level of aggression in the first grade classroom on the course and malleability of aggressive behavior into middle school. Dev Psychopathol 1998;10(2):165-85.

Kellam SG, Ling X, Merisca R, et al. The effect of the level of aggression in the first grade classroom on the course and malleability of aggressive behavior into middle school: Erratum. Dev Psychopathol 1999;11(1):193.

Kellam SG, Ling X, Merisca R, et al. The effect of the level of aggression in the first grade classroom on the course and malleability of aggressive behavior into middle school: Erratum. Dev Psychopathol 2000;12(1):107.

Kellam SG, Rebok GW, Ialongo N, et al. The course and malleability of aggressive behavior from early first grade into middle school: results of a developmental epidemiologically-based preventive trial. J Child Psychol Psychiatry 1994;35(2):259-81.

Kelley BR, Beauchesne MA. Interventions for violence in children and adolescents. School Nurse News 2002;19(3):36-9; Quiz 40.

Kelley D. Shots fired ... children down. JEMS 1998;23(8):38-42, 5.

Keltikangas-Jaervinen L. Aggressive behaviour and social problem-solving strategies: A review of the findings of a seven-year follow-up from childhood to late adolescence. Crim Behav Ment Health 2001;11(4):236-50.

Keltikangas-Jaervinen L. Aggressive problem-solving strategies, aggressive behavior, and social acceptance in early and late adolescence. J Youth Adolesc 2002;31(4):279-87.

Keltikangas-Jaervinen L, Pakaslahti L. Development of social problem-solving strategies and changes in aggressive behavior: A 7-year follow-up from childhood to late adolescence. Aggress Behav 1999;25(4):269-79.

Kemph JP, Braley RO, Ciotola PV. A comparison of youthful inmates who have committed violent versus nonviolent crimes. J Am Acad Psychiatry Law 1998;26(1):67-74.

Kemph JP, DeVane CL, Levin GM, et al. Treatment of aggressive children with clonidine: results of an open pilot study. J Am Acad Child Adolesc Psychiatry 1993;32(3):577-81.

Kempton T, Forehand R. Juvenile sex offenders: similar to, or different from, other incarcerated delinquent offenders? Behav Res Ther 1992;30(5):533-6.

Kennedy LW, Baron SW. Routine activities and a subculture of violence: A study of violence on the street. J Res Crime Delinq 1993;30(1):88-112.

Kennedy M. What's the matter with kids today? WMJ 1998;97(8):40-3.

Kennedy M. Teens today facing familiar problems. WMJ 2000;99(2):28-32.

Kent C. Perspectives. Public health attacks violence. Faulkner Grays Med Health 1992;46(25):Suppl 4 P.

Kesner JE, McKenry PC. The role of childhood attachment factors in predicting male violence toward female intimates. J Fam Violence 1998;13(4):417-32.

Kettl PA. Homicide in Alaska Natives. Alaska Med 1993;35(2):168-72.

Khatri P, Kupersmidt JB, Patterson C. Aggression and peer victimization as predictors of self-reported behavioral and emotional adjustment. Aggress Behav 2000;26(5):345-58.

Kheder S, VandenBosch T. Intimate partner violence: a health system's response. Continuum Soc Soc Work Leadersh Health Care 2001;21(1):15-22.

Kho K, Sensky T, Mortimer A, et al. Prospective study into factors associated with aggressive incidents in psychiatric acute admission wards. Br J Psychiatry 1998;172:38-43.

Killeen MR. Ten years after: examination of adolescent screening questions that predict future violence-related injury. J Child Fam Nurs 2000;3(2):115-6.

Kindlon DJ, Tremblay RE, Mezzacappa E, et al. Longitudinal patterns of heart rate and fighting behavior in 9- through 12-year-old boys. J Am Acad Child Adolesc Psychiatry 1995;34(3):371-7.

King KA, Vidourek RA, Davis B, et al. Increasing self-esteem and school connectedness through a multidimensional mentoring program. J Sch Health 2002;72(7):294-9.

King SR. Acting on what they (may) know: children's culpability for violent behavior. J Dev Behav Pediatr 2000;21(6):429-31.

Kingery PM, Biafora FA, Zimmerman RS. Risk factors for violent behaviors among ethnically diverse urban adolescents: Beyond race/ethnicity. Sch Psychol Int 1996;17(2):171-88.

Kingery PM, McCoy-Simandle L, Clayton R. Risk factors for adolescent violence: The importance of vulnerability. Sch Psychol Int 1997;18(1):49-60.

Kingery PM, Mirzaee E, Pruitt BE, et al. Rural communities near large metropolitan areas: Safe havens from adolescent violence and drug use? Health Values 1991;15(4):39-48.

Kingery PM, Pruitt BE, Heuberger G. A profile of rural Texas adolescents who carry handguns to school. J Sch Health 1996;66(1):18-22.

Kingery PM, Pruitt BE, Heuberger G, et al. Violence in rural schools: An emerging problem near the United States^Mexico border. Sch Psychol Int 1995;16(4):335-44.

Kingery PM, Pruitt BE, Hurley RS. Violence and illegal drug use among adolescents: evidence from the U.S. National Adolescent Student Health Survey. Int J Addict 1992;27(12):1445-64.

Kipke MD, Simon TR, Montgomery SB, et al. Homeless youth and their exposure to and involvement in violence while living on the streets. J Adolesc Health 1997;20(5):360-7.

Kirkish P, Sreenivasan S, Welsh R, et al. The future of criminal violence: juveniles tried as adults. J Am Acad Psychiatry Law 2000;28(1):38-46.

Klevens J, Roca J. Nonviolent youth in a violent society: Resilience and vulnerability in the country of Columbia. Violence Vict 1999;14(3):311-22.

Knox GW. The "get out of the gang thermometer": An application to a large national sample of African-American male youths. J Gang Res 1997;5(1):21-43.

Knox M, King C, Hanna GL, et al. Aggressive behavior in clinically depressed adolescents. J Am Acad Child Adolesc Psychiatry 2000;39(5):611-8.

Kodjo CM, Auinger P, Ryan SA, et al. Demographic, intrinsic, and extrinsic factors associated with weapon carrying at school. Arch Pediatr Adolesc Med 2003;157(1):96-103.

Kodjo CM, Auinger P, Ryan SA, et al. Demographic, intrinsic, and extrinsic factors associated with weapon carrying at school. Arch Pediatr Adolesc Med 2003;157(1):96-103.

Kohn R. Homicide among adolescents in the Americas: a growing epidemic. Bull World Health Organ 2001;79(2):172.

Kolko DJ. Conduct disorder and attention deficit disorder with hyperactivity in child inpatients: Comparisons on home and hospital measures. J Emot Behav Disord 1993;1(2):75-86.

Komro KA, Williams CL, Forster JL, et al. The relationship between adolescent alcohol use and delinquent and violent behaviors. J Child Adolesc Subst Abus 1999;9(2):13-28.

Kosterman R, Graham JW, Hawkins JD, et al. Childhood risk factors for persistence of violence in the transition to adulthood: a social development perspective. Violence Vict 2001;16(4):355-69.

Kostinsky S, Bixler EO, Kettl PA. Threats of school violence in Pennsylvania after media coverage of the Columbine High School massacre: examining the role of imitation. Arch Pediatr Adolesc Med 2001;155(9):994-1001.

Krakowski M, Czobor P. Violence in psychiatric patients: the role of psychosis, frontal lobe impairment, and ward turmoil. Compr Psychiatry 1997;38(4):230-6.

Krakowski M, Czobor P, Carpenter MD, et al. Community violence and inpatient assaults: neurobiological deficits. J Neuropsychiatry Clin Neurosci 1997;9(4):549-55.

Kreiter SR, Krowchuk DP, Woods CR, et al. Gender differences in risk behaviors among adolescents who experience date fighting. Pediatrics 1999;104(6):1286-92.

Kruesi MJ, Hibbs ED, Zahn TP, et al. A 2-year prospective follow-up study of children and adolescents with disruptive behavior disorders. Prediction by cerebrospinal fluid 5-hydroxyindoleacetic acid, homovanillic acid, and autonomic measures? Arch Gen Psychiatry 1992;49(6):429-35.

Kruesi MJ, Rapoport JL, Hamburger S, et al. Cerebrospinal fluid monoamine metabolites, aggression, and impulsivity in disruptive behavior disorders of children and adolescents. Arch Gen Psychiatry 1990;47(5):419-26.

Krug EG, Brener ND, Dahlberg LL, et al. The impact of an elementary school-based violence prevention program on visits to the school nurse. Am J Prev Med 1997;13(6):459-63.

Kruttschnitt C, Dornfeld M. Exposure to family violence: A partial explanation for initial and subsequent levels of delinquency? Crim Behav Ment Health 1993;3(2):61-75.

Kulig J, Valentine J, Griffith J, et al. Predictive model of weapon carrying among urban high school students: Results and validation. J Adolesc Health 1998;22(4):312-9.

Kundu R, Basu J. Aggression in reaction to frustration among adolescent boys with depression and conduct disorder. SIS J Project Psychol Ment Health 1998;5(2):119-26.

Kunitz SJ, Levy JE, McCloskey J, et al. Alcohol dependence and domestic violence as sequelae of abuse and conduct disorder in childhood. Child Abuse Negl 1998;22(11):1079-91.

Kyriacou DN, Hutson HR, Anglin D, et al. The relationship between socioeconomic factors and gang violence in the City of Los Angeles. J Trauma 1999;46(2):334-9.

Labelle A, Bradford JM, Bourget D, et al. Adolescent murderers. Can J Psychiatry 1991;36(8):583-7.

Lacourse E, Cote S, Nagin DS, et al. A longitudinal-experimental approach to testing theories of antisocial behavior development. Dev Psychopathol 2002;14(4):909-24.

Lahey BB, Goodman SH, Waldman ID, et al. Relation of age of onset to the type and severity of child and adolescent conduct problems. J Abnorm Child Psychol 1999;27(4):247-60.

Lahey BB, Loeber R, Quay HC, et al. Validity of DSM-IV subtypes of conduct disorder based on age of onset. J Am Acad Child Adolesc Psychiatry 1998;37(4):435-42.

Lamberg L. Preventing school violence: no easy answers. JAMA 1998;280(5):404-7.

Lamberg L. Younger children, more girls commit acts of violence: some get help, others receive only punishment. JAMA 2002;288(5):566-8.

Lancaster W, Jr., Compton D, White N, et al. MMPI-A and dissociative experiences scale responses of violent and non-violent youth offenders. J Offender Rehabil 1997;26(1-2):45-52.

Lanclos NF, Gordon ST, Kelley ML. The effects of community violence exposure on Louisiana's children. J La State Med Soc 2000;152(10):504-8.

Langhinrichsen-Rohling J, Neidig P. Violent backgrounds of economically disadvantaged youth: Risk factors for perpetrating violence? J Fam Violence 1995;10(4):379-97.

Langrock AM, Compas BE, Keller G, et al. Coping with the stress of parental depression: Parents' reports of children's coping, emotional, and behavioral problems. J Clin Child Adolesc Psychol 2002;31(3):312-24.

Lansford JE, Dodge KA, Pettit GS, et al. A 12-year prospective study of the long-term effects of early child physical maltreatment on psychological, behavioral, and academic problems in adolescence. Arch Pediatr Adolesc Med 2002;156(8):824-30.

Larson JD. Anger and aggression management techniques through the Think First curriculum. J Offender Rehabil 1992;18(1-2):101-17.

Lattimore PK, Others A. Predicting rearrest for violence among serious youthful offenders. J Res Crime Delinq 1995;32(1):54-83.

Lau MA, Pihl RO. Alcohol and the Taylor aggression paradigm: a repeated measures study. J Stud Alcohol 1994;55(6):701-6.

Lavoie F, Hebert M, Tremblay R, et al. History of family dysfunction and perpetration of dating violence by adolescent boys; A longitudinal study. J Adolesc Health 2002;30(5):375-83.

Lawrence LE. Perspectives on violence. J Natl Med Assoc 1993;85(11):825-7.

Leenaars AA, Lester D. Suicide and homicide rates in Canada and the United States. Suicide Life Threat Behav 1994;24(2):184-91.

Lego S. Children killing children. Perspect Psychiatr Care 1998;34(3):3-4.

Lehman C. Striking back. Minn Med 2000;83(9):24-6.

LeMarquand DG, Pihl RO, Young SN, et al. Tryptophan depletion, executive functions, and disinhibition in aggressive, adolescent males. Neuropsychopharmacology 1998;19(4):333-41.

Lempp R. To the diagnostic of "incomprehensible" offences of adolescents and juveniles. Acta Paedopsychiatr 1990;53(2):173-5.

Leon-Carrion J, Ramos FJC. Blows to the head during development can predispose to violent criminal behaviour: rehabilitation of consequences of head injury is a measure for crime prevention. Brain Inj 2003;17(3):207-16.

Leon-Carrion J, Ramos FJC. Blows to the head during development can predispose to violent criminal behaviour: rehabilitation of consequences of head injury is a measure for crime prevention. Brain Inj 2003;17(3):207-16.

Lester D. The Holinger/Easterlin cohort hypothesis about youth suicide and homicide rates. Percept Mot Skills 1994;79(3 Pt 2):1545-6.

LeSure-Lester GE. Relation between empathy and aggression and behavior compliance among abused group home youth. Child Psychiatry Hum Dev 2000;31(2):153-61.

LeSure-Lester GE. An application of cognitive-behavior principles in the reduction of aggression among abused African American adolescents. J Interpers Violence 2002;17(4):394-402.

Leventhal JM, Horwitz SM, Rude C, et al. Maltreatment of children born to teenage mothers: a comparison between the 1960s and 1980s. J Pediatr 1993;122(2):314-9.

Levine GN, Parra F. The gangbangers of East Los Angeles: Sociopsycho-analytic considerations. J Gang Res 2000;7(4):9-12.

Lewin LM, Davis B, Hops H. Childhood social predictors of adolescent antisocial behavior: Gender differences in predictive accuracy and efficacy. J Abnorm Child Psychol 1999;27(4):277-92.

Lewis DO, Lovely R, Yeager C, et al. Toward a theory of the genesis of violence: A follow-up study of delinquents. Annu Prog Child Psych Child Dev 1990:547-60.

Lewis DO, Yeager CA, Cobham-Portorreal CS, et al. A follow-up of female delinquents: maternal contributions to the perpetuation of deviance. J Am Acad Child Adolesc Psychiatry 1991;30(2):197-201.

Lewis DO, Yeager CA, Gidlow B, et al. Six adoptees who murdered: Neuropsychiatric vulnerabilities and characteristics of biological and adoptive parents. J Am Acad Psychiatry Law 2001;29(4):390-7.

Lewis SF, Travea L, Fremouw WJ. Characteristics of female perpetrators and victims of dating violence. Violence Vict 2002;17(5):593-606.

Li X, Feigelman S, Stanton B. Perceived parental monitoring and health risk behaviors among urban low-income African-American children and adolescents. J Adolesc Health 2000;27(1):43-8.

Li X, Stanton B, Feigelman S. Exposure to drug trafficking among urban, low-income African American children and adolescents. Arch Pediatr Adolesc Med 1999;153(2):161-8.

Lingle EA. Treating children by faith. Colliding constitutional issues. J Leg Med 1996;17(2):301-30.

Litt IF. Violence among adolescents: don't overlook the girls. J Adolesc Health 1995;17(6):333.

Little SA, Garber J. Interpersonal and achievement orientations and specific stressors predicting depressive and aggressive symptoms in children. Cognit Ther Res 2000;24(6):651-70.

Livingston R, Lawson L, Jones JG. Predictors of self-reported psychopathology in children abused repeatedly by a parent. J Am Acad Child Adolesc Psychiatry 1993;32(5):948-53.

Lochman JE, Dodge KA. Social-cognitive processes of severely violent, moderately aggressive, and nonaggressive boys. J Consult Clin Psychol 1994;62(2):366-74.

Lochman JE, Wayland KK. Aggression, social acceptance, and race as predictors of negative adolescent outcomes. J Am Acad Child Adolesc Psychiatry 1994;33(7):1026-35.

Lochman JE, Wells KC. Contextual social-cognitive mediators and child outcome: A test of the theoretical model in the Coping Power program. Dev Psychopathol 2002;14(4):945-67.

Lockwood D. Violence prevention among African American middle school children. Res Middle Level Educ Q 1998;21(3):33-49.

Lodico MA, Gruber E, DiClemente RJ. Childhood sexual abuse and coercive sex among school-based adolescents in a midwestern state. J Adolesc Health 1996;18(3):211-7.

Loeber R, Burke JD, Lahey BB. What are adolescent antecedents to antisocial personality disorder? Crim Behav Ment Health 2002;12(1):24-36.

Loeber R, Farrington DP, Stouthamer-Loeber M, et al. The development of male offending: Key findings from the first decade of the Pittsburgh Youth Study. Stud Crime Crime Prev 1998;7(2):141-71.

Loeber R, Green SM, Keenan K, et al. Which boys will fare worse? Early predictors of the onset of conduct disorder in a six-year longitudinal study. J Am Acad Child Adolesc Psychiatry 1995;34(4):499-509.

Loeber R, Wei E, Stouthamer-Loeber M, et al. Behavioral antecedents to serious and violent offending: Joint analyses from the Denver Youth Survey, Pittsburgh Youth Study and the Rochester Youth Development Study. Stud Crime

Crime Prev 1999;8(2):245-63.

Loeber R, Wung P, Keenan K, et al. Developmental pathways in disruptive child behavior. Dev Psychopathol 1993;5(1-2):103-33.

Long JJ, Fabricius WV, Musheno M, et al. Exploring the cognitive and affective capacities of child mediators in a "successful" inner-city peer mediation program. Mediat Q 1998;15(4):289-302.

Loper AB, Cornell DG. Homicide by juvenile girls. J Child Fam Stud 1996;5(3):323-36.

Loper AB, Hoffschmidt SJ, Ash E. Personality features and characteristics of violent events committed by juvenile offenders. Behav Sci Law 2001;19(1):81-96.

Lopez VA, Emmer ET. Adolescent male offenders: A grounded theory study of cognition, emotion, and delinquent crime contexts. Crim Justice Behav 2000;27(3):292-311.

Lopez VA, Emmer ET. Influences of beliefs and values on male adolescents' decision to commit violent offenses. Psychol Men Masc 2002;3(1):28-40.

Losada-Paisey G. Use of the MMPI-A to assess personality of juvenile male delinquents who are sex offenders and nonsex offenders. Psychol Rep 1998;83(1):115-22.

Loskota M. G is for gangsta. Understanding gangs in Minnesota. Minn Med 1998;81(4):28-32.

Lowenstein LF. Bullying: An intensive and multi-dimensional treatment approach in a therapeutic community. Educ Today 1995;45(1):19-24.

Lowenstein LF. Perception and accuracy of perception by bullying children of potential victims. Educ Today 1995;45(2):28-31.

Lowry R, Cohen LR, Modzeleski W, et al. School violence, substance use, and availability of illegal drugs on school property among US high school students. J Sch Health 1999;69(9):347-55.

Lowry R, Powell KE, Kann L, et al. Weapon-carrying, physical fighting, and fight-related injury among U.S. adolescents. Am J Prev Med 1998;14(2):122-9.

Lowry R, Sleet D, Duncan C, et al. Adolescents at risk for violence. Educ Psychol Rev 1995;7(1):7-39.

Ludwig J, Duncan GJ, Hirschfield P. Urban poverty and juvenile crime: evidence from a randomized housing-mobility experiment. Q J Econ 2001;116(2):655-79.

Luengo MA, Otero JM, Carrillo-de-la-Pena MT, et al. Dimensions of antisocial behaviour in juvenile delinquency: A study of personality variables. Psychol Crime Law 1994;1(1):27-37.

Luiselli JK, Arons M, Marchese N, et al. Incidence of law-violating behavior in a community sample of children and adolescents with traumatic brain injury. Int J Offender Ther Comp Criminol 2000;44(6):647-56.

Lurie S. Child psychiatrists address problem of youth violence. JAMA 1999;282(20):1906-7.

Lykken DT. The causes and costs of crime and a controversial cure. J Pers 2000;68(3):559-605.

Lyons JS, Schaefer K. Mental health and dangerousness: Characteristics and outcomes of children and adolescents in residential placements. J Child Fam Stud 2000;9(1):67-73.

Lysaker PH, Wright DE, Clements CA, et al. Neurocognitive and psychosocial correlates of hostility among persons in a post-acute phase of schizophrenia spectrum disorders. Compr Psychiatry 2002;43(4):319-24.

Ma X. Bullying and being bullied: To what extent are bullies also victims? Am Educ Res J 2001;38(2):351-70.

Macgowan MJ. An evaluation of a dating violence prevention program for middle school students. Violence Vict 1997;12(3):223-35.

MacKinnon-Lewis C, Lofquist A. Antecedents and consequences of boys' depression and aggression: Family and school linkages. J Fam Psychol 1996;10(4):490-500.

Madan A, Beech DJ, Flint L. Drugs, guns, and kids: the association between substance use and injury caused by interpersonal violence. J Pediatr Surg 2001;36(3):440-2.

Madsen P. Drive-by shootings in Los Angeles. N Engl J Med 1994;330(25):1833.

Malek MK, Chang BH, Davis TC. Self-reported characterization of seventh-grade students' fights. J Adolesc Health 1998;23(2):103-9.

Malek MK, Chang BH, Davis TC. Fighting and weapon-carrying among seventh-grade students in Massachusetts and Louisiana. J Adolesc Health 1998;23(2):94-102.

Males M. Youth behavior: subcultural effect or mirror of adult behavior? J Sch Health 1990;60(10):505-8.

Males M. California trends reveal teenage violence myths. Am J Public Health 1998;88(7):1123.

Males MA. America's youth violence hoax. Lancet 1999;354(9189):1563-4.

Malik S, Sorenson SB, Aneshensel CS. Community and dating violence among adolescents: perpetration and victimization. J Adolesc Health 1997;21(5):291-302.

Malmquist CP. Depression in homicidal adolescents. Bull Am Acad Psychiatry Law 1990;18(1):23-36.

Malone RP, Bennett DS, Luebbert JF, et al. Aggression classification and treatment response. Psychopharmacol Bull 1998;34(1):41-5.

Malone RP, Delaney MA, Leubbert JF, et al. A double-blind placebo-controlled study of lithium in hospitalized aggressive children and adolescents with conduct disorder. Arch Gen Psychiatry 2000;57(7):649-54.

Malone RP, Luebbert J, Pena-Ariet M, et al. The Overt Aggression Scale in a study of lithium in aggressive conduct disorder. Psychopharmacol Bull 1994;30(2):215-8.

Malone RP, Luebbert JF, Delaney MA, et al. Nonpharmacological response in hospitalized children with conduct disorder. J Am Acad Child Adolesc Psychiatry 1997;36(2):242-7.

Malpique C, Barrias P, Morais L, et al. Violence and alcoholism in the family: How are the children affected? Alcohol Alcohol 1998;33(1):42-6.

Manning JT, Wood D. Fluctuating asymmetry and aggression in boys. Hum Nat 1998;9(1):53-65.

Marans S, Berkowitz SJ, Cohen DJ. Police and mental health professionals. Collaborative responses to the impact of violence on children and families. Child Adolesc Psychiatr Clin N Am 1998;7(3):635-51.

Marcelle DR, Melzer-Lange MD. Project UJIMA: working together to make things right. WMJ 2001;100(2):22-5.

Marciniak LM. Adolescent attitudes toward victim precipitation of rape. Violence Vict 1998;13(3):287-300.

Marcus BA, Vollmer TR, Swanson V, et al. An experimental analysis of aggression. Behav Modif 2001;25(2):189-213.

Marcus NE, Lindahl KM, Malik NM. Interparental conflict, children's social cognitions, and child aggression: A test of a mediational model. J Fam Psychol 2001;15(2):315-33.

Marcus RF. A gender-linked exploratory factor analysis of antisocial behavior in young adolescents. Adolescence 1999;34(133):33-46.

Marcus RF, Gray L. Close relationships of violent and nonviolent African American delinquents. Violence Vict 1998;13(1):31-46.

Margolin A, Youga J, Ballou M. Voices of violence: A study of male adolescent aggression. J Humanist Educ Dev 2002;41(2):215-31.

Margolin L, Craft JL. Child abuse by adolescent caregivers. Child Abuse Negl 1990;14(3):365-73.

Marlowe M, Schneider HG, Bliss LB. Hair mineral analysis in emotionally disturbed and violence prone children. Int J Biosoc Med Res 1991;13(2):169-79.

Marsh HW, Parada RH, Yeung AS, et al. Aggressive school troublemakers and victims: A longitudinal model examining the pivotal role of self-concept. J Educ Psychol 2001;93(2):411-9.

Marsh TY, Cornell DG. The contribution of student experiences to understanding ethnic differences in high-risk behaviors at school. Behav Disord 2001;26(2):152-63.

Marshall JE. Street Soldiers: violence prevention over the airwaves, a phenomenon. J Health Care Poor Underserved 1995;6(2):246-51; Discussion 52-3.

Martin CA, Milich R, Martin WR, et al. Gender differences in adolescent psychiatric outpatient substance use: associated behaviors and feelings. J Am Acad Child Adolesc Psychiatry 1997;36(4):486-94.

Martin CS, Earleywine M, Blackson TC, et al. Aggressivity, inattention, hyperactivity, and impulsivity in boys at high and low risk for substance abuse. J Abnorm Child Psychol 1994;22(2):177-203.

Martin JL, Ross HS. Do mitigating circumstances influence family reactions to physical aggression? Child Dev 1996;67(4):1455-66.

Martin SE, Bryant K. Gender differences in the association of alcohol intoxication and illicit drug abuse among persons arrested for violent and property offenses. J Subst Abuse 2001;13(4):563-81.

Martin SE, Bryant K, Fitzgerald N. Self-reported alcohol use and abuse by arrestees in the 1998 Arrestee Drug Abuse Monitoring Program. Alcohol Res Health 2001;25(1):72-9.

Marty F. Linking work: from violence to subjectivization. Am J Psychoanal 2002;62(3):255-72.

Mason JO. Forum on youth violence in minority communities. Prevention of violence: a public health commitment. Public Health Rep 1991;106(3):265-8.

Mason JO. The dimensions of an epidemic of violence. Public Health Rep 1993;108(1):1-3.

Mathew T, Nordstrom K. On the equivalence of meta-analysis using literature and using individual patient data. Biometrics 1999;55(4):1221-3.

Matthys W, Cuperus JM, Van Engeland H. Deficient social problem-solving in boys with ODD/CD, with ADHD, and with both disorders. J Am Acad Child Adolesc Psychiatry 1999;38(3):311-21.

Matthys W, Van Engeland H. Social-cognitive research in children with aggressive behaviour: New perspectives. Eur Child Adolesc Psychiatry 1992;1(3):178-85.

Matykiewicz L, La Grange L, Vance P, et al. Adjudicated adolescent males: Measures of urinary 5-hydroxyindoleacetic acid and reactive hypoglycemia. Pers Individ Dif 1997;22(3):327-32.

Maughan B, Pickles A, Rowe R, et al. Developmental trajectories of aggressive and non-aggressive conduct problems. J Quant Criminol 2000;16(2):199-221.

Maxfield MG, Widom CS. The cycle of violence. Revisited 6 years later. Arch Pediatr Adolesc Med 1996;150(4):390-5.

McBurnett K, Harris SM, Swanson JM, et al. Neuropsychological and psychophysiological differentiation of inattention/overactivity and aggression/defiance symptom groups. J Clin Child Psychol 1993;22(2):165-71.

McBurnett K, Lahey BB, Rathouz PJ, et al. Low salivary cortisol and persistent aggression in boys referred for disruptive behavior. Arch Gen Psychiatry 2000;57(1):38-43.

McCabe KM, Hough R, Wood PA, et al. Childhood and adolescent onset conduct disorder: a test of the developmental taxonomy. J Abnorm Child Psychol 2001;29(4):305-16.

McCafferty C. Adolescent homicide. No quick fixes. Minn Med 1998;81(11):25-6.

McCarthy-Tucker S, Gold A, Garcia E. Effects of anger management training on aggressive behavior in adolescent boys. J Offender Rehabil 1999;29(3-4):129-41.

McCloskey LA, Lichter EL. The contribution of marital violence to adolescent aggression across different relationships. J Interpers Violence 2003;18(4):390-412.

McCloskey LA, Lichter EL. The contribution of marital violence to adolescent aggression across different relationships. J Interpers Violence 2003;18(4):390-412.

McColloch MA, Gilbert DG, Johnson S. Effects of situational variables on the interpersonal behavior of families with an aggressive adolescent. Pers Individ Dif 1990;11(1):1-11.

McCord J, Widom CS, Crowell NA. Juvenile crime, juvenile justice. Washington, D. C.: National Academy Press; 2001.

McCormick KF. Corporal punishment and violence. Arch Fam Med 1992;1(2):203-4.

McCurrie TF. White racist extremist gang members: A behavioral profile. J Gang Res 1998;5(2):51-60.

McElroy SL. Recognition and treatment of DSM-IV intermittent explosive disorder. J Clin Psychiatry 1999;60 Suppl 15:12-6.

McFarlane JM, Groff JY, O'Brien JA, et al. Behaviors of children who are exposed and not exposed to intimate partner violence: an analysis of 330 black, white, and Hispanic children. Pediatrics 2003;112(3 Pt 1):E202-7.

McGaha JE, Leoni EL. Family violence, abuse, and related family issues of incarcerated delinquents with alcoholic parents compared to those with nonalcoholic parents. Adolescence 1995;30(118):473-82.

McGee JP, DeBernardo CR. The classroom avenger: A behavioral profile of school based shootings. Forensic Exam 1999;8(5-6):16-8.

McGee RA, Wolfe DA, Wilson SK. Multiple maltreatment experiences and adolescent behavior problems: adolescents' perspectives. Dev Psychopathol 1997;9(1):131-49.

McGee ZT, Davis BL, Brisbane T, et al. Urban stress and mental health among African-American youth: assessing the link between exposure to violence, problem behavior, and coping strategies. J Cult Divers 2001;8(3):94-104.

McGloin JM, Widom CS. Resilience among abused and neglected children grown up. Dev Psychopathol 2001;13(4):1021-38.

McGuffin PW. The effect of timeout duration on frequency of aggression in hospitalized children with conduct disorders. Behav Resid Treat 1991;6(4):279-88.

McIntyre T, Cowell K. Effects of various music conditions on multiple dimensions of behavior of emotionally disturbed adolescents. Psychol Rep 1991;69(3, Pt 1):1007-8.

McKenney A, Dattilo J. Effects of an intervention within a sport context on the prosocial behavior and antisocial behavior of adolescents with disruptive behavior disorders. Ther Recreation J 2001;35(2):123-40.

McKeown RE, Jackson KL, Valois RF. The frequency and correlates of violent behaviors in a statewide sample of high school students. Fam Community Health 1998;20(4):38-53.

Mclaughlin CR, Daniel J, Joost TF. The relationship between substance use, drug selling, and lethal violence in 25 juvenile murderers. J Forensic Sci 2000;45(2):349-53.

McLaughlin CR, Reiner SM, Reams PN, et al. Factors associated with parenting among incarcerated juvenile offenders. Adolescence 1999;34(136):665-70.

McLaughlin CR, Reiner SM, Smith BW, et al. Firearm injuries among Virginia juvenile drug traffickers, 1992 through 1994. Am J Public Health 1996;86(5):751-2.

McNeal C, Amato PR. Parents' marital violence: Long-term consequences for children. J Fam Issues 1998;19(2):123-

39.

McNeil DE, Binder RL. The relationship between acute psychiatric symptoms, diagnosis, and short-term risk of violence. Hosp Community Psychiatry 1994;45(2):133-7.

McNiel DE, Binder RL. Clinical assessment of the risk of violence among psychiatric inpatients. Am J Psychiatry 1991;148(10):1317-21.

McNiel DE, Binder RL. Clinical assessment of the risk of violence among psychiatric inpatients. Am J Psychiatry 1991;148(10):1317-21.

McNiel DE, Eisner JP, Binder RL. The relationship between command hallucinations and violence. Psychiatr Serv 2000;51(10):1288-92.

McNulty TL, Bellair PE. Explaining racial and ethnic differences in adolescent violence: Structural disadvantage, family well-being, and social capital. Justice Q 2003;20(1):1-31.

Meehan PJ, O'Carroll PW. Gangs, drugs, and homicide in Los Angeles. Am J Dis Child 1992;146(6):683-7.

Meller WH, Borchardt CM. Comorbidity of major depression and conduct disorder. J Affect Disord 1996;39(2):123-6.

Meloy JR, Gacono GB, Kenney L. A Rorschach investigation of sexual homicide. J Pers Assess 1994;62(1):58-67.

Meloy JR, Hempel AG, Mohandie K, et al. Offender and offense characteristics of a nonrandom sample of adolescent mass murderers. J Am Acad Child Adolesc Psychiatry 2001;40(6):719-28.

Menard S, Mihalic S. The tripartite conceptual framework in adolescence and adulthood: Evidence from a national sample. J Drug Issues 2001;31(4):905-39.

Menken M. Grappling with the enigma of violence. An educational approach. Arch Neurol 1992;49(6):592-4.

Mercy JA, Potter LB. Combining analysis and action to solve the problem of youth violence. Am J Prev Med 1996;12(5 Suppl):1-2.

Merrick J, Kessel S, Morad M, et al. Trends in school violence. Int J Adolesc Med Health 2002;14(1):77-80.

Merrill LL, Hervig LK, Milner JS. Childhood parenting experiences, intimate partner conflict resolution, and adult risk for child physical abuse. Child Abuse Negl 1996;20:1049-65.

Merrill LL, Thomsen CJ, Gold SR, et al. Childhood abuse and premilitary sexual assault in male navy recruits. J Consult Clin Psychol 2001;69(2):252-61.

Messer SC, Gross AM. Childhood depression and aggression: A covariance structure analysis. Behav Res Ther 1994;32(6):663-77.

Metzler CW, Noell J, Biglan A, et al. The social context for risky sexual behavior among adolescents. J Behav Med 1994;17(4):419-38.

Mezzich AC. Diagnostic formulations for violent delinquent adolescents. J Psychiatry Law 1990;18(1):165-90.

Mezzich AC, Coffman G, Mezzich JE. A typology of violent delinquent adolescents. J Psychiatry Law 1991;19(1-2):63-78.

Miccio-Fonseca LC. Comparative differences in the psychological histories of sex offenders, victims, and their families. J Offender Rehabil 1996;23(3-4):71-83.

Miccio-Fonseca LC. Adult and adolescent female sex offenders: Experiences compared to other female and male sex offenders. J Psychol Human Sex 2000;11(3):75-88.

Middleton MB, Cartledge G. The effects of social skills instruction and parental involvement on the aggressive behaviors of African American males. Behav Modif 1995;19(2):192-210.

Mihalic SW, Elliott D. A social learning theory model of marital violence. J Fam Violence 1997;12(1):21-47.

Miller DB. Treatment of adolescent interpersonal violence: A cognitive-behavioral group approach. J Child Adolesc Group Ther 1995;5(4):191-200.

Miller F, Webb J. Theoretical perspectives on violence and youth. Med Health R I 1996;79(7):261-3.

Miller JM, DiIorio C, Dudley W. Parenting style and adolescent's reaction to conflict: is there a relationship? J Adolesc Health 2002;31(6):463-8.

Miller KS, Knutson JF. Reports of severe physical punishment and exposure to animal cruelty by inmates convicted of felonies and by university students. Child Abuse Negl 1997;21(1):59-82.

Miller M, Azrael D, Hemenway D. Firearm availability and unintentional firearm deaths, suicide, and homicide among 5-14 year olds. J Trauma 2002;52(2):267-74; Discussion 74-5.

Miller-Johnson S, Coie JD, Maumary-Gremaud A, et al. Peer rejection and aggression and early starter models of conduct disorder. J Abnorm Child Psychol 2002;30(3):217-30.

Miller-Johnson S, Coie JD, Maumary-Gremaud A, et al. Relationship between childhood peer rejection and aggression and adolescent delinquency severity and type among African American youth. J Emot Behav Disord

1999;7(3):137-46.

Millstein SG, Irwin CE, Adler NE, et al. Health-risk behaviors and health concerns among young adolescents. Pediatrics 1992;89(3):422-8.

Minden J, Henry DB, Tolan PH, et al. Urban boys' social networks and school violence. Prof Sch Couns 2000;4(2):95-104.

Mitka M. Hospital study offers hope of changing lives prone to violence. JAMA 2002;287(5):576-7.

Moffit TE, Caspi A, Dickson N, et al. Childhood-onset versus adolescent-onset antisocial conduct problems in males: Natural history from ages 3 to 18 years. Dev Psychopathol 1996;8(2):399-424.

Moise JF, Huesmann LR. Television violence viewing and aggression in females. Ann N Y Acad Sci 1996;794:380-3.

Molidor C, Tolman RM. Gender and contextual factors in adolescent dating violence. Violence Against Women 1998;4(2):180-94.

Molidor CE. Gender differences of psychological abuse in high school dating relationships. Child Adolesc Social Work J 1995;12(2):119-34.

Molidor CE. Female gang members: A profile of aggression and victimization. Soc Work 1996;41(3):251-7.

Molliconi SA, Runyan CW. Detecting domestic violence. A pilot study of family practitioners. N C Med J 1996;57(3):136-8.

Mooney A, Creeser R, Blatchford P. Children's views on teasing and fighting in junior schools. Educ Res 1991;33(2):103-12.

Moore E, Armsden G, Gogerty PL. A twelve-year follow-up study of maltreated and at-risk children who received early therapeutic child care. Child Maltreat 1998;3(1):3-16.

Moore MH. Violence prevention: criminal justice or public health? Health Aff (Millwood) 1993;12(4):34-45.

Moretti MM, Holland R, McKay S. Self-other representations and relational and overt aggression in adolescent girls and boys. Behav Sci Law 2001;19(1):109-26.

Moretti MM, Holland R, Peterson S. Long term outcome of an attachment-based program for conduct disorder. Can J Psychiatry 1994;39(6):360-70.

Moriarty N, Stough C, Tidmarsh P, et al. Deficits in emotional intelligence underlying adolescent sex offending. J Adolesc 2001;24(6):743-51.

Morris RE, Anderson MM, Knox GW. Incarcerated adolescents' experiences as perpetrators of sexual assault. Arch Pediatr Adolesc Med 2002;156(8):831-5.

Morrison EF. A coercive interactional style as an antecedent to aggression in psychiatric patients. Res Nurs Health 1992;15(6):421-31.

Morrissey C. A multimodal approach to controlling inpatient assaultiveness among incarcerated juveniles. J Offender Rehabil 1997;25(1-2):31-42.

Moscovitz H, Degutis L, Bruno GR, et al. Emergency department patients with assault injuries: previous injury and assault convictions. Ann Emerg Med 1997;29(6):770-5.

Moscovitz H, Milzman D, Haywood Y. The Washington, DC, Youth Curfew: effect on transports of injured youth and homicides. Prehosp Emerg Care 2000;4(4):294-8.

Moss HB, Mezzich A, Yao JK, et al. Aggressivity among sons of substance-abusing fathers: Association with psychiatric disorder in the father and son, paternal personality, pubertal development, and socioeconomic status. Am J Drug Alcohol Abuse 1995;21(2):195-208.

Mulder RT, Joyce PR. Relationship of temperament and behaviour measures to the prolactin response to fenfluramine in depressed men. Psychiatry Res 2002;109(3):221-8.

Mullen PE, Pathe M, Purcell R, et al. Study of stalkers. Am J Psychiatry 1999;156(8):1244-9.

Mulvey EP, Lidz CW. Clinical prediction of violence as a conditional judgment. Soc Psychiatry Psychiatr Epidemiol 1998;33 Suppl 1:s107-13.

Munroe RL, Hulefeld R, Rodgers JM, et al. Aggression among children in four cultures. Cross Cult Res 2000;34(1):3-25.

Muris P, Merckelbach H, Walczak S. Aggression and threat perception abnormalities in children with learning and behavior problems. Child Psychiatry Hum Dev 2002;33(2):147-63.

Murray NG, Kelder SH, Parcel GS, et al. Padres Trabajando por la Paz: a randomized trial of a parent education intervention to prevent violence among middle school children. Health Educ Res 1999;14(3):421-6.

Murrey GJ, Briggs D, Davis C. Psychopathic disordered, mentally ill, and mentally handicapped sex offenders: a comparative study. Med Sci Law 1992;32(4):331-6.

Muscari ME, Phillips C, Bears T. Health beliefs and behaviors in rural high school juniors. Pediatr Nurs 1997;23(4):380-9.

Myaard MJ, Crawford C, Jackson M, et al. Applying behavior analysis within the wraparound process: A multiple baseline study. J Emot Behav Disord

2000;8(4):216-29.

Myeroff R, Mertlich G, Gross J. Comparative effectiveness of holding therapy with aggressive children. Child Psychiatry Hum Dev 1999;29(4):303-13.

Myers WC, Blashfield R. Psychopathology and personality in juvenile sexual homicide offenders. J Am Acad Psychiatry Law 1997;25(4):497-508.

Myers WC, Burgess AW, Nelson JA. Criminal and behavioral aspects of juvenile sexual homicide. J Forensic Sci 1998;43(2):340-7.

Myers WC, Burton PR, Sanders PD, et al. Project back-on-track at 1 year: a delinquency treatment program for early-career juvenile offenders. J Am Acad Child Adolesc Psychiatry 2000;39(9):1127-34.

Myers WC, Kemph JP. DSM-III-R classification of murderous youth: help or hindrance? J Clin Psychiatry 1990;51(6):239-42.

Myers WC, Monaco L. Anger experience, styles of anger expression, sadistic personality disorder, and psychopathy in juvenile sexual homicide offenders. J Forensic Sci 2000;45(3):698-701.

Myers WC, Mutch PJ. Language disorders in disruptive behavior disordered homicidal youth. J Forensic Sci 1992;37(3):919-22.

Myers WC, Scott K. Psychotic and conduct disorder symptoms in juvenile murderers. Homicide Stud 1998;2(2):160-75.

Myers WC, Scott K, Burgess AW, et al. Psychopathology, biopsychosocial factors, crime characteristics, and classification of 25 homicidal youths. J Am Acad Child Adolesc Psychiatry 1995;34(11):1483-9.

Mynard H, Joseph S. Bully/victim problems and their association with Eysenck's personality dimensions in 8 to 13 year-olds. Br J Educ Psychol 1997;67(1):51-4.

Myner J, Santman J, Cappelletty GG, et al. Variables related to recidivism among juvenile offenders. Int J Offender Ther Comp Criminol 1998;42(1):65-80.

Nadel H, Spellmann M, Alvarez-Canino T, et al. The cycle of violence and victimization: a study of the school-based intervention of a multidisciplinary youth violence-prevention program. Am J Prev Med 1996;12(5 Suppl):109-19.

Nagin D, Tremblay RE. Trajectories of boys' physical aggression, opposition, and hyperactivity on the path to physically violent and nonviolent juvenile delinquency. Child Dev 1999;70(5):1181-96.

Nagin D, Tremblay RE. Trajectories of boys' physical aggression, opposition, and hyperactivity on the path to physically violent and nonviolent juvenile delinquency. Child Dev 1999;70(5):1181-96.

Nagy S, DiClemente R, Adcock AG. Adverse factors associated with forced sex among southern adolescent girls. Pediatrics 1995;96(5 Pt 1):944-6.

Nagy S, Dunn MS. Alcohol behaviors and deviant behaviors among adolescents in a rural state. J Alcohol Drug Educ 1999;44(3):1-9.

Nansel TR, Overpeck MD, Haynie DL, et al. Relationships between bullying and violence among US youth. Arch Pediatr Adolesc Med 2003;157(4):348-53.

Nansel TR, Overpeck MD, Haynie DL, et al. Relationships between bullying and violence among US youth. Arch Pediatr Adolesc Med 2003;157(4):348-53.

Nathanson AI. Parents versus peers: Exploring the significance of peer mediation of antisocial television. Commun Res 2001;28(3):251-74.

National Center for Injury Prevention and Control. Youth violence: Overview. Accessed: May 2004. http://www.cdc.gov/ncipc/factsheets/yvfacts.htm.

Nelson BV, Patience TH, MacDonald DC. Adolescent risk behavior and the influence of parents and education. J Am Board Fam Pract 1999;12(6):436-43.

Nelson C, Valliant PM. Personality dynamics of adolescent boys where the father was absent. Percept Mot Skills 1993;76(2):435-43.

Nevin R. How lead exposure relates to temporal changes in IQ, violent crime, and unwed pregnancy. Environ Res 2000;83(1):1-22.

New MJC, Stevenson J, Skuse D. Characteristics of mothers of boys who sexually abuse. Child Maltreat 1999;4(1):21-31.

Newhill CE, Mulvey EP, Lidz CW. Characteristics of violence in the community by female patients seen in a psychiatric emergency service. Psychiatr Serv 1995;46(8):785-9.

Nicol R, Stretch D, Whitney I. Mental health needs and services for severely troubled and troubling young people including young offenders in an N.H.S. region. J Adolesc 2000;23(3):243-61.

Nijman HLI, Rector G. Crowding and aggression on inpatient psychiatric wards. Psychiatr Serv 1999;50(6):830-1.

Ninness HAC, Ellis J, Miller WB, et al. The effect of a self-management training package on the transfer of aggression control procedures in the absence of supervision. Behav Modif 1995;19(4):464-90.

Nock MK, Kazdin AE. Parent-directed physical aggression by clinic-referred youths. J Clin Child Adolesc Psychol 2002;31(2):193-205.

Nolin MJ, Davies E, Chandler K. Student victimization at school. J Sch Health 1996;66(6):216-21.

Northrop D, Hamrick K. Weapons and minority youth violence. Public Health Rep 1991;106(3):274-5.

Northrop D, Jacklin B, Cohen S, et al. Violence prevention strategies targeted towards high-risk minority youth. Public Health Rep 1991;106(3):272-4.

Nugent WR, Bruley C, Allen P. The effects of aggression replacement training on antisocial behavior in a runaway shelter. Res Soc Work Pract 1998;8(6):637-56.

Nugent WR, Bruley C, Allen P. The effects of Aggression Replacement Training on male and female antisocial behavior in a runaway shelter. Res Soc Work Pract 1999;9(4):466-82.

Nutter DE, Kearns ME. Patterns of exposure to sexually explicit material among sex offenders, child molesters, and controls. J Sex Marital Ther 1993;19(1):77-85.

O'Brien RM, Stockard J, Isaacson L. The enduring effects of cohort characteristics on age-specific homicide rates, 1960-1995. AJS 1999; 104(4):1061-95.

O'Connor BP, Dvorak T. Conditional associations between parental behavior and adolescent problems: A search for personality-environment interactions. J Res Pers 2001;35(1):1-26.

O'Donnell L, Cohen S, Hausman A. Forum on youth violence in minority communities. Evaluation of community-based violence prevention programs. Public Health Rep 1991;106(3):276-7.

O'Donnell L, Stueve A, San Doval A, et al. Violence prevention and young adolescents' participation in community youth service. J Adolesc Health 1999;24(1):28-37.

ODS and OMAR. Procedures for EPC Reports for ODS and OMAR. 2003.

O'Keefe JJ, Carr A, McQuaid P. Conduct disorder in girls and boys: The identification of distinct psychological profiles. Ir J Psychol 1998;19(2-3):368-85.

O'Keefe M. Linking marital violence, mother^child/father^child aggression, and child behavior problems. J Fam Violence 1994;9(1):63-78.

O'Keefe M. The differential effects of family violence on adolescent adjustment. Child Adolesc Social Work J 1996;13(1):51-68.

O'Keefe M. Adolescents' exposure to community and school violence: prevalence and behavioral correlates. J Adolesc Health 1997;20(5):368-76.

O'Keefe M. Predictors of dating violence among high school students. J Interpers Violence 1997;12(4):546-68.

O'Keefe M. Factors mediating the link between witnessing interparental violence and dating violence. J Fam Violence 1998;13(1):39-57.

Olds D, Henderson CR, Kitzman H, et al. Effects of prenatal and infancy nurse home visitation on surveillance of child maltreatment. Pediatrics 1995;95(3):365-72.

Olds D, Pettitt LM, Robinson J, et al. Reducing risks for antisocial behavior with a program of prenatal and early childhood home visitation. J Community Psychol 1998;26(1):65-83.

O'Leary KD, Malone J, Tyree A. Physical aggression in early marriage: prerelationship and relationship effects. J Consult Clin Psychol 1994;62(3):594-602.

O'Leary KD, Slep AMS. A dyadic longitudinal model of adolescent dating aggression. J Clin Child Adolesc Psychol 2003;32(3):314-27.

Oliver LL, Hall GCN, Neuhaus SM. A comparison of the personality and background characteristics of adolescent sex offenders and other adolescent offenders. Crim Justice Behav 1993;20(4):359-70.

Olkin I, Sampson A. Comparison of meta-analysis versus analysis of variance of individual patient data. Biometrics 1998;54(1):317-22.

Olweus D. Bully/victim problems in school: Facts and intervention. Eur J Psychol Educ 1997;12(4):495-510.

Omar HA. Adolescent violence as viewed by high school students. Int J Adolesc Med Health 1999;11(3-4):153-8.

Onwuachi-Saunders C, Forjuoh SN, West P, et al. Child death reviews: a gold mine for injury prevention and control. Inj Prev 1999;5(4):276-9.

Orpinas P, Kelder S, Frankowski R, et al. Outcome evaluation of a multi-component violence-prevention program for middle schools: the Students for Peace project. Health Educ Res 2000;15(1):45-58.

Orpinas P, Murray N, Kelder S. Parental influences on students' aggressive behaviors and weapon carrying. Health Educ Behav 1999;26(6):774-87.

Orpinas P, Parcel GS, McAlister A, et al. Violence prevention in middle schools: a pilot evaluation. J Adolesc Health 1995;17(6):360-71.

Orpinas PK, Basen-Engquist K, Grunbaum JA, et al. The co-morbidity of violence-related behaviors with health-risk behaviors in a population of high school students. J

Adolesc Health 1995;16(3):216-25.

Orwin RG, Maranda M, Ellis B. The effectiveness of substance abuse treatment in reducing violent behavior. J Psychopathol Behav Assess 2000;22(4):309-24.

Osofsky JD. Community-based approaches to violence prevention. J Dev Behav Pediatr 1997;18(6):405-7.

Pack RP, Wallander JL, Browne D. Health risk behaviors of African American adolescents with mild mental retardation: prevalence depends on measurement method. Am J Ment Retard 1998;102(4):409-20.

Paikoff RL, Brooks-Gunn J, Warren MP. Effects of girls' hormonal status on depressive and aggressive symptoms over the course of one year. J Youth Adolesc 1991;20(2):191-215.

Pakaslahti L, Keltikangas-Jaervinen L. Social acceptance and the relationship between aggressive problem-solving strategies and aggressive behaviour in 14-year-old adolescents. Eur J Personal 1996;10(4):249-61.

Pakaslahti L, Keltikangas-Jaervinen L. The relationships between moral approval of aggression, aggressive problem-solving strategies, and aggressive behavior in 14-yr-old adolescents. J Soc Behav Pers 1997;12(4):905-24.

Pakaslahti L, Keltikangas-Jaervinen L. Types of aggressive behavior among aggressive-preferred, aggressive non-preferred, non-aggressive preferred and non-aggressive non-preferred 14-year-old adolescents. Pers Individ Dif 1998;24(6):821-8.

Pakaslahti L, Spoof I, Asplund-Peltola R-L, et al. Parents' social problem-solving strategies in families with aggressive and non-aggressive girls. Aggress Behav 1998;24(1):37-51.

Pakiz B, Reinherz HZ, Giaconia RM. Early risk factors for serious antisocial behavior at age 21: a longitudinal community study. Am J Orthopsychiatry 1997;67(1):92-101.

Palermo MT. Preventing filicide in families with autistic children. Int J Offender Ther Comp Criminol 2003;47(1):47-57.

Pallone NJ, Hennessy JJ. Blacks and whites as victims and offenders in aggressive crime in the U.S.: myths and realities. J Offender Rehabil 1999;30(1/2):1-33.

Palmer EJ, Farmer S. Victimizing behaviour among juvenile and young offenders: How different are perpetrators? J Adolesc 2002;25(5):469-82.

Palmstierna T, Huitfeldt B, Wistedt B. The relationship of crowding and aggressive behavior on a psychiatric intensive care unit. Hosp Community Psychiatry 1991;42(12):1237-40.

Palmstierna T, Wistedt B. Changes in the pattern of aggressive behaviour among inpatients with changed ward organization. Acta Psychiatr Scand 1995;91(1):32-5.

Paschall MJ, Ennett ST, Flewelling RL. Relationships among family characteristics and violent behavior by black and white male adolescents. J Youth Adolesc 1996;25(2):177-97.

Paschall MJ, Flewelling RL, Ennett ST. Racial differences in violent behavior among young adults: Moderating and confounding effects. J Res Crime Delinq 1998;35(2):148-65.

Paschall MJ, Hubbard ML. Effects of neighborhood and family stressors on African American male adolescents' self-worth and propensity for violent behavior. J Consult Clin Psychol 1998;66(5):825-31.

Pate RR, Trost SG, Levin S, et al. Sports participation and health-related behaviors among US youth. Arch Pediatr Adolesc Med 2000;154(9):904-11.

Paterson R, Luntz H, Perlesz A, et al. Adolescent violence towards parents: Maintaining family connections when the going gets tough. Aust N Z J Fam Ther 2002;23(2):90-100.

Paulson MJ, Coombs RH, Landsverk J. Youth who physically assault their parents. J Fam Violence 1990;5(2):121-33.

Pedersen W, Wichstrom L, Blekesaune M. Violent behaviors, violent victimization, and doping agents: A normal population study of adolescents. J Interpers Violence 2001;16(8):808-32.

Pellegrini AD, Long JD. A longitudinal study of bullying, dominance, and victimization during the transition from primary school through secondary school. Br J Dev Psychol 2002;20(2):259-80.

Pellegrini RJ, Roundtree T, Camagna TF, et al. On the epidemiology of violent juvenile crime in America: a total arrest-referenced approach. Psychol Rep 2000;86(3 Pt 2):1171-86.

Pepler D, King G, Craig W, et al. The development and evaluation of a multisystem social skills group training program for aggressive children. Child Youth Care Forum 1995;24(5):297-313.

Pepler DJ, Craig WM, Roberts WL. Observations of aggressive and nonaggressive children on the school playground. Merrill Palmer Q 1998;44(1):55-76.

Perez DM. Ethnic differences in property, violent, and sex offending for abused and nonabused adolescents. J Crim Justice 2001;29(5):407-17.

Perry CL, Komro KA, Veblen-Mortenson S, et al. The Minnesota DARE PLUS Project: creating community partnerships to prevent drug use and violence. J Sch Health

2000;70(3):84-8.

Perry CL, Komro KA, Veblen-Mortenson S, et al. A randomized controlled trial of the middle and junior high school D.A.R.E. and D.A.R.E. Plus programs. Arch Pediatr Adolesc Med 2003;157(2):178-84.

Perry CL, Komro KA, Veblen-Mortenson S, et al. A randomized controlled trial of the middle and junior high school D.A.R.E. and D.A.R.E. Plus programs. Arch Pediatr Adolesc Med 2003;157(2):178-84.

Peterson-Badali M, Koegl CJ. Juveniles' experiences of incarceration: The role of correctional staff in peer violence. J Crim Justice 2002;30(1):41-9.

Pharris MD. Coming to know ourselves as community through a nursing partnership with adolescents convicted of murder. ANS Adv Nurs Sci 2002;24(3):21-42.

Phelps CE. Children's responses to overt and relational aggression. J Clin Child Psychol 2001;30(2):240-52.

Phillips DR, Schwean VL, Saklofske DH. Treatment effect of a school based cognitive-behavioral program for aggressive children. Can J Sch Psychol 1997;13(1):60-7.

Pickett W, Schmid H, Boyce WF, et al. Multiple risk behavior and injury: an international analysis of young people. Arch Pediatr Adolesc Med 2002;156(8):786-93.

Pihl RO, Young SN, Harden P, et al. Acute effect of altered tryptophan levels and alcohol on aggression in normal human males. Psychopharmacology (Berl) 1995;119(4):353-60.

Pillmann F, Rohde A, Ullrich S, et al. Violence, criminal behavior, and the EEG: significance of left hemispheric focal abnormalities. J Neuropsychiatry Clin Neurosci 1999;11(4):454-7.

Pine DS, Coplan JD, Wasserman GA, et al. Neuroendocrine response to fenfluramine challenge in boys: Associations with aggressive behavior and adverse rearing. Arch Gen Psychiatry 1997;54(9):839-46.

Piquero A. Frequency, specialization, and violence in offending careers. J Res Crime Delinq 2000;37(4):392-418.

Piquero A, Tibbetts S. The impact of pre/perinatal disturbances and disadvantaged familial environment in predicting criminal offending. Stud Crime Crime Prev 1999;8(1):52-70.

Piquero AR, Brame R, Mazerolle P. Crime in Emerging Adulthood. Criminology 2002;40(1):137-69.

Piquero AR, Buka SL. Linking juvenile and adult patterns of criminal activity in the Providence cohort of the National Collaborative Perinatal Project. J Crim Justice 2002;30(4):259-72.

Piquero AR, MacDonald JM, Parker KF. Race, local life circumstances, and criminal activity. Soc Sci Q 2002;83(3):654-70.

Pithers WD, Gray A, Busconi A, et al. Caregivers of children with sexual behavior problems: psychological and familial functioning. Child Abuse Negl 1998;22(2):129-41.

Pittenger J. Domestic abuse: complicated by rural living. Wis Med J 1997;96(8):22-4.

Pollard JA, Hawkins JD, Arthur MW. Risk and protection: Are both necessary to understand diverse behavioral outcomes in adolescence? Soc Work Res 1999;23(3):145-58.

Pope AW, Bierman KL. Predicting adolescent peer problems and antisocial activities: The relative roles of aggression and dysregulation. Dev Psychol 1999;35(2):335-46.

Potthoff SJ, Bearinger LH, Skay CL, et al. Dimensions of risk behaviors among American Indian youth. Arch Pediatr Adolesc Med 1998;152(2):157-63.

Poulin F, Boivin M. The role of proactive and reactive aggression in the formation and development of boys' friendships. Dev Psychol 2000;36(2):233-40.

Powell KB. Correlates of violent and nonviolent behavior among vulnerable inner-city youths. Fam Community Health 1997;20(2):38-47.

Prentky RA, Knight RA, Lee AF. Risk factors associated with recidivism among extrafamilial child molesters. J Consult Clin Psychol 1997;65(1):141-9.

Preski S, Shelton D. The role of contextual, child and parent factors in predicting criminal outcomes in adolescence. Issues Ment Health Nurs 2001;22(2):197-205.

Prinstein MJ, Boergers J, Spirito A. Adolescents' and their friends' health-risk behavior: Factors that alter or add to peer influence. J Pediatr Psychol 2001;26(5):287-98.

Prinstein MJ, Boergers J, Vernberg EM. Overt and relational aggression in adolescents: Social-psychological adjustment of aggressors and victims. J Community Psychol 2001;30(4):479-91.

Pritchard C, Cox M. The criminality of former "special educational provision" permanently "excluded from school" adolescents as young adults (16-23): costs and practical implications. J Adolesc 1998;21(5):609-20.

Proimos J, DuRant RH, Pierce JD, et al. Gambling and other risk behaviors among 8th- to 12th-grade students. Pediatrics 1998;102(2):E23.

Pulkkinen L. Proactive and reactive aggression in early adolescence as precursors to anti- and prosocial behavior in young adults. Aggress Behav 1996;22(4):241-57.

Pulkkinen L, Pitkaenen T. Continuities in aggressive behavior from childhood to adulthood. Aggress Behav 1993;19(4):249-63.

Putnam FW, Hornstein N, Peterson G. Clinical Phenomenology of Child and Adolescent Dissociative Disorders: Gender and Age Effects. Child Adolesc Psychiatr Clin N Am 1996;5(2):351-60.

Quiggle NL, Garber J, Panak WF, et al. Social information processing in aggressive and depressed children. Child Dev 1992;63(6):1305-20.

Quinn JF, Downs B. Predictors of gang violence: The impact of drugs and guns on police perceptions in nine states. J Gang Res 1995;2(3):15-27.

Quinn KP, Newman DL, Cumblad C. Behavioral characteristics of children and youth at risk for out-of-home placements. J Emot Behav Disord 1995;3(3):166-73.

Racey BD, Lopez NL, Schneider HG. Sexually assaultive adolescents: Cue perception, interpersonal competence and cognitive distortions. Int J Adolesc Youth 2000;8(2-3):229-39.

Rahey L, Craig WM. Evaluation of an ecological program to reduce bullying in schools. Can J Couns 2002;36(4):281-96.

Raine A, Brennan P, Mednick B, et al. High rates of violence, crime, academic problems, and behavioral problems in males with both early neuromotor deficits and unstable family environments. Arch Gen Psychiatry 1996;53(6):544-9.

Raine A, Brennan P, Mednick SA. Birth complications combined with early maternal rejection at age 1 year predispose to violent crime at age 18 years. Arch Gen Psychiatry 1994;51(12):984-8.

Raine A, Phil D, Stoddard J, et al. Prefrontal glucose deficits in murderers lacking psychosocial deprivation. Neuropsychiatry Neuropsychol Behav Neurol 1998;11(1):1-7.

Rakoff VM. Trauma and adolescent rites of initiation. Adolesc Psychiatry 1995;20:109-23.

Ralph N, Morgan KA. Assessing differences in chemically dependent adolescent males using the Child Behavior Checklist. Adolescence 1991;26(101):183-94.

Raine A. Biosocial studies of antisocial and violent behavior in children and adults: a review. J Abnorm Child Psychol 2002; 30(4) 312-26.

Randall J, Henggeler SW, Pickrel SG, et al. Psychiatric comorbidity and the 16-month trajectory of substance-abusing and substance-dependent juvenile offenders. J Am Acad Child Adolesc Psychiatry 1999;38(9):1118-24.

Rando RA, Rogers JR, Brittan-Powell CS. Gender role conflict and college men's sexually aggressive attitudes and behavior. J Ment Health Couns 1998;20(4):359-69.

Rao U, Carlson GA, Rapport MD. Serum cholesterol and aggressive behavior in psychiatrically hospitalized children. Acta Psychiatr Scand 1991;83(1):77-8.

Rapp-Paglicci LA, Wodarski JS. Antecedent behaviors of male youth victimization: An exploratory study. Deviant Behav 2000;21(6):519-36.

Rasanen E, Hirvenoja R, Hakko H, et al. A portrait of the juvenile arsonist. Forensic Sci Int 1995;73(1):41-7.

Ray JA, English DJ. Comparison of female and male children with sexual behavior problems. J Youth Adolesc 1995;24(4):439-51.

Reebye P, Moretti MM, Wiebe VJ, et al. Symptoms of posttraumatic stress disorder in adolescents with conduct disorder: sex differences and onset patterns. Can J Psychiatry 2000;45(8):746-51.

Reiss S, Rojahn J. Joint occurrence of depression and aggression in children and adults with mental retardation. J Intellect Disabil Res 1993;37(3):287-94.

Remington PL, Stahlsmith L, Nashold R. Assessing the increase in firearm-related homicides in Wisconsin, 1979-1993. Wis Med J 1995;94(2):88-90.

Resnick MD, Bearman PS, Blum RW, et al. Protecting adolescents from harm. Findings from the National Longitudinal Study on Adolescent Health. JAMA 1997;278(10):823-32.

Resnick MD, Harris LJ, Blum RW. The impact of caring and connectedness on adolescent health and well-being. J Paediatr Child Health 1993;29 Suppl 1:s3-9.

Reynolds AJ, Temple JA, Robertson DL, et al. Long-term effects of an early childhood intervention on educational achievement and juvenile arrest: A 15-year follow-up of low-income children in public schools. JAMA 2001;285(18):2339-46.

Rhodes JE, Fischer K. Spanning the gender gap: gender differences in delinquency among inner-city adolescents. Adolescence 1993;28(112):879-89.

Rican P, Klicperova M, Koucka Ta. Families of bullies and their victims: A children's view. Stud Psychol (Bratisl) 1993;35(3):261-6.

Rich JA, Sullivan LM. Correlates of violent assault among young male primary care patients. J Health Care Poor Underserved 2001;12(1):103-12.

Riggs N, Houry D, Long G, et al. Analysis of 1,076 cases of sexual assault. Ann Emerg Med 2000;35(4):358-62.

Riner ME, Saywell RM. Development of the social ecology model of adolescent interpersonal violence prevention (SEMAIVP). J Sch Health 2002;72(2):65-70.

Ringwalt CL, Graham LA, Paschall MJ, et al. Supporting Adolescents with Guidance and Employment (SAGE). Am J Prev Med 1996;12(5 Suppl):31-8.

Risler EA, Sweatman T, Nackerud L. Evaluating the Georgia legislative Waiver's effectiveness in deterring juvenile crime. Res Soc Work Pract 1998;8(6):657-67.

Ritter J, Stewart M, Bernet C, et al. Effects of childhood exposure to familial alcoholism and family violence on adolescent substance use, conduct problems, and self-esteem. J Trauma Stress 2002;15(2):113-22.

Rivara FP. Injury research and violence: what's our contribution? Inj Prev 1996;2(4):249.

Rivara FP, Shepherd JP, Farrington DP, et al. Victim as offender in youth violence. Ann Emerg Med 1995;26(5):609-14.

Rivera B, Widom CS. Childhood victimization and violent offending. Violence Vict 1990;5(1):19-35.

Rivers I, Soutter A. Bullying and the Steiner School ethos: A case study analysis of a group-centered educational philosophy. Sch Psychol Int 1996;17(4):359-77.

Roberto AJ, Meyer G, Boster FJ, et al. Adolescents' decisions about verbal and physical aggression: An application of the theory of reasoned action. Hum Commun Res 2003;29(1):135-47.

Roberto AJ, Meyer G, Boster FJ, et al. Adolescents' decisions about verbal and physical aggression: An application of the theory of reasoned action. Hum Commun Res 2003;29(1):135-47.

Roberts TA, Ryan SA, al. e. Tattooing and high-risk behavior in adolescents. Pediatrics 2002;110(6):1058-63.

Robertson S. Separating the men from the boys: masculinity, psychosexual development, and sex crime in the United States, 1930s-1960s. J Hist Med Allied Sci 2001;56(1):3-35.

Rodney HE, Tachia HR, Rodney LW. The effect of family and social support on feelings and past acts of violence among African American college men. J Am Coll Health 1997;46(3):103-8.

Rodney HE, Tachia HR, Rodney LW. The home environment and delinquency: A study of African American adolescents. Fam Soc 1999;80(6):551-9.

Rodriguez MA, Solorio R, Hayes-Bautista DE, et al. Health risks of Latino children. JAMA 2002;288(16):1981; Discussion 3.

Roff JD. Childhood aggression, peer status, and social class as predictors of delinquency. Psychol Rep 1992;70(1):31-4.

Roitberg T, Menard S. Adolescent violence: A test of integrated theory. Stud Crime Crime Prev 1995;4(2):177-96.

Romi S, Itskowitz R. The relationship between locus of control and type of aggression in middle-class and culturally deprived children. Pers Individ Dif 1990;11(4):327-33.

Ronen T. Imparting self-control skills in the school setting. Child Fam Behav Ther 1994;16(1):1-20.

Rosen PM, Walsh BW, Rode SA. Interpersonal loss and self-mutilation. Suicide Life Threat Behav 1990;20(2):177-84.

Rosenbaum JL. A violent few: Gang girls in the California Youth Authority. J Gang Res 1996;3(3):17-23.

Rosenberg MF, Anthony JC. Aggressive behavior and opportunities to purchase drugs. Drug Alcohol Depend 2001;63(3):245-52.

Rosenfeld R, Bray TM, Egley A. Facilitating violence: A comparison of gang-motivated, gang-affiliated and nongang youth homicides. J Quant Criminol 1999;15(4):495-516.

Rossman BBR. Multiple risks for children exposed to parental violence: Family factors, psychological maltreatment, and trauma. J Aggress Maltreat Trauma 1999;2(2):207-37.

Rowe DC, Almeida DM, Jacobson KC. School context and genetic influences on aggression in adolescence. Psychol Sci 1999;10(3):277-80.

Rubenstein JL, Feldman SS. Conflict-resolution behavior in adolescent boys: Antecedents and adaptational correlates. J Res Adolesc 1993;3(1):41-66.

Rubin KH, Chen X, McDougall P, et al. The Waterloo Longitudinal Project: Predicting internalizing and externalizing problems in adolescence. Dev Psychopathol 1995;7(4):751-64.

Rubinstein M, Yeager CA, Goodstein C, et al. Sexually assaultive male juveniles: a follow-up. Am J Psychiatry 1993;150(2):262-5.

Rucker N, Greene V. The myth of the invulnerable self of adolescence. Am J Psychoanal 1995;55(4):369-79.

Russell A, Owens L. Peer estimates of school-aged boys' and girls' aggression to same- and cross-sex targets. Soc Dev 1999;8(3):364-79.

Russell ST, Franz BT, Driscoll AK. Same-sex romantic

attraction and experiences of violence in adolescence. Am J Public Health 2001;91(6):903-6.

Rys GS, Bear GG. Relational aggression and peer relations: Gender and developmental issues. Merrill Palmer Q 1997;43(1):87-106.

Sachs JJ, Miller SR. The impact of a wilderness experience on the social interactions and social expectations of behaviorally disordered adolescents. Behav Disord 1992;17(2):89-98.

Saigal S, Pinelli J, Hoult L, et al. Psychopathology and social competencies of adolescents who were extremely low birth weight. Pediatrics 2003;111(5 Pt 1):969-75.

Salekin KL, Ogloff JRP, Ley RG, et al. The overcontrolled hostility scale: An evaluation of its applicability with an adolescent population. Crim Justice Behav 2002;29(6):718-33.

Salfati CG, Canter DV. Differentiating stranger murders: Profiling offender characteristics from behavioral styles. Behav Sci Law 1999;17(3):391-406.

Salmivalli C. Intelligent, attractive, well-behaving, unhappy: The structure of adolescents' self-concept and its relations to their social behavior. J Res Adolesc 1998;8(3):333-54.

Salmivalli C, Karhunen J, Lagerspetz KMJ. How do the victims respond to bullying? Aggress Behav 1996;22(2):99-109.

Salmivalli C, Kaukiainen A, Kaistaniemi L, et al. Self-evaluated self-esteem, peer-evaluated self-esteem, and defensive egotism as predictors of adolescents' participation in bullying situations. Pers Soc Psychol Bull 1999;25(10):1268-78.

Salmivalli C, Kaukiainen A, Lagerspetz K. Aggression and sociometric status among peers: Do gender and type of aggression matter? Scand J Psychol 2000;41(1):17-24.

Salmivalli C, Nieminen E. Proactive and reactive aggression among school bullies, victims, and bully-victims. Aggress Behav 2002;28(1):30-44.

Salts CJ, Lindholm BW, Goddard HW, et al. Predictive variables of violent behavior in adolescent males. Youth Soc 1995;26(3):377-99.

Salzinger S, Feldman RS, Hammer M, et al. Constellations of family violence and their differential effects on children's behavioral disturbance. Child Fam Behav Ther 1992;14(4):23-41.

Salzinger S, Feldman RS, Ng-Mak DS, et al. Effects of partner violence and physical child abuse on child behavior: A study of abused and comparison children. J Fam Violence 2002;17(1):23-52.

SAMHSA. The NHSDA report. Youth violence and substance use: 2001 update. Accessed: May 2004. http://www.oas.samhsa.gov/2k2/YouthViolence/YouthViolence.cfm.

Sampson RJ, Morenoff JD, Gannon-Rowley T. Assessing "neighborhood effects": social processes and new directions in research. Annu Rev Sociol. 2002;28:443-78.

Sandor P, Stephens RJ. Risperidone treatment of aggressive behavior in children with Tourette syndrome. J Clin Psychopharmacol 2000;20(6):710-2.

Saner H, Ellickson P. Concurrent risk factors for adolescent violence. J Adolesc Health 1996;19(2):94-103.

Santman J, Myner J, Cappelletty GG, et al. California juvenile gang members: An analysis of case records. J Gang Res 1997;5(1):45-53.

Sarigiani PA, Ryan L, Petersen AC. Prevention of high-risk behaviors in adolescent women. J Adolesc Health 1999;25(2):109-19.

Sarne Y, Mandel J, Goncalves MH, et al. Imipramine binding to blood platelets and aggressive behavior in offenders, schizophrenics and normal volunteers. Neuropsychobiology 1995;31(3):120-4.

Satcher D. Youth violence: A report of the surgeon general. Accessed: May 2004. http://www.surgeongeneral.gov/library/youthviolence/.

Satcher D, Powell KE, Mercy JA, et al. Violence prevention is as American as apple pie. Am J Prev Med 1996;12(5 Suppl):V-Vi.

Satterfield JH, Swanson J, Schell AM, et al. Prediction of antisocial behavior in attention-deficit hyperactivity disorder boys from aggression/defiant scores. J Am Acad Child Adolesc Psychiatry 1994;33(2):185-90.

Sayger TV, Horne AM, Glaser BA. Marital satisfaction and social learning family therapy for child conduct problems: Generalization of treatment effects. J Marital Fam Ther 1993;19(4):393-402.

Scerbo AS, Kolko DJ. Salivary testosterone and cortisol in disruptive children: Relationship to aggressive, hyperactive, and internalizing behaviors. J Am Acad Child Adolesc Psychiatry 1994;33(8):1174-84.

Scerbo AS, Kolko DJ. Child physical abuse and aggression: preliminary findings on the role of internalizing problems. J Am Acad Child Adolesc Psychiatry 1995;34(8):1060-6.

Schaal B, Tremblay RE, Soussignan R, et al. Male testosterone linked to high social dominance but low physical aggression in early adolescence. J Am Acad Child Adolesc Psychiatry 1996;35(10):1322-30.

Scheidlinger S. The centrality of the peer group's role in

two aspects of school violence revisited. Int J Group Psychother 2003;53(2):245-9.

Scherer DG, Brondino MJ, Henggeler SW, et al. Multisystemic Family Preservation Therapy: Preliminary findings from a study of rural and minority serious adolescent offenders. J Emot Behav Disord 1994;2(4):198-206.

Scherer DG, Others A. Multisystemic family preservation therapy: Preliminary findings from a study of rural and minority serious adolescent offenders. J Emot Behav Disord 1994;2(4):198-206.

Scherzer T, Pinderhughes HL. Violence and gender: reports from an urban high school. Violence Vict 2002;17(1):57-72.

Schiff M, Cavaiola AA. Child abuse, adolescent substance abuse, and "deadly violence." J Adolesc Chem Depend 1993;2(3-4):131-41.

Schinke S, Jansen M, Kennedy E, et al. Reducing risk-taking behavior among vulnerable youth: An intervention outcome study. Fam Community Health 1994;16(4):49-56.

Schoenthaler SJ, Bier ID. The effect of vitamin-mineral supplementation on juvenile delinquency among American schoolchildren: a randomized, double-blind placebo-controlled trial. J Altern Complement Med 2000;6(1):7-17.

Scholte EM. Factors predicting continued violence into young adulthood. J Adolesc 1999;22(1):3-20.

Schreiber EH. A study of the personality of violent children. N Am J Psychol 1999;1(1):51-6.

Schreiber EL, Screiber KN. A study of parents of violent children. Psychol Rep 2002;90(1):101-4.

Schreier HA. Risperidone for young children with mood disorders and aggressive behavior. J Child Adolesc Psychopharmacol 1998;8(1):49-59.

Schubiner H, Scott R, Tzelepis A. Exposure to violence among inner-city youth. J Adolesc Health 1993;14(3):214-9.

Schulenberg SE, Soundy T. Epidemiology of physical and sexual abuse in young persons diagnosed with conduct disorder: a retrospective chart review. S D J Med 2000;53(1):29-32.

Schwab CW, Richmond TS, Cheney RA, et al. Risk factors for violent death in children. JAMA 2002;287(8):983-4.

Schwab-Stone M, Chen C, Greenberger E, et al. No safe haven. II: The effects of violence exposure on urban youth. J Am Acad Child Adolesc Psychiatry 1999;38(4):359-67.

Schwartz CE, Snidman N, Kagan J. Early childhood temperament as a determinant of externalizing behavior in adolescence. Dev Psychopathol 1996;8(3):527-37.

Schwartz D. Subtypes of victims and aggressors in children's peer groups. J Abnorm Child Psychol 2000;28(2):181-92.

Schwartz M, O'Leary SG, Kendziora KT. Dating aggression among high school students. Violence Vict 1997;12(4):295-305.

Schwartz RH, Little DL. Let's party tonight: drinking patterns and breath alcohol values at high school parties. Fam Med 1997;29(5):326-31.

Schwartzberg AZ. Risk factors for adolescent violence: Implications for prevention and treatment. Int J Adolesc Med Health 1999;11(3-4):429-37.

Scott KD, Schafer J, Greenfield TK. The role of alcohol in physical assault perpetration and victimization. J Stud Alcohol 1999;60(4):528-36.

Scott KK, Tepas JJ, Frykberg E, et al. Turning point: rethinking violence--evaluation of program efficacy in reducing adolescent violent crime recidivism. J Trauma 2002;53(1):21-7.

Sege R, D, Kharasch S, Perron C, et al. Pediatric violence-related injuries in Boston: results of a city-wide emergency department surveillance program. Arch Pediatr Adolesc Med 2002;156(1):73-6.

Sege R, Stringham P, Short S, et al. Ten years after: examination of adolescent screening questions that predict future violence-related injury. J Adolesc Health 1999;24(6):395-402.

Seguin JR, Arseneault L, Boulerice B, et al. Response perseveration in adolescent boys with stable and unstable histories of physical aggression: The role of underlying processes. J Child Psychol Psychiatry 2002;43(4):481-94.

Seguin JR, Boulerice B, Harden PW, et al. Executive functions and physical aggression after controlling for attention deficit hyperactivity disorder, general memory, and IQ. J Child Psychol Psychiatry 1999;40(8):1197-208.

Seguin JR, Pihl RO, Boulerice B, et al. Low pain sensitivity and stability of physical aggression in boys. Ann N Y Acad Sci 1996;794:408-10.

Seguin JR, Pihl RO, Harden PW, et al. Cognitive and neuropsychological characteristics of physically aggressive boys. J Abnorm Psychol 1995;104(4):614-24.

Seidenwurm D, Pounds TR, Globus A, et al. Abnormal temporal lobe metabolism in violent subjects: correlation of imaging and neuropsychiatric findings. AJNR Am J Neuroradiol 1997;18(4):625-31.

Seidman E, Yoshikawa H, Roberts A, et al. Structural and

experiential neighborhood contexts, developmental stage, and antisocial behavior among urban adolescents in poverty. Dev Psychopathol 1998;10(2):259-81.

Seifert K, Phillips S, Parker S. Child and Adolescent Risk for Violence (CARV): A tool to assess juvenile risk. J Psychiatry Law 2001;29(3):329-46.

Selkurt J. Teens and domestic violence. Wis Med J 1994;93(1):29.

Selner-O'Hagan MB, Kindlon DJ, Buka SL, et al. Assessing exposure to violence in urban youth. J Child Psychol Psychiatry 1998;39(2):215-24.

Sequeira H, Halstead S. "Is it meant to hurt, is it?": Management of violence in women with developmental disabilities. Violence Against Women 2001;7(4):462-76.

Shackelford TK. Risk of multiple-offender rape-murder varies with female age. J Crim Justice 2002;30(2):135-41.

Shahinfar A, Kupersmidt JB, Matza LS. The relation between exposure to violence and social information processing among incarcerated adolescents. J Abnorm Psychol 2001;110(1):136-41.

Shahpar C, Li G. Homicide mortality in the United States, 1935-1994: age, period, and cohort effects. Am J Epidemiol 1999;150(11):1213-22.

Shapiro JP, Welker CJ, Pierce JL. An evaluation of residential treatment for sexually aggressive youth. J Child Sex Abus 2001;10(1):1-21.

Sharps PW, Campbell J, Campbell D, et al. The role of alcohol use in intimate partner femicide. Am J Addict 2001;10(2):122-35.

Shaw JA, Campo-Bowen AE, Applegate B, et al. Young boys who commit serious sexual offenses: demographics, psychometrics, and phenomenology. Bull Am Acad Psychiatry Law 1993;21(4):399-408.

Shechtman Z, Ben-David M. Individual and group psychotherapy of childhood aggression: A comparison of outcomes and processes. Group Dyn 1999;3(4):263-74.

Sheehan K, DiCara JA, LeBailly S, et al. Adapting the gang model: peer mentoring for violence prevention. Pediatrics 1999;104(1 Pt 1):50-4.

Sheley JF. Drugs and guns among inner-city high school students. J Drug Educ 1994;24(4):303-21.

Sheley JF, Brewer VE. Possession and carrying of firearms among suburban youth. Public Health Rep 1995;110(1):18-26.

Shepherd JP, Farrington DP. Preventing crime and violence. BMJ 1995;310(6975):271-2.

Sheras PL, Cornell DG, Bostain DS. The Virginia Youth Violence Project: Transmitting psychological knowledge on youth violence to schools and communities. Prof Psychol Res Pract 1996;27(4):401-6.

Sherman LW, Gottfredson D. Preventing crime: What works, what doesn't, what's promising. Appendix: Research methods. Accessed: May 2004. http://www.ncjrs.org/works/appendix.htm.

Shields A, Cicchetti D. Reactive aggression among maltreated children: The contributions of attention and emotion dysregulation. J Clin Child Psychol 1998;27(4):381-95.

Shields A, Cicchetti D. Parental maltreatment and emotion dysregulation as risk factors for bullying and victimization in middle childhood. J Clin Child Psychol 2001;30(3):349-63.

Shields EW. Intimidation and violence by males in high school athletics. Adolescence 1999;34(135):503-21.

Shields N, Pierce L. Factors related to aggressive and violent behavior among preadolescent African-American boys. Int J Adolesc Youth 2001;10(1-2):51-68.

Shoda Y, Mischel W, Wright JC. The role of situational demands and cognitive competencies in behavior organization and personality coherence. J Pers Soc Psychol 1993;65(5):1023-35.

Shonkoff JP, Phillips D. From neurons to neighborhoods : the science of early child development. Washington, D.C.: National Academy Press; 2000.

Shumaker DM, McKee GR. Characteristics of homicidal and violent juveniles. Violence Vict 2001;16(4):401-9.

Shumaker DM, Prinz RJ. Children who murder: a review. Clin Child Fam Psychol Rev 2000;3(2):97-115.

Sikand VK. A violence prevention program targeting adolescents. Conn Med 1996;60(1):41.

Silverman RA, Kennedy LW. Women who kill their children. Violence Vict 1988;3(2):113-27.

Simic M, Fombonne E. Depressive conduct disorder: symptom patterns and correlates in referred children and adolescents. J Affect Disord 2001;62(3):175-85.

Simon TR, Sussman S, Dahlberg LL, et al. Influence of a substance-abuse-prevention curriculum on violence-related behavior. Am J Health Behav 2002;26(2):103-10.

Simonoff E, Pickles A, Meyer J, et al. Genetic and environmental influences on subtypes of conduct disorder behavior in boys. J Abnorm Child Psychol 1998;26(6):495-509.

Simons KJ, Paternite CE, Shore C. Quality of

parent/adolescent attachment and aggression in young adolescents. J Early Adolesc 2001;21(2):182-203.

Simons RL, Johnson C, Conger RD. Harsh corporal punishment versus quality of parental involvement as an explanation of adolescent maladjustment. J Marriage Fam 1994;56(3):591-607.

Simons RL, Lin K-H, Gordon LC. Socialization in the family of origin and male dating violence: A prospective study. J Marriage Fam 1998;60(2):467-78.

Simons RL, Whitbeck LB, Beaman J, et al. The impact of mothers' parenting, involvement by nonresidential fathers, and parental conflict on the adjustment of adolescent children. J Marriage Fam 1994;56(2):356-74.

Simonson H. Interaction effects of television and socioeconomic status on teenage aggression. Int J Adolesc Youth 1992;3(3-4):333-43.

Singer MH. How central is the analysis of aggression to clinical psychoanalysis? J Am Psychoanal Assoc 1999;47(4):1179-89.

Singer MI, Flannery DJ. The relationship between children's threats of violence and violent behaviors. Arch Pediatr Adolesc Med 2000;154(8):785-90.

Singer MI, Miller DB, Guo S, et al. Contributors to violent behavior among elementary and middle school children. Pediatrics 1999;104(4 Pt 1):878-84.

Singer MI, Slovak K, Frierson T, et al. Viewing preferences, symptoms of psychological trauma, and violent behaviors among children who watch television. J Am Acad Child Adolesc Psychiatry 1998;37(10):1041-8.

Singleton EG, Dale GAJ. Lack of co-occurring interpersonal violence-related emotional difficulties and alcohol or other drug problems among African American youth with conduct disorder. J Negro Educ 1996;65(4):445-53.

Skeem JL, Mulvey EP. Psychopathy and community violence among civil psychiatric patients: results from the MacArthur Violence Risk Assessment Study. J Consult Clin Psychol 2001;69(3):358-74.

Skelton DL, Glynn MA, Berta SM. Aggressive behavior as a function of taekwondo ranking. Percept Mot Skills 1991;72(1):179-82.

Skiba RJ, Knesting K, al e. Zero tolerance, zero evidence: an analysis of school disciplinary practice. New Dir Youth Dev 2001;92:17-43.

Skinner ML, Elder GH, Conger RD. Linking economic hardship to adolescent aggression. J Youth Adolesc 1992;21(3):259-76.

Skovholt T, Cognetta P, Ye G, et al. Violence prevention strategies of inner-city student experts. Prof Sch Couns 1997;1(1):35-8.

Slabbekoorn D, Van Goozen SHM, Gooren LJG, et al. Effects of cross-sex hormone treatment on emotionality in transsexuals. Int J Transgenderism 2001;5(3):NP.

Slovak K, Singer M. Gun violence exposure and trauma among rural youth. Violence Vict 2001;16(4):389-400.

Smith AM, Gacono CB, Kaufman L. A Rorschach comparison of psychopathic and nonpsychopathic conduct disordered adolescents. J Clin Psychol 1997;53(4):289-300.

Smith AM, Gacono CB, Kaufman L. A Rorschach comparison of psychopathic and nonpsychopathic conduct disordered adolescents. J Clin Psychol 1997;53:289-300.

Smith AT, Kuller LH, Perper JA, et al. Epidemiology of homicide in Allegheny County, Pennsylvania, between 1966-1974 and 1984-1993. Prev Med 1998;27(3):452-60.

Smith CA. Dis-attachment. Aust N Z J Psychiatry 1994;28(4):691-3.

Smith H, Thomas S. Violent and nonviolent girls: contrasting perceptions of anger experiences, school, and relationships. Issues Ment Health Nurs 2000;21(5):547-75.

Smith JP, Williams JG. From abusive household to dating violence. J Fam Violence 1992;7(2):153-65.

Smith MA, Jenkins JM. The effects of marital disharmony on prepubertal children. J Abnorm Child Psychol 1991;19(6):625-44.

Smith MD, Feiler SM. Absolute and relative involvement in homicide offending: contemporary youth and the baby boom cohorts. Violence Vict 1995;10(4):327-33.

Smith P, Flay BR, Bell CC, et al. The protective influence of parents and peers in violence avoidance among African-American youth. Matern Child Health J 2001;5(4):245-52.

Smith S, Kern RM, Curlette WL, et al. Lifestyle profiles and interventions for aggressive adolescents. J Individ Psychol 2001;57(3):224-45.

Smith S, Mullis F, Kern RM, et al. An Adlerian model for the etiology of aggression in adjudicated adolescents. Fam J 1999;7(2):135-47.

Smith SL, Howard JA, Monroe AD. Issues underlying behavior problems in at-risk adopted children. Child Youth Serv Rev 2000;22(7):539-62.

Snyder R, Turgay A, Aman M, et al. Effects of risperidone on conduct and disruptive behavior disorders in children with subaverage IQs. J Am Acad Child Adolesc Psychiatry 2002;41(9):1026-36.

Soderstrom H, Blennow K, Manhem A, et al. CSF studies

in violent offenders. II. Blood-brain barrier dysfunction without concurrent inflammation or structure degeneration. J Neural Transm 2001;108(7):879-86.

Soderstrom H, Blennow K, Manhem A, et al. CSF studies in violent offenders. I. 5-HIAA as a negative and HVA as a positive predictor of psychopathy. J Neural Transm 2001;108(7):869-78.

Sommers I, Baskin DR. Factors related to female adolescent initiation into violent street crime. Youth Soc 1994;25:468-89.

Sommers I, Baskin DR. Situational or generalized violence in drug dealing networks. J Drug Issues 1997;27(4):833-49.

Sommers I, Fagan J, Baskin D. Sociocultural influences on the explanation of delinquency for Puerto Rican youths. Hisp J Behav Sci 1993;15(1):36-62.

Song LY, Singer MI, Anglin TM. Violence exposure and emotional trauma as contributors to adolescents' violent behaviors. Arch Pediatr Adolesc Med 1998;152(6):531-6.

Sosin DM, Koepsell TD, Rivara FP, et al. Fighting as a marker for multiple problem behaviors in adolescents. J Adolesc Health 1995;16(3):209-15.

Sourander A, Aurela A, Piha J. Therapeutic holding in child and adolescent psychiatric inpatient treatment. Nord J Psychiatry 1996;50(5):375-80.

Sourander A, Helstela L, Helenius H. Persistence of bullying from childhood to adolescence--a longitudinal 8-year follow-up study. Child Abuse Negl 2000;24(7):873-81.

Spaccarelli S, Bowden B, Coatsworth JD, et al. Psychosocial correlates of male sexual aggression in a chronic delinquent sample. Crim Justice Behav 1997;24(1):71-95.

Spaccarelli S, Coatsworth JD, Bowden BS. Exposure to serious family violence among incarcerated boys: its association with violent offending and potential mediating variables. Violence Vict 1995;10(3):163-82.

Spergel IA, Grossman SF. The Little Village Project: A community approach to the gang problem. Soc Work 1997;42(5):456-70.

Spigelman G, Spigelman A, Englesson I. Hostility, aggression, and anxiety levels of divorce and nondivorce children as manifested in their responses to projective tests. J Pers Assess 1991;56(3):438-52.

Spillane-Grieco E. From parent verbal abuse to teenage physical aggression? Child Adolesc Social Work J 2000;17(6):411-30.

Spingarn RW, DuRant RH. Male adolescents involved in pregnancy: associated health risk and problem behaviors. Pediatrics 1996;98(2 Pt 1):262-8.

Spitz RT, Hillbrand M, Foster HG, et al. Ethnicity, aggression and serum creatine kinase in hospitalized male forensic patients. Ethn Dis 1997;7(3):259-70.

Sprague J, Walker HM, Stieber S, et al. Exploring the relationship between school discipline referrals and delinquency. Psychol Sch 2001;38(2):197-206.

Spunt B, Goldstein P, Brownstein H, et al. The role of marijuana in homicide. Int J Addict 1994;29(2):195-213.

St George DM, Thomas SB. Perceived risk of fighting and actual fighting behavior among middle school students. J Sch Health 1997;67(5):178-81.

St. Lawrence JS, Crosby RA, Belcher L, et al. Sexual risk reduction and anger management interventions for incarcerated male adolescents: A randomized controlled trial of two interventions. J Sex Educ Ther 1999;24(1-2):9-17.

Stafford E, Cornell DG. Psychopathy scores predict adolescent inpatient aggression. Assessment 2003;10(1):102-12.

Stanislav SW, Fabre T, Crismon ML, et al. Buspirone's efficacy in organic-induced aggression. J Clin Psychopharmacol 1994;14(2):126-30.

Stein DB. Outpatient behavioral management of aggressiveness in adolescents: A response cost paradigm. Aggress Behav 1999;25(5):321-30.

Stein DJ, Keating J, Zar HJ, et al. A survey of the phenomenology and pharmacotherapy of compulsive and impulsive-aggressive symptoms in Prader-Willi Syndrome. J Neuropsychiatry Clin Neurosci 1994;6(1):23-9.

Steiner H, Stone LA. Violence and related psychopathology. J Am Acad Child Adolesc Psychiatry 1999;38(3):232-4.

Steinert T, Woelfle M, Gebhardt RP. No correlation of serum cholesterol levels with measures of violence in patients with schizophrenia and non-psychotic disorders. Eur Psychiatry 1999;14(6):346-8.

Steinert T, Woelfle M, Gebhardt RP. No correlation of serum cholesterol levels with measures of violence in patients with schizophrenia and non-psychotic disorders. Eur Psychiatry 1999;14(6):346-8.

Steinert T, Wolfle M, Gebhardt RP. Measurement of violence during in-patient treatment and association with psychopathology. Acta Psychiatr Scand 2000;102(2):107-12.

Stephens RJ, Sandor P. Aggressive behaviour in children with Tourette syndrome and comorbid attention-deficit hyperactivity disorder and obsessive-compulsive disorder.

Can J Psychiatry 1999;44(10):1036-42.

Stevens V, De Bourdeaudhuij I, Van Oost P. Relationship of the family environment to children's involvement in bully/victim problems at school. J Youth Adolesc 2002;31(6):419-28.

Stevenson HC, Herrero-Taylor T, Cameron R, et al. "Mitigating instigation": Cultural phenomenological influences of anger and fighting among "big-boned' and "baby-faced' African American youth. J Youth Adolesc 2002;31(6):473-85.

Stewart EA, Simons RL, Conger RD. Assessing Neighborhood and Social Psychological Influences on Childhood Violence in an African-American Sample. Criminology 2002;40(4):801-29.

Stewart LA, Clarke MJ. Practical methodology of meta-analyses (overviews) using updated individual patient data. Cochrane Working Group. Stat Med 1995;14(19):2057-79.

Stewart LA, Parmar MK. Meta-analysis of the literature or of individual patient data: is there a difference? Lancet 1993;341(8842):418-22.

Stier DM, Leventhal JM, Berg AT, et al. Are children born to young mothers at increased risk of maltreatment? Pediatrics 1993;91(3):642-8.

Stiffman AR, Dore P, Cunningham RM. Violent behavior in adolescents and young adults: A person and environment model. J Child Fam Stud 1996;5(4):487-501.

Stoff DM, Pasatiempo AP, Yeung J, et al. Neuroendocrine responses to challenge with dl-fenfluramine and aggression in disruptive behavior disorders of children and adolescents. Psychiatry Res 1992;43(3):263-76.

Stolzenberg L, D'Alessio SJ. Gun availability and violent crime: New evidence from the National Incident-Based Reporting System. Soc Forces 2000;78(4):1461-82.

Stouthamer-Loeber M, Loeber R. Lost opportunities for intervention: Undetected markers for the development of serious juvenile delinquency. Crim Behav Ment Health 2002;12(1):69-82.

Stouthamer-Loeber M, Loeber R, Homish DL, et al. Maltreatment of boys and the development of disruptive and delinquent behavior. Dev Psychopathol 2001;13(4):941-55.

Strain PS, Timm MA. Remediation and prevention of aggression: An evaluation of the Regional Intervention Program over a quarter century. Behav Disord 2001;26(4):297-313.

Straus MA. Spanking and the making of a violent society. Pediatrics 1996;98(4 Pt 2):837-42.

Straus MA, Kantor GK. Corporal punishment of adolescents by parents: A risk factor in the epidemiology of depression, suicide, alcohol abuse, child abuse, and wife beating. Adolescence 1994;29(115):543-61.

Straus MA, Mouradian VE. Impulsive corporal punishment by mothers and antisocial behavior and impulsiveness of children. Behav Sci Law 1998;16(3):353-74.

Straznickas KA, McNiel DE, Binder RL. Violence toward family caregivers by mentally ill relatives. Hosp Community Psychiatry 1993;44(4):385-7.

Stricker SJ, Volgas DA. Extremity handgun injuries in children and adolescents. Orthopedics 1998;21(10):1095-110.

Strom JP. Breaking the cycle of violence. J S C Med Assoc 1995;91(10):439.

Stueve A, O'Donnell L, Link B. Gender differences in risk factors for violent behavior among economically disadvantaged African American and Hispanic young adolescents. Int J Law Psychiatry 2001;24(4-5):539-57.

Stulc JP. The cult of violence. J Ky Med Assoc 1998;96(12):497-8.

Sullivan AM, Rivera J. Profile of a comprehensive psychiatric emergency program in a New York City municipal hospital. Psychiatr Q 2000;71(2):123-38.

Surette R. Self-reported copycat crime among a population of serious and violent juvenile offenders. Crime Delinq 2002;48(1):46-69.

Sussman S, Dent CW, McCullar WJ. Group self-identification as a prospective predictor of drug use and violence in high-risk youth. Psychol Addict Behav 2000;14(2):192-6.

Sussman S, Dent CW, Stacy AW. The association of current stimulant use with demographic, substance use, violence-related, social and intrapersonal variables among high risk youth. Addictive Behaviors Addict Behav 1999;24(6):741-8.

Sussman S, Dent CW, Stacy AW, et al. Psychosocial variables as prospective predictors of violent events among adolescents. Health Values 1994;18(3):29-40.

Sussman S, Simon TR, Dent CW, et al. One-year prediction of violence perpetration among high-risk youth. Am J Health Behav 1999;23(5):332-44.

Swanson JW, Swartz MS, Borum R, et al. Involuntary out-patient commitment and reduction of violent behaviour in persons with severe mental illness. Br J Psychiatry 2000;176:324-31.

Swartz MS, Swanson JW, Hiday VA, et al. Taking the wrong drugs: the role of substance abuse and medication noncompliance in violence among severely mentally ill

individuals. Soc Psychiatry Psychiatr Epidemiol 1998;33 Suppl 1:s75-80.

Swartz MS, Swanson JW, Hiday VA, et al. Violence and severe mental illness: the effects of substance abuse and nonadherence to medication. Am J Psychiatry 1998;155(2):226-31.

Swett C. Inpatient seclusion: Description and causes. Bull Am Acad Psychiatry Law 1994;22(3):421-30.

Swikert N. SAVE--school violence II. J Ky Med Assoc 2000;98(10):459-60.

Swinford SP, DeMaris A, Cernkovich SA, et al. Harsh physical discipline in childhood and violence in later romantic involvements: The mediating role of problem behaviors. J Marriage Fam 2000;62(2):508-19.

Talbott E, Celinska D, Simpson J, et al. "Somebody else making somebody else fight": Aggression and the social context among urban adolescent girls. Exceptionality 2002;10(3):203-20.

Taliaferro E, Smith D, Rogers J, et al. Violence intervention programs: the Parkland Domestic Violence Project. Tex Dent J 2000;117(10):54-8.

Tannenhaus N. Violence in the streets. What can communities do? Trustee 1995;48(4):6-9.

Tarter RE, Kirisci L, Vanyukov M, et al. Predicting adolescent violence: impact of family history, substance use, psychiatric history, and social adjustment. Am J Psychiatry 2002;159(9):1541-7.

Tashman NA, Weist MD, Nabors LA, et al. Involvement in meaningful activities and self-reported aggression and delinquency among inner-city teenagers. J Clin Psychol Med Settings 1998;5(3):239-48.

Taub J. Evaluation of the Second Step Violence Prevention Program at a rural elementary school. School Psych Rev 2002;31(2):186-200.

Taussig HN. Risk behaviors in maltreated youth placed in foster care: a longitudinal study of protective and vulnerability factors. Child Abuse Negl 2002;26(11):1179-99.

Taylor E, Chadwick O, Heptinstall E. Hyperactivity and conduct problems as risk factors for adolescent development. J Am Acad Child Adolesc Psychiatry 1996;35:1213-26.

Taylor E, Chadwick O, Heptinstall E, et al. Hyperactivity and conduct problems as risk factors for adolescent development. J Am Acad Child Adolesc Psychiatry 1996;35(9):1213-26.

Taylor ER, Kelly J, Valescu S, et al. Is stealing a gateway crime? Community Ment Health J 2001;37(4):347-58.

Taylor HG. Family violence and the community pharmacist. Am Pharm 1994;Ns34(4):41-4.

Tebbutt J, Swanston H, Oates RK, et al. Five years after child sexual abuse: persisting dysfunction and problems of prediction. J Am Acad Child Adolesc Psychiatry 1997;36(3):330-9.

Teevan JJ, Dryburgh HB. First person accounts and sociological explanations of delinquency. Can Rev Sociol Anthropol 2000;37(1):77-93.

Tengstroem A, Grann M, Langstroem N, et al. Psychopathy (PCL-R) as a predictor of violent recidivism among criminal offenders with schizophrenia. Law Hum Behav 2000;24(1):45-58.

Teplin LA, Abram KM, McClelland GM. Does psychiatric disorder predict violent crime among released jail detainees? A six-year longitudinal study. Am Psychol 1994;49(4):335-42.

Thompson KM, Brownfield D, Sorenson AM. At-risk behavior and group fighting: A latent structure analysis. J Gang Res 1998;5(3):1-14.

Thornberry TP, Freeman-Gallant A, Lizotte AJ, et al. Linked lives: The intergenerational transmission of antisocial behavior. J Abnorm Child Psychol 2003;31(2):171-84.

Thornberry TP, Krohn MD, Lizotte AJ, et al. The role of juvenile gangs in facilitating delinquent behavior. J Res Crime Delinq 1993;30(1):55-87.

Tiet QQ, Wasserman GA, Loeber R, et al. Developmental and sex differences in types of conduct problems. J Child Fam Stud 2001;10(2):181-97.

Tinklenberg JA, Steiner H, Huckaby WJ, et al. Criminal recidivism predicted from narratives of violent juvenile delinquents. Child Psychiatry Hum Dev 1996;27(2):69-79.

Tippins BS. Family violence: a national epidemic. J Med Assoc Ga 1992;81(7):372-3.

Tobin T, Sugai G, Colvin G. Patterns in middle school discipline records. J Emot Behav Disord 1996;4(2):82-94.

Tobin TJ, Sugai GM. Using sixth-grade school records to predict school violence, chronic discipline problems, and high school outcomes. J Emot Behav Disord 1999;7(1):40-53.

Todis B, Severson HH, Walker HM. The Critical Events Scale: Behavioral profiles of students with externalizing and internalizing behavior disorders. Behav Disord 1990;15(2):75-86.

Tolan PH, Gorman-Smith D, Henry DB. Linking family violence to delinquency across generations? Child Serv

(Mahwah NJ) 2002;5(4):273-84.

Tolan PH, Gorman-Smith D, Henry DB. The developmental ecology of urban males' youth violence. Dev Psychol 2003;39(2):274-91.

Tolan PH, Gorman-Smith D, Henry DB. The developmental ecology of urban males' youth violence. Dev Psychol 2003;39(2):274-91.

Tolan PH, Gorman-Smith D, Loeber R. Developmental timing of onsets of disruptive behaviors and later delinquency of inner-city youth. J Child Fam Stud 2000;9(2):203-20.

Tolan PH, Henry D. Patterns of psychopathology among urban poor children: Comorbidity and aggression effects. J Consult Clin Psychol 1996;64(5):1094-9.

Tomori M. Personality characteristics of adolescents with alcoholic parents. Adolescence 1994;29(116):949-59.

Tones K. Health education: evidence of effectiveness. Arch Dis Child 1997;77(3):189-91.

Tong DA. Beyond prevention: healing the "sociomas". Healthc Forum J 1996;39(3):39-40, 57.

Tontodonato P, Crew BK. Dating violence, social learning theory, and gender: a multivariate analysis. Violence Vict 1992;7(1):3-14.

Toombs NJ, Benda B, Corwyn RF. Violent youth in boot camps for non-violent offenders. J Offender Rehabil 2000;31(3-4):113-33.

Totten M. Girlfriend abuse as a form of masculinity construction among violent, marginal male youth. Men Masc 2003;6(1):70-92.

Toupin J, Morissette L. Juvenile homicide: a case control study. Med Law 1990;9(3):986-94.

Tremblay RE, Schaal B. Physically aggressive boys from age 6 to 12 years. Their biopsychosocial status at puberty. Ann N Y Acad Sci 1996;794:192-207.

Tremblay RE, Schaal B, Boulerice B, et al. Testosterone, physical aggression, dominance, and physical development in early adolescence. Int J Behav Dev 1998;22(4):753-77.

Trickett PK, Noll JG, Reiffman A, et al. Variants of intrafamilial sexual abuse experience: implications for short- and long-term development. Dev Psychopathol 2001;13(4):1001-19.

Trulson C, Triplett R, Snell C. Social control in a school setting: Evaluating a school-based boot camp. Crime Delinq 2001;47(4):573-609.

Truscott D. Intergenerational transmission of violent behavior in adolescent males. Aggress Behav 1992;18(5):327-35.

Truscott D. Adolescent offenders: comparison for sexual, violent, and property offences. Psychol Rep 1993;73(2):657-8.

Tucker JB, Barone JE, Stewart J, et al. Violence prevention: reaching adolescents with the message. Pediatr Emerg Care 1999;15(6):436-9.

Tuisku K, Virkkunen M, Holi M, et al. Antisocial violent offenders with attention deficit hyperactivity disorder demonstrate akathisia-like hyperactivity in three-channel actometry. J Neuropsychiatry Clin Neurosci 2003;15(2):194-9.

Tuisku K, Virkkunen M, Holi M, et al. Antisocial violent offenders with attention deficit hyperactivity disorder demonstrate akathisia-like hyperactivity in three-channel actometry. J Neuropsychiatry Clin Neurosci 2003;15(2):194-9.

Tuninger EE, Levander S, Bernce R, et al. Criminality and aggression among psychotic in-patients: frequency and clinical correlates. Acta Psychiatr Scand 2001;103(4):294-300.

Tunzi M. Isn't this statutory rape? Am Fam Physician 2002;65(9):1950, 3-4.

Turnure C, Young P. Chemical abuse and family violence in Minnesota. Minn Med 1994;77(10):24-6.

Twemlow SW. A crucible for murder: The social context of violent children and adolescents. Psychoanal Q 2003;72(3):659-98.

Twemlow SW, Fonagy P, Sacco FC. An innovative psychodynamically influenced approach to reduce school violence. J Am Acad Child Adolesc Psychiatry 2001;40(3):377-9.

Twemlow SW, Fonagy P, Sacco FC, et al. Premeditated mass shootings in schools: threat assessment. J Am Acad Child Adolesc Psychiatry 2002;41(4):475-7.

Uberos DJ, Gomez A, Munoz A, et al. Television and childhood injuries: is there a connection? Arch Pediatr Adolesc Med 1998;152(7):712-4.

Uehara ES, Chalmers D, Jenkins EJ, et al. African American youth encounters with violence: Results from the Community Mental Health Council Violence Screening Project. J Black Stud 1996;26(6):768-81.

Ullman SE. A comparison of gang and individual rape incidents. Violence Vict 1999;14(2):123-33.

Ulman A, Straus MA. Violence by children against mothers in relation to violence between parents and corporal punishment by parents. J Comp Fam Stud 2003;34(1):41-60.

Underwood RC, Patch PC. Siblicide: A descriptive analysis of sibling homicide. Homicide Stud 1999;3(4):333-48.

Unger JB, Sussman S, Dent CW. Interpersonal conflict tactics and substance use among high-risk adolescents. Addictive Behaviors Addict Behav 2003;28(5):979-87.

Unis AS, Cook EH, Vincent JG, et al. Platelet serotonin measures in adolescents with conduct disorder. Biol Psychiatry 1997;42(7):553-9.

Valdez A, Kaplan CD, Codina E. Psychopathy among Mexican American gang members: A comparative study. Int J Offender Ther Comp Criminol 2000;44(1):46-58.

Valliant PM, Bergeron T. Personality and criminal profile of adolescent sexual offenders, general offenders in comparison to nonoffenders. Psychol Rep 1997;81(2):483-9.

Valois RF, McKeown RE, Garrison CZ, et al. Correlates of aggressive and violent behaviors among public high school adolescents. J Adolesc Health 1995;16(1):26-34.

Valois RF, McKewon RE. Frequency and correlated of fighting and carrying weapons among public school adolescents. Am J Health Behav 1998;22(1):8-17.

Valois RF, Oeltmann JE, Waller J, et al. Relationship between number of sexual intercourse partners and selected health risk behaviors among public high school adolescents. J Adolesc Health 1999;25(5):328-35.

Valois RF, Vincent ML, McKeown RE, et al. Adolescent risk behaviors and the potential for violence: a look at what's coming to campus. J Am Coll Health 1993;41(4):141-7.

Valois RF, Zullig KJ, Huebner ES, et al. Relationship between life satisfaction and violent behaviors among adolescents. Am J Health Behav 2001;25(4):353-66.

van Dis J, Mahmoodian M, Goddik S, et al. A survey of the prevalence of domestic violence in rural and Urban South Dakota. S D J Med 2002;55(4):133-9.

van Goozen SHM, Matthys W, Cohen-Kettenis PT, et al. Plasma monoamine metabolites and aggression: Two studies of normal and oppositional defiant disorder children. Eur Neuropsychopharmacol 1999;9(1-2):141-7.

van Goozen SHM, van den Ban E, Matthys W, et al. Increased adrenal androgen functioning in children with oppositional defiant disorder: A comparison with psychiatric and normal controls. J Am Acad Child Adolesc Psychiatry 2000;39(11):1446-51.

Vance JE, Bowen NK, Fernandez G, et al. Risk and protective factors as predictors of outcome in adolescents with psychiatric disorder and aggression. J Am Acad Child Adolesc Psychiatry 2002;41(1):36-43.

Vanderschmidt HF, Lang JM, Knight-Williams V, et al. Risks among inner-city young teens: the prevalence of sexual activity, violence, drugs, and smoking. J Adolesc Health 1993;14(4):282-8.

Vartiainen H, Tiihonen J, Putkonen A, et al. Citalopram, a selective serotonin reuptake inhibitor, in the treatment of aggression in schizophrenia. Acta Psychiatr Scand 1995;91(5):348-51.

Velsor-Friedrich B. Family violence: a growing epidemic. J Pediatr Nurs 1994;9(4):272-4.

Veneziano C, Veneziano L. A typology of family social environments for institutionalized juvenile delinquents: Implications for research and treatment. J Youth Adolesc 1992;21(5):593-607.

Vera Institute of Justice. Vera institute of justice. Accessed: May 2004. http://www.vera.org/.

Vernberg EM, Jacobs AK, Hershberger SL. Peer victimization and attitudes about violence during early adolescence. J Clin Child Psychol 1999;28(3):386-95.

Vidyasagar P, Mishra H. Effect of modelling on aggression. Indian J Clin Psychol 1993;20(1):50-2.

Viemeroe V. Factors in childhood that predict later criminal behavior. Aggress Behav 1996;22(2):87-97.

Villani S. Violence in the media. J Am Acad Child Adolesc Psychiatry 1999;38(10):1208.

Villani, S. Impact of media on children and adolescents: a 10-year review of the research. J Am Acad Child Adolesc Psychiatry 2001;40(4):392-401.

Villani S, Sharfstein SS. Evaluating and treating violent adolescents in the managed care era. Am J Psychiatry 1999;156(3):458-64.

Violence CftSaPo. Blueprints for violence prevention. Accessed: May 2004. http://www.colorado.edu/cspv/blueprints/.

Virkkunen M. Reactive hypoglycemic tendency among habitually violent offenders. Nutr Rev 1986;44 Suppl:94-103.

Vissing YM, Straus MA, Gelles RJ, et al. Verbal aggression by parents and psychosocial problems of children. Child Abuse Negl 1991;15(3):223-38.

Vitacco MJ, Rogers R. Predictors of adolescent psychopathy: the role of impulsivity, hyperactivity, and sensation seeking. J Am Acad Psychiatry Law 2001;29(4):374-82.

Vitaro F, Gendreau PL, Tremblay RE, et al. Reactive and proactive aggression differentially predict later conduct

problems. J Child Psychol Psychiatry 1998;39(3):377-85.

Vitelli R. Comparison of early and late start models of delinquency in adult offenders. Int J Offender Ther Comp Criminol 1997;41(4):351-7.

Vivona JM, Ecker B, Halgin RP. Self- and other-directed aggression in child and adolescent psychiatric inpatients. J Am Acad Child Adolesc Psychiatry 1995;34:434-44.

Volavka J, Laska E, Baker S, et al. History of violent behaviour and schizophrenia in different cultures. Analyses based on the WHO study on Determinants of Outcome of Severe Mental Disorders. Br J Psychiatry 1997;171:9-14.

Vowell PR, May DC. Another look at classic strain theory: poverty status, perceived blocked opportunity, and gang membership as predictors of adolescent violent behavior. Sociol Inq 2000;70(1):42-60.

Vukelich MS. Stop the media violence. Minn Med 1995;78(6):16-8.

Waite BM, Hillbrand M, Foster HG. Reduction of aggressive behavior after removal of music television. Hosp Community Psychiatry 1992;43(2):173-5.

Waldner-Haugrud LK, Gratch LV, Magruder B. Victimization and perpetration rates of violence in gay and lesbian relationships: gender issues explored. Violence Vict 1997;12(2):173-84.

Wallace JM, Forman TA. Religion's role in promoting health and reducing risk among American youth. Health Educ Behav 1998;25(6):721-41.

Walsh A. Genetic and environmental explanations of juvenile violence in advantaged and disadvantaged environments. Aggress Behav 1992;18(3):187-99.

Walsh D. Interactive media violence and children. Minn Med 2000;83(9):42-4.

Walsh MM, Pepler DJ, Levene KS. A Model Intervention for Girls with Disruptive Behaviour Disorders: The Earlscourt Girls Connection. Can J Couns 2002;36(4):297-311.

Walsh WJ, Isaacson HR, Rehman F, et al. Elevated blood copper/zinc ratios in assaultive young males. Physiol Behav 1997;62(2):327-9.

Waschbusch DA, Pelham WEJ, Jennings JR, et al. Reactive aggression in boys with disruptive behavior disorders: Behavior, physiology, and affect. J Abnorm Child Psychol 2002;30(6):641-56.

Watts WD, Wright LS. The drug use-violent delinquency link among adolescent Mexican-Americans. NIDA Res Monogr 1990;103:136-59.

Watts WD, Wright LS. The relationship of alcohol, tobacco, marijuana, and other illegal drug use to delinquency among Mexican-American, Black, and White adolescent males. Adolescence 1990;25(97):171-81.

Watts WD, Wright LS. The relationships of alcohol, tobacco, marijuana, and other illegal drug use to delinquency among Mexican-American, black, and white adolescent males. Adolescence 1990;25(97):171-81.

Way I, Chung S, Jonson-Reid M, et al. Maltreatment perpetrators: a 54-month analysis of recidivism. Child Abuse Negl 2001;25(8):1093-108.

Weaver GM, Wootton RR. The use of the MMPI special scales in the assessment of delinquent personality. Adolescence 1992;27(107):545-54.

Weber DO. Healing a violent society. Healthc Forum J 1996;39(5):22-32.

Webster DW, Gainer PS, Champion HR. Weapon carrying among inner-city junior high school students: defensive behavior vs aggressive delinquency. Am J Public Health 1993;83(11):1604-8.

Weiner MD, Pentz MA, Turner GE, et al. From early to late adolescence: alcohol use and anger relationships. J Adolesc Health 2001;28(6):450-7.

Weisburd D, Lum C, Petrosino A. Does research design affect study outcomes in criminal justice? Ann Am Acad Polit Soc Sci 2001;578:50-70.

Weishew NL, Peng SS. Variables predicting students' problem behaviors. J Educ Res 1993;87(1):5-17.

Weiss B, Dodge KA, Bates JE, et al. Some consequences of early harsh discipline: child aggression and a maladaptive social information processing style. Child Dev 1992;63(6):1321-35.

Weisz JR, Martin SL, Walter BR, et al. Differential prediction of young adult arrests for property and personal crimes: findings of a cohort follow-up study of violent boys from North Carolina's Willie M Program. J Child Psychol Psychiatry 1991;32(5):783-92.

Weisz JR, Suwanlert S, Chaiyasit W, et al. Behavioral and emotional problems among Thai and American adolescents: parent reports for ages 12-16. J Abnorm Psychol 1993;102(3):395-403.

Weisz JR, Walter BR, Weiss B. Arrests among emotionally disturbed violent and assaultive individuals following minimal versus lengthy intervention through North Carolina's Willie M program. J Consult Clin Psychol 1990;58:720-8.

Wekerle C, Wolfe DA. The role of child maltreatment and attachment style in adolescent relationship violence. Dev Psychopathol 1998;10(3):571-86.

Wekerle C, Wolfe DA, Hawkins DL, et al. Childhood maltreatment, posttraumatic stress symptomatology, and adolescent dating violence: considering the value of adolescent perceptions of abuse and a trauma mediational model. Dev Psychopathol 2001;13(4):847-71.

Weller NF, Tortolero SR, Kelder SH, et al. Health risk behaviors of Texas students attending dropout prevention/recovery schools in 1997. J Sch Health 1999;69(1):22-8.

Welsh J. Children and torture. Lancet 2000;356(9247):2093.

Welte JW, Wieczorek WF. Alcohol, intelligence and violent crime in young males. J Subst Abuse 1998;10(3):309-19.

Welte JW, Zhang L, Wieczorek WF. The effects of substance use on specific types of criminal offending in young men. J Res Crime Delinq 2001;38(4):416-38.

West CM, Rose S. Dating aggression among low income African American youth: An examination of gender differences and antagonistic beliefs. Violence Against Women 2000;6(5):470-94.

West S, King V, Carey T, et al. Systems to rate the strength of scientific svidence. Evidence Report/Technology Assessment No. 47. AHRQ Publication No. 02-E016. Rockville, MD: Agency for Healthcare Research and Quality; 2002.

Westhoff WW, McDermott RJ, Harokopos V. Acquisition of high-risk behavior by African-American, Latino, and Caucasian middle-school students. Psychol Rep 1996;79(3, Pt 1):787-95.

Whipple EE, Webster-Stratton C. The role of parental stress in physically abusive families. Child Abuse Negl 1991;15(3):279-91.

White HR, Brick J, Hansell S. A longitudinal investigation of alcohol use and aggression in adolescence. J Stud Alcohol 1993;Suppl 11:62-77.

White HR, Chen P-H, al e. Problem drinking and intimate partner violence. J Stud Alcohol 2002;63(2):205-14.

White HR, Hansell S. The moderating effects of gender and hostility on the alcohol-aggression relationship. J Res Crime Delinq 1996;33(4):450-70.

White HR, Hansell S. Acute and long-term effects of drug use on aggression from adolescence into adulthood. J Drug Issues 1998;28(4):837-58.

White HR, Hansell S, Brick J. Alcohol use and aggression among youth. Alcohol Health Res World 1993;17(2):144-50.

White HR, Loeber R, Stouthamer-Loeber M, et al. Developmental associations between substance use and violence. Dev Psychopathol 1999;11(4):785-803.

White HR, Tice PC, Loeber R, et al. Illegal acts committed by adolescents under the influence of alcohol and drugs. J Res Crime Delinq 2002;39(2):131-52.

Whitfield GW. Validating school social work: An evaluation of a cognitive-behavioral approach to reduce school violence. Res Soc Work Pract 1999;9(4):399-426.

Widom CS. Child abuse, neglect, and adult behavior: research design and findings on criminality, violence, and child abuse. Amer J Orhopsychiat 1989;59(3):355-67.

Widom CS. The role of placement experiences in mediating the criminal consequences of early childhood victimization. Am J Orthopsychiatry 1991;61(2):195-209.

Widom CS. Motivation and mechanisms in the "cycle of violence". Nebr Symp Motiv 2000;46:1-37.

Widom CS, Ames MA. Criminal consequences of childhood sexual victimization. Child Abuse Negl 1994;18(4):303-18.

Widom CS, Maxfield MG. A prospective examination of risk for violence among abused and neglected children. Ann N Y Acad Sci 1996;794:224-37.

Widom CS, White HR. Problem behaviours in abused and neglected children grown up: Prevalence and co-occurrence of substance abuse, crime and violence. Crim Behav Ment Health 1997;7(4):287-310.

Wieckowski E, Hartsoe P, Mayer A, et al. Deviant sexual behavior in children and young adolescents: Frequency and patterns. Sex Abuse 1998;10(4):293-303.

Wiist WH, Jackson RH, Jackson KW. Peer and community leader education to prevent youth violence. Am J Prev Med 1996;12(5 Suppl):56-64.

Willard JC, Schoenborn CA. Relationship between cigarette smoking and other unhealthy behaviors among our nation's youth: United States, 1992. Adv Data 1995(263):1-11.

Williams JH, Stiffman AR, O'Neal JL. Violence among urban African American youths: An analysis of environmental and behavioral risk factors. Soc Work Res 1998;22(1):3-13.

Williams O. Spouse abuse: social learning, attribution and interventions. J Health Soc Policy 1989;1(2):91-107.

Winpisinger KA, Hopkins RS, Indian RW, et al. Risk factors for childhood homicides in Ohio: a birth certificate-based case-control study. Am J Public Health 1991;81(8):1052-4.

Wintemute GJ, Wright MA, Parham CA, et al. Criminal

activity and assault-type handguns: a study of young adults. Ann Emerg Med 1998;32(1):44-50.

Witkowski MJ, Homant RJ, Barnes E. Work, workplace deviance, and criminal offenders: An analysis of Project GANGMILL. J Gang Res 2002;10(1):1-10.

Wolfe DA, Feiring C. Dating violence through the lens of adolescent romantic relationships. Child Maltreat 2000;5(4):360-3.

Wolfe DA, Wekerle C, Reitzel-Jaffe D, et al. Factors associated with abusive relationships among maltreated and nonmaltreated youth. Dev Psychopathol 1998;10(1):61-85.

Wolfe DA, Wekerle C, Scott K, et al. Dating violence prevention with at-risk youth: A controlled outcome evaluation. J Consult Clin Psychol 2003;71(2):279-91.

Wolfe DA, Wekerle C, Scott K, et al. Dating violence prevention with at-risk youth: a controlled outcome evaluation. J Consult Clin Psychol 2003;71(2):279-91.

Wolfe LR. "Girl stabs boy at school": girls and the cycle of violence. Womens Health Issues 1994;4(2):109-16.

Wolfe TW, Shoemaker DJ. Actor, situation, and context: A framework for delinquency theory integration. Am J Crim Justice 1999;24(1):117-38.

Workman M, Beer J. Depression, suicide ideation, and aggression among high school students whose parents are divorced and use alcohol at home. Psychol Rep 1992;70(2):503-11.

Worling JR. Sexual abuse histories of adolescent male sex offenders: differences on the basis of the age and gender of their victims. J Abnorm Psychol 1995;104(4):610-3.

Worling JR. Adolescent sibling-incest offenders: differences in family and individual functioning when compared to adolescent nonsibling sex offenders. Child Abuse Negl 1995;19(5):633-43.

Worling JR. Adolescent sex offenders against females: Differences based on the age of their victims. Int J Offender Ther Comp Criminol 1995;39(3):276-93.

Worling JR. Sexual abuse histories of adolescent male sex offenders: differences on the basis of the age and gender of their victims. J Abnorm Psychol 1995;104:610-13.

Worling JR. Personality-based typology of adolescent male sexual offenders: differences in recidivism rates, victim-selection characteristics, and personal victimization histories. Sex Abuse 2001;13(3):149-66.

Worling JR, Curwen T. Adolescent sexual offender recidivism: success of specialized treatment and implications for risk prediction. Child Abuse Negl 2000;24(7):965-82.

Wright S, Klee H. Violent crime, aggression and amphetamine: What are the implications for drug treatment services? Drug Educ Prev Policy 2001;8(1):73-90.

Xie H, Cairns RB, Cairns BD. The development of social aggression and physical aggression: A narrative analysis of interpersonal conflicts. Aggress Behav 2002;28(5):341-55.

Xie H, Farmer TW, Cairns BD. Different forms of aggression among inner-city African-American children: Gender, configurations and school social networks. J Sch Psychol 2003;41(5):355-75.

Xie H, Swift DJ, Cairns B, et al. Aggressive behaviors in social interaction and developmental adaptation: A narrative analysis of interpersonal conflicts during early adolescence. Soc Dev 2002;11(2):205-24.

Yarvis RM. Patterns of substance abuse and intoxication among murderers. Bull Am Acad Psychiatry Law 1994;22(1):133-44.

Yates TM, Dodds MF, Sroufe LA, et al. Exposure to partner violence and child behavior problems: A prospective study controlling for child physical abuse and neglect, child cognitive ability, socioeconomic status, and life stress. Dev Psychopathol 2003;15(1):199-218.

Yexley M, Borowsky I, Ireland M. Correlation between different experiences of intrafamilial physical violence and violent adolescent behavior. J Interpers Violence 2002;17(7):707-20.

Young TJ. Parricide rates and criminal street violence in the United States: is there a correlation? . Adolescence 1993;28(109):171-2.

Young TJ, French LA. Homicide rates among Native American children: the status integration hypothesis. Adolescence 1997;32(125):57-9.

Youngstrom E, Weist MD, Albus KE. Exploring violence exposure, stress, protective factors and behavioral problems among inner-city youth. Am J Community Psychol 2003;32(1-2):115-29.

Zagar R, Arbit J, Sylvies R, et al. Homicidal adolescents: a replication. Psychol Rep 1990;67(3 Pt 2):1235-42.

Zgourides G, Monto M, Harris R. Correlates of adolescent male sexual offense: Prior adult sexual contact, sexual attitudes, and use of sexually explicit materials. Int J Offender Ther Comp Criminol 1997;41(3):272-83.

Zhang L, Welte JW, Wieczorek WW, et al. The role of aggression-related alcohol expectancies in explaining the link between alcohol and violent behavior. Subst Use Misuse 2002;37(4):457-71.

Zhang L, Wieczorek WF, Welte JW. The nexus between alcohol and violent crime. Alcohol Clin Exp Res 1997;21(7):1264-71.

Zhang Q, Loeber R, Stouthamer-Loeber M. Developmental trends of delinquent attitudes and behaviors: Replications and synthesis across domains, time, and samples. J Quant Criminol 1997;13(2):181-215.

Zivin G, Hassan NR, DePaula GF, et al. An effective approach to violence prevention: traditional martial arts in middle school. Adolescence 2001;36(143):443-59.

Zoloth-Dorfman L. Audience and authority: the story in front of the story. J Clin Ethics 1996;7(4):355-61.

Listing of Excluded Studies

Anonymous. Weapon-carrying among high school students--United States, 1990. MMWR Morb Mortal Wkly Rep 1991;40(40):681-4. Excluded; Outcome is not violence.

Anonymous. From the Centers for Disease Control. Physical fighting among high school students--United States, 1990. JAMA 1992;267(22):3009-10. Excluded; Not a research study.

Anonymous. Physical fighting among high school students--United States, 1990. MMWR Morb Mortal Wkly Rep 1992;41(6):91-4. Excluded; Not addressing they key questions.

Anonymous. Domestic violence. Am J Public Health 1993;83(3):458-63. Excluded; Not a research study.

Anonymous. From the Centers for Disease Control and Prevention. Violence-related attitudes and behaviors of high school students--New York City, 1992. JAMA 1993;270(17):2032-3. Excluded; Study design not used.

Anonymous. Adolescent homicide--Fulton County, Georgia, 1988-1992. MMWR Morb Mortal Wkly Rep 1994;43(40):728-30. Excluded; Study does not focus on youth as perpetrators.

Anonymous. From the Centers for Disease Control and Prevention. Homicides among 15-19-year-old males--United States, 1963-1991. JAMA 1994;272(20):1572. Excluded; Study does not focus on youth as perpetrators.

Anonymous. The role of the pediatrician in violence prevention. Proceedings of a conference. Chantilly, Virginia, March 4-5, 1994. Pediatrics 1994;94(4 Pt 2):576-651. Excluded; Not a research study.

Anonymous. Sexual assault and the adolescent. American Academy of Pediatrics Committee on Adolescence. Pediatrics 1994;94(5):761-5. Excluded; Not a research study.

Anonymous. Media violence. American Academy of Pediatrics Committee on Communications. Pediatrics 1995;95(6):949-51. Excluded; Not a research study.

Anonymous. Defusing gang activity: different hospitals take different approaches. Hosp Secur Saf Manage 1999;19(11):1-4. Excluded; Not a research study.

Anonymous. Firearm-associated deaths and hospitalizations--California, 1995-1996. MMWR Morb Mortal Wkly Rep 1999;48(23):485-8. Excluded; Not addressing they key questions.

Anonymous. The WHO cross-national study on health behavior in school-aged children from 28 countries: findings from the United States. J Sch Health 2000;70(6):227-8. Excluded; Study does not focus on youth as perpetrators.

Anonymous. JAMA patient page. Bullying. JAMA 2001;285(16):2156. Excluded; Not a research study.

Anonymous. Children, youth and gun violence. Selected bibliography. Future Child 2002;12(2):Inside Back Cover. Excluded; Not a research study.

Aber J, Lawrence, Brown JL, Jones SM. Developmental trajectories toward violence in middle childhood: course, demographic differences, and response to school-based intervention. Dev Psychol 2003;39(2):324-48. Excluded; Duplicated citation or findings.

Aber JL, Brown JL, Chaudry N, et al. The evaluation of the resolving conflict creatively program: an overview. Am J Prev Med 1996;12(5 Suppl):82-90. Excluded; Study does not focus on youth as perpetrators.

Aber JL, Brown JL, Jones SM. Developmental trajectories toward violence in middle childhood: Course, demographic differences, and response to school-based intervention. Dev Psychol 2003;39(2):324-48. Excluded; Study does not focus on youth as perpetrators.

Aber JL, Jones SM, Brown JL, et al. Resolving conflict creatively: Evaluating the developmental effects of a school-based violence prevention program in neighborhood and classroom context. Dev Psychopathol 1998;10(2):187-213. Excluded; Outcome is not violence.

Abram KM, Teplin LA. Drug disorder, mental illness, and violence. NIDA Res Monogr 1990;103:222-38. Excluded; Study does not focus on youth as perpetrators.

Achenbach TM, Howell CT, McConaughy SH, et al. Six-year predictors of problems in a national sample: III. Transitions to young adult syndromes. J Am Acad Child Adolesc Psychiatry 1995;34(5):658-69. Excluded; Outcome is not violence.

Acton PA, Farley T, Freni LW, et al. Traumatic spinal cord injury in Arkansas, 1980 to 1989. Arch Phys Med Rehabil 1993;74(10):1035-40. Excluded; Outcome is not violence.

Adams D, Allen D. Assessing the need for reactive behaviour management strategies in children with intellectual disability and severe challenging behaviour. J Intellect Disabil Res 2001;45(4):335-43. Excluded; Not a U.S. study.

Adams J, McClellan J, Douglass D, et al. Sexually inappropriate behaviors in seriously mentally ill children and adolescents. Child Abuse Negl 1995;19(5):555-68. Excluded; Study design not used.

Adams PF, Schoenborn CA, Moss AJ, et al. Health-risk behaviors among our nation's youth: United States, 1992.

Vital Health Stat 10 1995(192):1-51. Excluded; Not addressing they key questions.

Adams PL, Arnow J. Children in violence. J Am Acad Psychoanal 1996;24(1):179-86. Excluded; Not a research study.

Adler NA, Schutz J. Sibling incest offenders. Child Abuse Negl 1995;19(7):811-9. Excluded; Study design not used.

af Klinteberg B. Biology, norms, and personality: a developmental perspective. Neuropsychobiology 1996;34(3):146-54. Excluded; Not a U.S. study.

af Klinteberg B, Andersson T, Magnusson D, et al. Hyperactive behavior in childhood as related to subsequent alcohol problems and violent offending: A longitudinal study of male subjects. Pers Individ Dif 1993;15(4):381-8. Excluded; Not a U.S. study.

Agnew R. The techniques of neutralization and violence. Criminology 1994;32:555-80. Excluded; Study design not used.

Ahmed MB. High-risk adolescents and satanic cults. Tex Med 1991;87(10):74-6. Excluded; Not a research study.

Akhtar N, Bradley EJ. Social information processing deficits of aggressive children: Present findings and implications for social skills training. Clin Psychol Rev 1991;11(5):621-44. Excluded; Not a research study.

Alaniz ML, Cartmill RS, Parker RN. Immigrants and violence: The importance of neighborhood context. Hisp J Behav Sci 1998;20(2):155-74. Excluded; Data not abstractable.

Alexander B. Violence: a public health problem. Am Fam Physician 1992;46(1):67-8. Excluded; Outcome is not violence.

Allen JS, Rupert V, Spatafora K, et al. Differentiating violent from nonviolent female offenders using the Jesness Inventory. Pers Individ Dif 2003;35(1):101-8. Excluded; Study design not used.

Altemeier WA. Is the media friend or foe to our children? Pediatr Ann 1995;24(2):68-9. Excluded; Not a research study.

Aluja-Fabregat A, Torrubia-Beltri R. Viewing of mass media violence, perception of violence, personality and academic achievement. Pers Individ Dif 1998;25(5):973-89. Excluded; Outcome is not violence.

Alvarez A. Trends and patterns of justifiable homicide: a comparative analysis. Violence Vict 1992;7(4):347-56. Excluded; Not a research study.

Amen DG, Stubblefield M, Carmicheal B, et al. Brain SPECT findings and aggressiveness. Ann Clin Psychiatry 1996;8(3):129-37. Excluded; Data not abstractable.

Amodei N, Elkin BB, Burge SK, et al. Psychiatric problems experienced by primary care patients who misuse alcohol. Int J Addict 1994;29(5):609-26. Excluded; Age of study population greater than 17 years.

Andershed H, Kerr M, Stattin H. Bullying in school and violence on the streets: Are the same people involved? J Scand Stud Crim Crime Prev 2001;2(1):31-49. Excluded; Not a U.S. study.

Andershed HA, Gustafson SB, Kerr M, et al. The usefulness of self-reported psychopathy-like traits in the study of antisocial behaviour among non-referred adolescents. Eur J Personal 2002;16(5):383-402. Excluded; Not a U.S. study.

Anderson CA, Bushman BJ, Groom RW. Hot years and serious and deadly assault: empirical tests of the heat hypothesis. J Pers Soc Psychol 1997;73(6):1213-23. Excluded; Data not abstractable.

Anderson NL, Roper JM. The interactional dynamics of violence, Part II: Juvenile detention. Arch Psychiatr Nurs 1991;5(4):216-22. Excluded; Not addressing they key questions.

Anderson NL, Roper JM. The interactional dynamics of violence: II. Juvenile detention. Arch Psychiatr Nurs 1991;5(4):216-22. Excluded; Outcome is not violence.

Andre C, Jaber-Filho JA, Carvalho M, et al. Predictors of recovery following involuntary hospitalization of violent substance abuse patients. Am J Addict 2003;12(1):84-9. Excluded; Not a U.S. study.

Andrews JA, Foster SL, Capaldi D, et al. Adolescent and family predictors of physical aggression, communication, and satisfaction in young adult couples: a prospective analysis. J Consult Clin Psychol 2000;68(2):195-208. Excluded; Age of study population greater than 17 years.

Andrews TK, Rose FD, Johnson DA. Social and behavioural effects of traumatic brain injury in children. Brain Inj 1998;12(2):133-8. Excluded; Not a U.S. study.

Ansevics NL, Doweiko HE. Serial murderers: Early proposed developmental model and typology. Psychother Priv Pract 1991;9(2):107-22. Excluded; Not a research study.

Archwamety T, Katsiyannis A. Factors related to recidivism among delinquent females at a state correctional facility. J Child Fam Stud 1998;7(1):59-67. Excluded; Outcome is not violence.

Arluke A, Levin J, Luke C, et al. The relationship of animal abuse to violence and other forms of antisocial behavior. J Interpers Violence 1999;14(9):963-75. Excluded; Data not abstractable.

Armenteros JL, Lewis JE. Citalopram treatment for

impulsive aggression in children and adolescents: An open pilot study. J Am Acad Child Adolesc Psychiatry 2002;41(5):522-9. Excluded; Data not abstractable.

Arria A, Borges G, Anthony JC. Fears and other suspected risk factors for carrying lethal weapons among urban youths of middle-school age. Arch Pediatr Adolesc Med 1997;151(6):555-60. Excluded; Outcome is not violence.

Arria AM, Wood NP, Anthony JC. Prevalence of carrying a weapon and related behaviors in urban schoolchildren, 1989 to 1993. Arch Pediatr Adolesc Med 1995;149(12):1345-50. Excluded; Outcome is not violence.

Artz S. Where have all the school girls gone? Violent girls in the school yard. Child Youth Care Forum 1998;27(2):77-109. Excluded; Not a U.S. study.

Ash P, Kellermann AL, Fuqua-Whitley D, et al. Gun acquisition and use by juvenile offenders. JAMA 1996;275(22):1754-8. Excluded; Outcome is not violence.

Askenazy F, Caci H, Myquel M, et al. Relationship between impulsivity and platelet serotonin content in adolescents. Psychiatry Res 2000;94(1):19-28. Excluded; Outcome is not violence.

Askenazy FL, Sorci K, Benoit M, et al. Anxiety and impulsivity levels identify relevant subtypes in adolescents with at-risk behavior. J Affect Disord 2003;74(3):219-27. Excluded; Outcome is not violence.

Asnis GM, Kaplan ML, van Praag HM, et al. Homicidal behaviors among psychiatric outpatients. Hosp Community Psychiatry 1994;45(2):127-32. Excluded; Data not abstractable.

Assaad J-M, Pihl RO, Seguin JR, et al. Aggressiveness, family history of alcoholism, and the heart rate response to alcohol intoxication. Exp Clin Psychopharmacol 2003;11(2):158-66. Excluded; Not a U.S. study.

Astor RA, Behre WJ. Violent and nonviolent children's and parents' reasoning about family and peer violence. Behav Disord 1997;22(4):231-45. Excluded; Outcome is not violence.

Astor RA, Meyer HA, Behre WJ. Unowned places and times: Maps and interviews about violence in high schools. Am Educ Res J 1999;36(1):3-42. Excluded; Not addressing they key questions.

Atkin CK, Smith SW, Roberto AJ, et al. Correlates of verbally aggressive communication in adolescents. J Appl Commun Res 2002;30(3):251-68. Excluded; Outcome is not violence.

Atlas RS, Pepler DJ. Observations of bullying in the classroom. J Educ Res 1998;92(2):86-99. Excluded; Outcome is not violence.

Attar BK, Guerra NG, Tolan PH. Neighborhood disadvantage, stressful life events, and adjustment in urban elementary-school children. J Clin Child Psychol 1994;23(4):391-400. Excluded; Age of study population greater than 17 years.

Auffrey C, Fritz JM, Lin B, et al. Exploring differences between violent and nonviolent juvenile offenders using juvenile corrections facility client records. J Educ Psychol Consult 1999;10(2):129-43. Excluded; Study design not used.

August GJ, Hektner JM, Egan EA, et al. The early risers longitudinal prevention trial: Examination of 3-year outcomes in aggressive children with intent-to treat and as-intended analyses. Psychol Addict Behav 2002;16(Suppl4):S27-S39. Excluded; Study does not focus on youth as perpetrators.

August GJ, Realmuto GM, Hektner JM, et al. An integrated components preventive intervention for aggressive elementary school children: The Early Risers program. J Consult Clin Psychol 2001;69(4):614-26. Excluded; Study does not focus on youth as perpetrators.

Avakame EF. Intergenerational transmission of violence, self-control, and conjugal violence: a comparative analysis of physical violence and psychological aggression. Violence Vict 1998;13(3):301-16. Excluded; Age of study population greater than 17 years.

Awad GA, Saunders EB. Male adolescent sexual assaulters: Clinical observations. J Interpers Violence 1991;6(4):446-60. Excluded; Not a U.S. study.

Ayers S. The truth about underage drinking. J La State Med Soc 2001;153(7):332-4. Excluded; Not a research study.

Aylwin AS, Clelland SR, Kirkby L, et al. Sexual offense severity and victim gender preference: A comparison of adolescent and adult sex offenders. Int J Law Psychiatry 2000;23(2):113-24. Excluded; Not a U.S. study.

Azrael D, Hemenway D. 'In the safety of your own home': results from a national survey on gun use at home. Soc Sci Med 2000;50(2):285-91. Excluded; Age of study population greater than 17 years.

Baba Y. Vietnamese gangs, cliques and delinquents. J Gang Res 2001;8(2):1-20. Excluded; Study design not used.

Bachman R, Peralta R. The relationship between drinking and violence in an adolescent population: Does gender matter? Deviant Behav 2002;23(1):1-19. Excluded; Data not abstractable.

Bagley C, Pritchard C. The reduction of problem behaviours and school exclusion in at-risk youth: An experimental study of school social work with cost-benefit analyses. Child Fam Soc Work 1998;3(4):219-26. Excluded; Not a U.S. study.

Bagley C, Shewchuk-Dann D. Characteristics of 60

children and adolescents who have a history of sexual assault against others: Evidence from a controlled study. J Child Youth Care 1991:43-52. Excluded; Not a U.S. study.

Bailey SL, Flewelling RL, Rosenbaum DP. Characteristics of students who bring weapons to school. J Adolesc Health 1997;20(4):261-70. Excluded; Outcome is not violence.

Bailey SM, Thornton L, Weaver AB. The first 100 admissions to an adolescent secure unit. J Adolesc 1994;17(3):207-20. Excluded; Not a U.S. study.

Baker AJ, Tabacoff R, Tornusciolo G, et al. Calculating number of offenses and victims of juvenile sexual offending: the role of posttreatment disclosures. Sex Abuse 2001;13(2):79-90. Excluded; Outcome is not violence.

Baker K, Pollack M, Kohn I. Violence prevention through informal socialization: An evaluation of the South Baltimore Youth Center. Stud Crime Crime Prev 1995;4(1):61-85. Excluded; Outcome is not violence.

Baker W, Bramston P. Attributional and emotional determinants of aggression in people with mild intellectual disabilities. J Intellect Dev Disabil 1997;22(3):169-85. Excluded; Not a U.S. study.

Baldwin K. MSMS alliance focuses on violence prevention. Mich Med 2001;100(4):53. Excluded; Not a research study.

Bank L, Duncan T, Patterson GR, et al. Parent and teacher ratings in the assessment and prediction of antisocial and delinquent behaviors. J Pers 1993;61(4):693-709. Excluded; Not a research study.

Barkin S, Kreiter S, DuRant RH. Exposure to violence and intentions to engage in moralistic violence during early adolescence. J Adolesc 2001;24(6):777-89. Excluded; Outcome is not violence.

Barnes A, Ephross PH. The impact of hate violence on victims: emotional and behavioral responses to attacks. Soc Work 1994;39(3):247-51. Excluded; Age of study population greater than 17 years.

Barnow S, Schuckit M, Smith TL, et al. The real relationship between the family density of alcoholism and externalizing symptoms among 146 children. Alcohol Alcohol 2002;37(4):383-7. Excluded; Data not abstractable.

Baron SW. Risky lifestyles and the link between offending and victimization. Stud Crime Crime Prev 1997;6(1):53-71. Excluded; Not a U.S. study.

Baron SW, Hartnagel TF. Street youth and criminal violence. J Res Crime Delinq 1998;35(2):166-92. Excluded; Not a U.S. study.

Baron SW, Hartnagel TF. Street youth and labor market strain. J Crim Justice 2002;30(6):519-33. Excluded; Not a U.S. study.

Barrios LC. Preventing school violence: a time for hard, solid thinking. Inj Prev 2000;6(3):165-6. Excluded; Not a research study.

Barry CT, Frick PJ, Killian AL. The relation of narcissism and self-esteem to conduct problems in children: A preliminary investigation. J Clin Child Adolesc Psychol 2003;32(1):139-52. Excluded; Outcome is not violence.

Barry DS. Screen violence and America's children. Spectrum 1993;66:37-42. Excluded; Not a research study.

Bars DR, Heyrend FL, Simpson CD, et al. Use of visual evoked-potential studies and EEG data to classify aggressive, explosive behavior of youths. Psychiatr Serv 2001;52(1):81-6. Excluded; Study design not used.

Barstow DG. An offender-friendly society. J Psychosoc Nurs Ment Health Serv 1994;32(8):56. Excluded; Not a research study.

Barylnik J. Psychopathology, psychosocial characteristics and family environment in juvenile delinquents. Ger J Psychol 2003;6(2):30-2. Excluded; Not addressing they key questions.

Beaudoin MN, Hodgins S, Lavoie F. Homicide, schizophrenia and substance abuse or dependency. Can J Psychiatry 1993;38(8):541-6. Excluded; Not a U.S. study.

Beauford JE, McNiel DE, Binder RL. Utility of the initial therapeutic alliance in evaluating psychiatric patients' risk of violence. Am J Psychiatry 1997;154(9):1272-6. Excluded; Age of study population greater than 17 years.

Beauvais F, Chavez EL, Oetting ER, et al. Drug use, violence, and victimization among White American, Mexican American, and American Indian dropouts, students with academic problems, and students in good academic standing. J Couns Psychol 1996;43(3):292-9. Excluded; Study design not used.

Becker DF, Edell WS, Fujioka TA. Attentional and intellectual deficits in unmedicated behavior-disordered adolescent inpatients. J Youth Adolesc 1996;25:127-35. Excluded; Duplicated citation or findings.

Becker DF, Edell WS, Fujioka TA, et al. Attentional and intellectual deficits in unmedicated behavior-disordered adolescent inpatients. J Youth Adolesc 1996;25(1):127-35. Excluded; Data not abstractable.

Beer J, Beer J. Aggression of youth as related to parental divorce and eye color. Percept Mot Skills 1992;75(3 Pt 2):1066. Excluded; Study design not used.

Beier SR, Rosenfeld WD, Spitalny KC, et al. The potential role of an adult mentor in influencing high-risk behaviors in adolescents. Arch Pediatr Adolesc Med 2000;154(4):327-31. Excluded; Outcome is not violence.

Bell CC, Jenkins EJ. Traumatic stress and children. J Health Care Poor Underserved 1991;2(1):175-85; Discussion 86-8. Excluded; Not a research study.

Bell CC, Jenkins EJ. Community violence and children on Chicago's southside. Psychiatry 1993;56(1):46-54. Excluded; Not addressing they key questions.

Bell K. Female offenders of sexual assault. J Emerg Nurs 1999;25(3):241-3. Excluded; Not a research study.

Bellair PE, Roscigno VJ. Local labor-market opportunity and adolescent delinquency. Soc Forces 2000;78(4):1509-38. Excluded; Study design not used.

Bellair PE, Roscigno VJ, McNulty TL. Linking local labor market opportunity to violent adolescent delinquency. J Res Crime Delinq 2003;40(1):6-33. Excluded; Study design not used.

Bellair PE, Roscigno VJ, McNulty TL. Linking local labor market opportunity to violent adolescent delinquency. J Res Crime Delinq 2003;40(1):6-33. Excluded; Duplicated citation or findings.

Benda BB, Corwyn RF. The effect of abuse in childhood and in adolescence on violence among adolescents. Youth Soc 2002;33(3):339-65. Excluded; Study design not used.

Benda BB, Corwyn RF, Rodell DE. Alcohol and violence among youth in boot camps for non-violent offenders. Alcohol Treat Q 2001;19(1):37-55. Excluded; Age of study population greater than 17 years.

Benda BB, Turney HM. Youthful violence: Problems and prospects. Child Adolesc Social Work J 2002;19(1):5-34. Excluded; Study design not used.

Bender D, Loesel F. Protective and risk effects of peer relations and social support on antisocial behaviour in adolescents from multi-problem milieus. J Adolesc 1997;20(6):661-78. Excluded; Not a U.S. study.

Bennett L. Growing up with violence. Can Nurse 1993;89(7):33-6. Excluded; Not a research study.

Bennett L, Fineran S. Sexual and severe physical violence among high school students. Power beliefs, gender, and relationship. Am J Orthopsychiatry 1998;68(4):645-52. Excluded; Study design not used.

Bennett LW, Tolman RM, Rogalski CJ, et al. Domestic abuse by male alcohol and drug addicts. Violence Vict 1994;9(4):359-68. Excluded; Age of study population greater than 17 years.

Benoit JL, Kennedy WA. The abuse history of male adolescent sex offenders. J Interpers Violence 1992;7(4):543-48. Excluded; Study design not used.

Benoit M. Impact of violence on children and adolescents: Report from a community-based child psychiatry clinic. Psychiatry Interpers Biol Process 1993;56(1):124-6. Excluded; Not a research study.

Bentovim A. Trauma-organized systems in practice: Implications for work with abused and abusing children and young people. Clin Child Psychol Psychiatry 1996;1(4):513-24. Excluded; Not a research study.

Berenbaum SA, Resnick SM. Early androgen effects on aggression in children and adults with congenital adrenal hyperplasia. Psychoneuroendocrinology 1997;22(7):505-15. Excluded; Outcome is not violence.

Bergeret J. Adolescence: the crossroads of violence. J Adolesc Health 1992;13(5):418-9. Excluded; Not a research study.

Bergman L. Dating violence among high school students. Soc Work 1992;37(1):21-7. Excluded; Study does not focus on youth as perpetrators.

Berman LH. The effects of living with violence. J Am Acad Psychoanal 1992;20(4):671-5. Excluded; Not a research study.

Bernstein DP, Stein JA, Handelsman L. Predicting personality pathology among adult patients with substance use disorders: effects of childhood maltreatment. Addictive Behaviors Addict Behav 1998;23(6):855-68. Excluded; Outcome is not violence.

Berthhold KA, Hoover JH. Correlates of bullying and victimization among intermediate students in the Midwestern USA. Sch Psychol Int 2000;21(1):65-78. Excluded; Data not abstractable.

Bickett LR, Milich R, Brown RT. Attributional styles of aggressive boys and their mothers. J Abnorm Child Psychol 1996;24(4):457-72. Excluded; Outcome is not violence.

Bierman KL, Smoot DL, Aumiller K. Characteristics of aggressive-rejected, aggressive (nonrejected), and rejected (nonaggressive) boys. Child Dev 1993;64(1):139-51. Excluded; Study does not focus on youth as perpetrators.

Bihm EM, Poindexter AR, Warren ER. Aggression and psychopathology in persons with severe or profound mental retardation. Res Dev Disabil 1998;19(5):423-38. Excluded; Age of study population greater than 17 years.

Billingham RE, Bland R, Leary A. Dating violence at three time periods: 1976, 1992, and 1996. Psychol Rep 1999;85(2):574-8. Excluded; Age of study population greater than 17 years.

Billingham RE, Gilbert KR. Parental divorce during childhood and use of violence in dating relationships. Psychol Rep 1990;66(3 Pt 1):1003-9. Excluded; Age of study population greater than 17 years.

Bincer WL. The tragedy of gun violence. Wis Med J

1994;93(10):508-9. Excluded; Not a research study.

Birmaher B, Stanley M, Greenhill L, et al. Platelet imipramine binding in children and adolescents with impulsive behavior. J Am Acad Child Adolesc Psychiatry 1990;29(6):914-8. Excluded; Data not abstractable.

Birnbaum AS, Lytle LA, Hannan PJ, et al. School functioning and violent behavior among young adolescents: a contextual analysis. Health Educ Res 2003;18(3):389-403. Excluded; Study design not used.

Bischof GP, Stith SM, Whitney ML. Family environments of adolescent sex offenders and other juvenile delinquents. Adolescence 1995;30(117):157-70. Excluded; Study design not used.

Bischof GP, Stith SM, Wilson SM. A comparison of the family systems of adolescent sexual offenders and nonsexual offending delinquents. Fam Relat 1992;41(3):318-23. Excluded; Study design not used.

Bjoerkqvist K, Lagerspetz KM, Kaukiainen A. Do girls manipulate and boys fight? Developmental trends in regard to direct and indirect aggression. Aggress Behav 1992;18(2):117-27. Excluded; Outcome is not violence.

Bjorkly S. SCL-90-R profiles in a sample of severely violent psychiatric inpatients. Aggress Behav 2002;28(6):446-57. Excluded; Not a U.S. study.

Black MM, Ricardo IB. Drug use, drug trafficking, and weapon carrying among low-income, African-American, early adolescent boys. Pediatrics 1994;93(6 Pt 2):1065-72. Excluded; Data not abstractable.

Blake PY, Pincus JH, Buckner C. Neurologic abnormalities in murderers. Neurology 1995;45(9):1641-7. Excluded; Study does not focus on youth as perpetrators.

Blum J, Ireland M, Blum RW. Gender differences in juvenile violence: A report from Add Health. J Adolesc Health 2003;32(3):234-40. Excluded; Study design not used.

Blum J, Ireland M, Blum RW. Gender differences in juvenile violence: A report from Add Health. J Adolesc Health 2003;32(3):234-40. Excluded; Study design not used.

Blum RW, Beuhring T, Shew ML, et al. The effects of race/ethnicity, income, and family structure on adolescent risk behaviors. Am J Public Health 2000;90(12):1879-84. Excluded; Data not abstractable.

Blumensohn R, Ratzoni G, Weizman A, et al. Reduction in serotonin 5HT-sub-2 receptor binding on platelets of delinquent adolescents. Psychopharmacology (Berl) 1995;118(3):354-6. Excluded; Not a U.S. study.

Blumensohn R, Ratzoni G, Weizman A, et al. Reduction in serotonin 5HT2 receptor binding on platelets of delinquent adolescents. Psychopharmacology (Berl) 1995;118(3):354-6. Excluded; Not a U.S. study.

Blumenthal S, Gudjonsson G, Burns J. Cognitive distortions and blame attribution in sex offenders against adults and children. Child Abuse Negl 1999;23(2):129-43. Excluded; Not a U.S. study.

Bodtker A. Conflict education and special-needs students, part two: Improving conflict competence and emotional competence. Mediat Q 2001;18(4):377-95. Excluded; Outcome is not violence.

Bolger KE, Patterson CJ. Developmental pathways from child maltreatment to peer rejection. Child Dev 2001;72(2):549-68. Excluded; Data not abstractable.

Bolland JM. Hopelessness and risk behaviour among adolescents living in high-poverty inner-city neighbourhoods. J Adolesc 2003;26(2):145-58. Excluded; Study design not used.

Bolland JM. Hopelessness and risk behaviour among adolescents living in high-poverty inner-city neighbourhoods. J Adolesc 2003;26(2):145-58. Excluded; Duplicated citation or findings.

Bolland JM, McCallum DM, Lian B, et al. Hopelessness and violence among inner-city youths. Matern Child Health J 2001;5(4):237-44. Excluded; Study design not used.

Bond AJ, Surguy SM. Relationship between attitudinal hostility and P300 latencies. Progr Neuro-Psychopharmacol Biol Psychiatr 2000;24(8):1277-88. Excluded; Outcome is not violence.

Booker AL, Hoffschmidt SJ, Ash E. Personality features and characteristics of violent events committed by juvenile offenders. Behav Sci Law 2001;19(1):81-96. Excluded; Not addressing the key questions.

Boone SL. Aggression in African-American boys: A discriminant analysis. Genet Soc Gen Psychol Monogr 1991;117(2):203-28. Excluded; Data not abstractable.

Booth RE, Zhang Y. Severe aggression and related conduct problems among runaway and homeless adolescents. Psychiatr Serv 1996;47(1):75-80. Excluded; Data not abstractable.

Borgatti JC. Crisis at Columbine: a lesson learned? Nurs Spectr (N Engl Ed) 1999;9(11):6-7, 32. Excluded; Not a research study.

Boruch RF, Coleman D, Doria-Ortiz C, et al. Violence prevention strategies targeted at the general population of minority youth. Public Health Rep 1991;106(3):247-50. Excluded; Not a research study.

Borzekowski DL, Poussaint AF. Common themes from the extremes: using two methodologies to examine adolescents' perceptions of anti-violence public service

announcements. J Adolesc Health 2000;26(3):164-75. Excluded; Outcome is not violence.

Bosch X. Firearm-related homicides among teenagers and young adults. JAMA 1999;281(4):324. Excluded; Not a research study.

Bosworth K, Espelage D, DuBay T. A computer-based violence prevention intervention for young adolescents: pilot study. Adolescence 1998;33(132):785-95. Excluded; Outcome is not violence.

Bosworth K, Espelage D, DuBay T, et al. Using multimedia to teach conflict-resolution skills to young adolescents. Am J Prev Med 1996;12(5 Suppl):65-74. Excluded; Data not abstractable.

Bosworth K, Espelage DL, Simon TR. Factors associated with bullying behavior in middle school students. J Early Adolesc 1999;19(3):341-62. Excluded; Outcome is not violence.

Boulton MJ. A comparison of structural and contextual features of middle school children's playful and aggressive fighting. Ethol Sociobiol 1991;12(2):119-45. Excluded; Not a U.S. study.

Boulton MJ, Flemington I. The effects of a short video intervention on secondary school pupils' involvement in definitions of and attitudes towards bullying. Sch Psychol Int 1996;17(4):331-45. Excluded; Outcome is not violence.

Boulton MJ, Underwood K. Bully/victim problems among middle school children. Br J Educ Psychol 1992;62(Pt 1):73-87. Excluded; Not a U.S. study.

Bowen NK, Flora DB. When is it appropriate to focus on protection in interventions for adolescents? Am J Orthopsychiatry 2002;72(4):526-38. Excluded; Study design not used.

Bowers L, Smith PK, Binney V. Perceived family relationships of bullies, victims and bully/victims in middle childhood. J Soc Pers Relatsh 1994;11(2):215-32. Excluded; Not a U.S. study.

Bownes IT, O'Gorman EC, Sayers A. Rape--a comparison of stranger and acquaintance assaults. Med Sci Law 1991;31(2):102-9. Excluded; Not a U.S. study.

Boyatzis CJ, Matillo GM, Nesbitt KM. Effects of the "Mighty Morphin Power Rangers" on children's aggression with peers. Child Study J 1995;25(1):45-55. Excluded; Study does not focus on youth as perpetrators.

Brady EC, Chrisler JC, Hosdale DC, et al. Date rape: expectations, avoidance strategies, and attitudes toward victims. J Soc Psychol 1991;131(3):427-9. Excluded; Outcome is not violence.

Braga AA. Serious youth gun offenders and the epidemic of youth violence in Boston. J Quant Criminol 2003;19(1):33-54. Excluded; Data not abstractable.

Braga AA, Kennedy DM, Waring EJ, et al. Problem-oriented policing, deterrence, and youth violence: An evaluation of Boston's Operation Ceasefire. J Res Crime Delinq 2001;38(3):195-225. Excluded; Study does not focus on youth as perpetrators.

Brame R, Mulvey EP, Piquero AR. On the development of different kinds of criminal activity. Sociol Methods Res 2001;29(3):319-41. Excluded; Not a research study.

Brannon JM, Troyer R. Peer group counseling: A normalized residential alternative to the specialized treatment of adolescent sex offenders. Int J Offender Ther Comp Criminol 1991;35(3):225-34. Excluded; Not addressing they key questions.

Brecklin LR. The role of perpetrator alcohol use in the injury outcomes of intimate assaults. J Fam Violence 2002;17(3):185-97. Excluded; Age of study population greater than 17 years.

Bremer JF. Serious juvenile sex offenders: Treatment and long-term follow-up. Psychiatr Ann 1992;22(6):326-32. Excluded; Study does not focus on youth as perpetrators.

Brendgen M, Vitaro F, Tremblay RE, et al. Parent and peer effects on delinquency-related violence and dating violence: A test of two mediational models. Soc Dev 2002;11(2):225-44. Excluded; Not a U.S. study.

Brendgen M, Vitaro R, Tremblay RE, et al. Reactive and proactive aggression: predictions to physical violence in different contexts and moderating effects of parental monitoring and caregiving behavior. J Abnorm Child Psychol 2001;29(4):293-304. Excluded; Not a U.S. study.

Brener ND, Krug EG, Dahlberg LL, et al. Nurses' logs as an evaluation tool for school-based violence prevention programs. J Sch Health 1997;67(5):171-4. Excluded; Not a research study.

Brener ND, Simon TR, Krug EG, et al. Recent trends in violence-related behaviors among high school students in the United States. JAMA 1999;282(5):440-6. Excluded; Study design not used.

Brener ND, Wilson TW. Substance use on school property among students attending alternative high schools in the United States. J Drug Educ 2001;31(4):329-42. Excluded; Outcome is not violence.

Brennan PA, Grekin ER, Mednick SA. Maternal smoking during pregnancy and adult male criminal outcomes. Arch Gen Psychiatry 1999;56(3):215-9. Excluded; Not a U.S. study.

Breslow RE, Klinger BI, Erickson BJ. The disruptive behavior disorders in the psychiatric emergency service. Gen Hosp Psychiatry 1999;21(3):214-9. Excluded; Study design not used.

Bretherton D, Collins L, Ferretti C. Dealing with conflict: Assessment of a course for secondary school students. Aust Psychol 1993;28(2):105-11. Excluded; Not a U.S. study.

Brezina T, Piquero AR, Mazerolle. Student anger and aggressive behavior in school: An initial test of Agnew's macro-level strain theory. J Res Crime Delinq 2001;38(4):362-86. Excluded; Data not abstractable.

Briere J, Elliott D. Prevalence, characteristics, and long-term sequelae of natural disaster exposure in the general population. J Trauma Stress 2000;13(4):661-79. Excluded; Outcome is not violence.

Briggs S, MacKay T, Miller S. The Edinbarnet Playground Project: Changing aggressive behavior through structured intervention. AEP J 1995;11(2):37-44. Excluded; Not a research study.

Briscoe J. Breaking the cycle of violence: A rational approach to at-risk youth. Fed Probat 1997;61(3):3-13. Excluded; Not a research study.

Brockenbrough KK, Cornell DG, Loper AB. Aggressive attitudes among victims of violence at school. Educ Treat Child 2002;25(3):273-87. Excluded; Study design not used.

Brody SL. Violence associated with acute cocaine use in patients admitted to a medical emergency department. NIDA Res Monogr 1990;103:44-59. Excluded; Age of study population greater than 17 years.

Broidy LM, Nagin DS, Tremblay RE, et al. Developmental trajectories of childhood disruptive behaviors and adolescent delinquency: A six-site, cross-national study. Dev Psychol 2003;39(2):222-45. Excluded; Not a research study.

Broidy LM, Nagin DS, Tremblay RE, et al. Developmental trajectories of childhood disruptive behaviors and adolescent delinquency: a six-site, cross-national study. Dev Psychol 2003;39(2):222-45. Excluded; Duplicated citation or findings.

Brondolo E, Baruch C, Conway E, et al. Aggression among inner-city minority youth: A biopsychosocial model for school-based evaluation and treatment. J Soc Distress Homeless 1994;3(1):53-80. Excluded; Outcome is not violence.

Brooke MM, Questad KA, Patterson DR, et al. Agitation and restlessness after closed head injury: a prospective study of 100 consecutive admissions. Arch Phys Med Rehabil 1992;73(4):320-3. Excluded; Outcome is not violence.

Brookoff D, O'Brien KK, Cook CS, et al. Characteristics of participants in domestic violence. Assessment at the scene of domestic assault. JAMA 1997;277(17):1369-73. Excluded; Age of study population greater than 17 years.

Brooks JH, Reddon JR. Serum testosterone in violent and nonviolent young offenders. J Clin Psychol 1996;52(4):475-83. Excluded; Not a U.S. study.

Brown TL, Henggeler SW, Brondino MJ, et al. Trauma exposure, protective factors and mental health functioning of substance-abusing and dependent juvenile offenders. J Emot Behav Disord 1999;7(2):94-102. Excluded; Outcome is not violence.

Buitelaar JK. Open-label treatment with risperidone of 26 psychiatrically-hospitalized children and adolescents with mixed diagnoses and aggressive behavior. J Child Adolesc Psychopharmacol 2000;10(1):19-26. Excluded; Not a research study.

Buitelaar JK, van der Gaag RJ, Cohen-Kettenis P, et al. A randomized controlled trial of risperidone in the treatment of aggression in hospitalized adolescents with subaverage cognitive abilities. J Clin Psychiatry 2001;62(4):239-48. Excluded; Not a U.S. study.

Burke EC. Youth violence. An epidemic vaccines can't treat. Minn Med 1993;76(8):5. Excluded; Not a research study.

Burks VS, Laird RD, Dodge KA, et al. Knowledge structures, social information processing, and children's aggressive behavior. Soc Dev 1999;8(2):220-36. Excluded; Data not abstractable.

Burrell B, Thompson B, Sexton D. Predicting child abuse potential across family types. Child Abuse Negl 1994;18(12):1039-49. Excluded; Outcome is not violence.

Burt CW. Injury-related visits to hospital emergency departments: United States, 1992. Adv Data 1995(261):1-20. Excluded; Not a research study.

Burton D, Foy D, Bwanausi C, et al. The relationship between traumatic exposure, family dysfunction, and post-traumatic stress symptoms in male juvenile offenders. J Trauma Stress 1994;7(1):83-93. Excluded; Outcome is not violence.

Burton DL. An examination of social cognitive theory with differences among sexually aggressive, physically aggressive and nonaggressive children in state care. Violence Vict 1999;14(2):161-78. Excluded; Age of study population greater than 17 years.

Burton DL, Nesmith AA, Badten L. Clinician's views on sexually aggressive children and their families: A theoretical exploration. Child Abuse Negl 1997;21(2):157-70. Excluded; Study does not focus on youth as perpetrators.

Busch KG, Zagar R, Hughes JR, et al. Adolescents who kill. J Clin Psychol 1990;46(4):472-85. Excluded; Study design not used.

Bushman BJ, Baumeister RF. Threatened egotism,

narcissism, self-esteem, and direct and displaced aggression: does self-love or self-hate lead to violence? J Pers Soc Psychol 1998;75(1):219-29. Excluded; Age of study population greater than 17 years.

Buss DM. Manipulation in close relationships: five personality factors in interactional context. J Pers 1992;60(2):477-99. Excluded; Outcome is not violence.

Butchart A, Engstrom K, al. e. Sex- and age- specific relations between economic development, economic inequality and homicide rates in people aged 0-24 years: a cross-sectional analysis. Bull World Health Organ 2002;80(10):797-805. Excluded; Study does not focus on youth as perpetrators.

Butts JA, Snyder HN. Youngest delinquents: Offenders under age 15. Sch Interv Rep 1997;11(2):6-11. Excluded; Not a research study.

Butz C, Spaccarelli S. Use of physical force as an offense characteristic in subtyping juvenile sexual offenders. Sex Abuse 1999;11(3):217-32. Excluded; Study design not used.

Bynum EG, Weiner RI. Self-concept and violent delinquency in urban African-American adolescent males. Psychol Rep 2002;90(2):477-86. Excluded; Study design not used.

Caggiano AD. Identifying violent-toward-staff juvenile delinquents via the Millon Adolescent Clinical Inventory and neuropsychological measures. J Offender Rehabil 2000;32(1-2):147-65. Excluded; Not addressing they key questions.

Cahn MD, Chamberlain B, Cross PO, et al. Forum on youth violence in minority communities. Interventions in early childhood. Public Health Rep 1991;106(3):258-63. Excluded; Not a research study.

Cairns RB, Coleman-Miller B, Greenwood PW, et al. Violence prevention strategies directed toward high-risk minority youths. Public Health Rep 1991;106(3):250-4. Excluded; Not a research study.

Caldwell JR. Interpersonal violence. Can political, sociologic or economic reform stem the epidemic? J Fla Med Assoc 1994;81(7):459-60. Excluded; Not a research study.

Caldwell MF, Van Rybroek GJ. Efficacy of a decompression treatment model in the clinical management of violent juvenile offenders. Int J Offender Ther Comp Criminol 2001;45(4):469-77. Excluded; Outcome is not violence.

Calicchia JA, Moncata SJ, Santostefano S. Cognitive control differences in violent juvenile inpatients. J Clin Psychol 1993;49(5):731-40. Excluded; Study design not used.

Callahan CM, Rivara FP, Farrow JA. Youth in detention and handguns. J Adolesc Health 1993;14(5):350-5. Excluded; Outcome is not violence.

Calvert WJ. Neighborhood disorder, individual protective factors, and the risk of adolescent delinquency. ABNF J 2002;13(6):127-35. Excluded; Study design not used.

Campanella S. Delinquency risk prediction. J Child Youth Care 1990;4(5):73-83. Excluded; Not a research study.

Campbell A. Representations, repertoires and power: Mother-child conflict. J Theory Soc Behav 1995;25(1):35-57. Excluded; Outcome is not violence.

Campbell A, Muncer S, Odber J. Aggression and testosterone: Testing a bio-social model. Aggress Behav 1997;23(4):229-38. Excluded; Not a U.S. study.

Campbell JS, Lerew C. Juvenile sex offenders in diversion. Sex Abuse 2002;14(1):1-17. Excluded; Not addressing they key questions.

Cano A, Avery-Leaf S, Cascardi M, et al. Dating violence in two high school samples: Discriminating variables. J Prim Prev 1998;18(4):431-46. Excluded; Study design not used.

Cantrell PJ, MacIntyre DI, Sharkey KJ, et al. Violence in the marital dyad as a predictor of violence in the peer relationships of older adolescents/young adults. Violence Vict 1995;10(1):35-41. Excluded; Age of study population greater than 17 years.

Capaldi DM, Clark S. Prospective family predictors of aggression toward female partners for at-risk young men. Dev Psychol 1998;34(6):1175-88. Excluded; Data not abstractable.

Capaldi DM, Dishion TJ, Stoolmiller M, et al. Aggression toward female partners by at-risk young men: the contribution of male adolescent friendships. Dev Psychol 2001;37(1):61-73. Excluded; Age of study population greater than 17 years.

Capaldi DM, Owen LD. Physical aggression in a community sample of at-risk young couples: gender comparisons for high frequency, injury, and fear. J Fam Psychol 2001;15(3):425-40. Excluded; Study does not focus on youth as perpetrators.

Capaldi DM, Patterson GR. Can violent offenders be distinguished from frequent offenders: Prediction from childhood to adolescence. J Res Crime Delinq 1996;33(2):206-31. Excluded; Data not abstractable.

Capaldi DM, Shortt JW, Crosby L. Physical and psychological aggression in at-risk young couples: Stability and change in young adulthood. Merrill Palmer Q 2003;49(1):1-27. Excluded; Data not abstractable.

Cappell C, Heiner RB. The intergenerational transmission

of family aggression. J Fam Violence 1990;5(2):135-52. Excluded; Age of study population greater than 17 years.

Caprara GV, Barbaranelli C, Pastorelli C, et al. Prosocial foundations of children's academic achievement. Psychol Sci 2000;11(4):302-6. Excluded; Outcome is not violence.

Caprara GV, Regalia C, Bandura A. Longitudinal impact of perceived self-regulatory eficacy on violent conduct. Eur Psychol 2002;7(1):63-9. Excluded; Not a U.S. study.

Caputo AA, Frick PJ, Brodsky SL. Family violence and juvenile sex offending: The potential mediating role of psychopathic traits and negative attitudes toward women. Crim Justice Behav 1999;26(3):338-56. Excluded; Not addressing they key questions.

Carbonneau R, Tremblay RE, Vitaro F, et al. Paternal alcoholism, paternal absence and the development of problem behaviors in boys from age six to twelve years. J Stud Alcohol 1998;59(4):387-98. Excluded; Not a U.S. study.

Carlo G, Raffaelli M, Laible DJ, et al. Why are girls less physically aggressive than boys? Personality and parenting mediators of physical aggression. Sex Roles 1999;40(9-10):711-29. Excluded; Data not abstractable.

Carlson BE. Adolescent observers of marital violence. J Fam Violence 1990;5(4):285-99. Excluded; Study design not used.

Carlson EA. A prospective longitudinal study of attachment disorganization/disorientation. Child Dev 1998;69(4):1107-28. Excluded; Outcome is not violence.

Carpenter EM, Nangle DW. Effects of brief verbal instructions on aggression: A replication in a Head Start setting. Child Fam Behav Ther 2002;24(4):21-38. Excluded; Outcome is not violence.

Carroll ST, Riffenburgh RH, Roberts TA, et al. Tattoos and body piercings as indicators of adolescent risk-taking behaviors. Pediatrics 2002;109(6):1021-10217. Excluded; Data not abstractable.

Carvajal SC, Hanson CE, Romero AJ, et al. Behavioural risk factors and protective factors in adolescents: a comparison of Latinos and non-Latino whites. Ethn Health 2002;7(3):181-93. Excluded; Study design not used.

Caspi A, Begg D, Dickson N. Personality differences predict health-risk behaviors in young adulthood: evidence from a longitudinal study. J Pers Soc Psychol 1997;73:1052-63. Excluded; Duplicated citation or findings.

Caspi A, Begg D, Dickson N, et al. Personality differences predict health-risk behaviors in young adulthood: evidence from a longitudinal study. J Pers Soc Psychol 1997;73(5):1052-63. Excluded; Not a U.S. study.

Caspi A, McClay J, Moffitt TE, et al. Role of genotype in the cycle of violence in maltreated children. Science 2002;297(5582):851-4. Excluded; Not a U.S. study.

Caspi A, Moffitt TE, Newman DL, et al. Behavioral observations at age 3 years predict adult psychiatric disorders. Longitudinal evidence from a birth cohort. Arch Gen Psychiatry 1996;53(11):1033-9. Excluded; Not a U.S. study.

Cassetta RA. Children: a community in crisis. Am Nurse 1994;26(10):1, 20-1. Excluded; Not a research study.

Cassetta RA. Nurses work to prevent violence in schools. Am Nurse 1994;26(4):7. Excluded; Not a research study.

Castiglia PT. Gangs. J Pediatr Health Care 1993;7(1):39-41. Excluded; Not a research study.

Cauffman E, Feldman SS, Waterman J, et al. Posttraumatic stress disorder among female juvenile offenders. J Am Acad Child Adolesc Psychiatry 1998;37(11):1209-16. Excluded; Data not abstractable.

Cavell TA, Hughes JN. Secondary prevention as context for assessing change processes in aggressive children. J Sch Psychol 2000;38(3):199-235. Excluded; Study does not focus on youth as perpetrators.

Chang J, Jen, Chen JJ, Brownson RC. The role of repeat victimization in adolescent delinquent behaviors and recidivism. J Adolesc Health 2003;32(4):272-80. Excluded; Duplicated citation or findings.

Chang JJ, Chen JJ, Brownson RC. The role of repeat victimization in adolescent delinquent behaviors and recidivism. J Adolesc Health 2003;32(4):272-80. Excluded; Data not abstractable.

Chapple CL. Examining intergenerational violence: violent role modeling or weak parental controls? Violence Vict 2003;18(2):143-62. Excluded; Study design not used.

Charlebois P, LeBlanc M, Gagnon C, et al. Age trends in early behavioral predictors of serious antisocial behaviors. J Psychopathol Behav Assess 1993;15(1):23-41. Excluded; Not a U.S. study.

Chase KA, Treboux D, O'Leary KD. Characteristics of high-risk adolescents' dating violence. J Interpers Violence 2002;17(1):33-49. Excluded; Study design not used.

Chase KA, Treboux D, O'Leary KD, et al. Specificity of dating aggression and its justification among high-risk adolescents. J Abnorm Child Psychol 1998;26(6):467-73. Excluded; Study does not focus on youth as perpetrators.

Cheadle A, Wagner E, Anderman C, et al. Measuring community mobilization in the Seattle Minority Youth Health Project. Eval Rev 1998;22(6):699-716. Excluded; Not a research study.

Cheadle A, Wagner E, Walls M, et al. The effect of neighborhood-based community organizing: results from the Seattle Minority Youth Health Project. Health Serv Res 2001;36(4):671-89. Excluded; Outcome is not violence.

Chen C, Greenberger E, Lester J, et al. A cross-cultural study of family and peer correlates of adolescent misconduct. Dev Psychol 1998;34(4):770-81. Excluded; Data not abstractable.

Cheng TL, Wright JL, Fields CB, et al. Violent injuries among adolescents: declining morbidity and mortality in an urban population. Ann Emerg Med 2001;37(3):292-300. Excluded; Outcome is not violence.

Cheong J, Patock-Peckham JA, Nagoshi CT. Effects of alcoholic beverage, instigation, and inhibition on expectancies of aggressive behavior. Violence Vict 2001;16(2):173-84. Excluded; Outcome is not violence.

Cherpitel CJ. Alcohol and casualties: a comparison of emergency room and coroner data. Alcohol Alcohol 1994;29(2):211-8. Excluded; Age of study population greater than 17 years.

Chesney-Lind M, Paramore VV. Are girls getting more violent? Exploring juvenile robbery trends. J Contemp Crim Justice 2001;17(2):142-66. Excluded; Outcome is not violence.

Cheung P, Schweitzer I, Tuckwell V, et al. A prospective study of assaults on staff by psychiatric in-patients. Med Sci Law 1997;37(1):46-52. Excluded; Not a U.S. study.

Choi PY, Pope HG. Violence toward women and illicit androgenic-anabolic steroid use. Ann Clin Psychiatry 1994;6(1):21-5. Excluded; Data not abstractable.

Christoffel KK. Violent death and injury in US children and adolescents. Am J Dis Child 1990;144(6):697-706. Excluded; Not a research study.

Christoffel KK. Firearm-related homicides among teenagers and young adults. JAMA 1999;281(4):323-4. Excluded; Not a research study.

Christoffel KK, Spivak H, Witwer M. Youth violence prevention: the physician's role. JAMA 2000;283(9):1202-3. Excluded; Not a research study.

Cirillo KJ, Pruitt BE, Colwell B, et al. School violence: prevalence and intervention strategies for at-risk adolescents. Adolescence 1998;33(130):319-30. Excluded; Outcome is not violence.

Clare P, Bailey S, Clark A. Relationship between psychotic disorders in adolescence and criminally violent behaviour. A retrospective examination. Br J Psychiatry 2000;177:275-9. Excluded; Not a research study.

Clark E, Beck D, Sloane H, et al. Self-modeling with preschoolers: Is it different? Sch Psychol Int 1993;14(1):83-9. Excluded; Outcome is not violence.

Clark J. Our youth, our future. J Ky Med Assoc 1994;92(5):197-8. Excluded; Not a research study.

Clarke J, Stein MD, Sobota M, et al. Victims as victimizers: physical aggression by persons with a history of childhood abuse. Arch Intern Med 1999;159(16):1920-4. Excluded; Age of study population greater than 17 years.

Clarke RA, Murphy DL, Constantino JN. Serotonin and externalizing behavior in young children. Psychiatry Res 1999;86(1):29-40. Excluded; Age of study population greater than 17 years.

Claussen AH, Crittenden PM. Physical and psychological maltreatment: relations among types of maltreatment. Child Abuse Negl 1991;15(1-2):5-18. Excluded; Study does not focus on youth as perpetrators.

Clemence AJ, Hilsenroth MJ, Sivec HJ, et al. Hand Test AGG and AOS variables: Relation with teacher rating of aggressiveness. J Pers Assess 1999;73(3):334-44. Excluded; Data not abstractable.

Clubb PA, Browne DC, Humphrey AD, et al. Violent behaviors in early adolescent minority youth: results from a "middle school youth risk behavior survey". Matern Child Health J 2001;5(4):225-35. Excluded; Study design not used.

Coccaro EF, Kavoussi RJ, Hauger RL. Serotonin function and antiaggressive response to fluoxetine: a pilot study. Biol Psychiatry 1997;42(7):546-52. Excluded; Outcome is not violence.

Cochran JK, Wood PB, Arneklev BJ. Is the religiosity-delinquency relationship spurious? Social control theories. J Res Crime Delinq 1994;31(1):92-123. Excluded; Outcome is not violence.

Cockburn A. The best years of their lives. New Statesman Soc 1990;3:25-6. Excluded; Not a research study.

Cohen E. The violent adolescent: theoretical and clinical considerations. Am J Psychoanal 2002;62(3):209-12. Excluded; Not a research study.

Cohen RA, Rosenbaum A, Kane RL, et al. Neuropsychological correlates of domestic violence. Violence Vict 1999;14(4):397-411. Excluded; Age of study population greater than 17 years.

Cohen S, Lang C. Forum on youth violence in minority communities. Application of the principles of community-based programs. Public Health Rep 1991;106(3):269-70. Excluded; Not a research study.

Coie JD, Cillessen AHN, Dodge KA, et al. It takes two to fight: A test of relational factors and a method for assessing aggressive dyads. Dev Psychol 1999;35(5):1179-88. Excluded; Study does not focus on youth as perpetrators.

Coker AL, McKeown RE, Sanderson M, et al. Severe dating violence and quality of life among south carolina high school students. Am J Prev Med 2000;19(4):220-7. Excluded; Study design not used.

Colder CR, Lochman JE, Wells KC. The moderating effects of children's fear and activity level on relations between parenting practices and childhood symptomatology. J Abnorm Child Psychol 1997;25(3):251-63. Excluded; Age of study population greater than 17 years.

Colder CR, Mott J, Levy S, et al. The relation of perceived neighborhood danger to childhood aggression: A test of mediating mechanisms. Am J Community Psychol 2000;28(1):83-103. Excluded; Study does not focus on youth as perpetrators.

Cole DA, Maxwell SE, Martin JM, et al. The development of multiple domains of child and adolescent self-concept: a cohort sequential longitudinal design. Child Dev 2001;72(6):1723-46. Excluded; Outcome is not violence.

Coleman M, Pfeiffer S, Oakland T. Aggression replacement training with behaviorally disordered adolescents. Behav Disord 1992;18(1):54-66. Excluded; Data not abstractable.

Coles CJ, Greene AF, Braithwaite HO. The relationship between personality, anger expression, and perceived family control among incarcerated male juveniles. Adolescence 2002;37(146):395-409. Excluded; Outcome is not violence.

Collinsworth HJ. Adolescent violence. J La State Med Soc 2000;152(10):483-4. Excluded; Not a research study.

Colsman M, Wulfert E. Conflict Resolution Style as an Indicator of Adolescents' Substance Use and Other Problem Behaviors. Addict Behav 2002;27(4):633-48. Excluded; Study design not used.

Compton R. Discovering the promise of curriculum integration: The National Curriculum Integration Project. Confl Resolut Q 2002;19(4):447-64. Excluded; Not a research study.

Connolly J, Pepler D, Craig W, et al. Dating experiences of bullies in early adolescence. Child Maltreat 2000;5(4):299-310. Excluded; Not a U.S. study.

Connor DE, Edwards G, Fletcher KE, et al. Correlates of comorbid psychopathology in children with ADHD. J Am Acad Child Adolesc Psychiatry 2003;42(2):193-200. Excluded; Outcome is not violence.

Connor DF, Barkley RA, Davis HT. A pilot study of methylphenidate, clonidine, or the combination in ADHD comorbid with aggressive oppositional defiant or conduct disorder. Clin Pediatr (Phila) 2000;39(1):15-25. Excluded; Outcome is not violence.

Connor DF, Melloni RH, Harrison RJ. Overt categorical aggression in referred children and adolescents. J Am Acad Child Adolesc Psychiatry 1998;37(1):66-73. Excluded; Not addressing they key questions.

Connor DF, Melloni RHJ, Harrison RJ. Overt categorical aggression in referred children and adolescents. J Am Acad Child Adolesc Psychiatry 1998;37(1):66-73. Excluded; Duplicated citation or findings.

Connor DF, Ozbayrak KR, Benjamin S, et al. A pilot study of nadolol for overt aggression in developmentally delayed individuals. J Am Acad Child Adolesc Psychiatry 1997;36(6):826-34. Excluded; Data not abstractable.

Conroy DE, Silva JM, Newcomer RR, et al. Personal and participatory socializers of the perceived legitimacy of aggressive behavior in sport. Aggress Behav 2001;27(6):405-18. Excluded; Outcome is not violence.

Conseur A, Rivara FP, Barnoski R, et al. Maternal and perinatal risk factors for later delinquency. Pediatrics 1997;99(6):785-90. Excluded; Outcome is not violence.

Constantino JN, Liberman M, Kincaid M. Effects of serotonin reuptake inhibitors on aggressive behavior in psychiatrically hospitalized adolescents: results of an open trial. J Child Adolesc Psychopharmacol 1997;7(1):31-44. Excluded; Duplicated citation or findings.

Conway KP, McCord J. A longitudinal examination of the relation between co-offending with violent accomplices and violent crime. Aggress Behav 2002;28(2):97-108. Excluded; Study design not used.

Coohey C. The role of friends, in-laws, and other kin in father-perpetrated child physical abuse. Child Welfare 2000;79(4):373-402. Excluded; Outcome is not violence.

Cook PJ, Juarez P, Lee RK, et al. Weapons and minority youth violence. Public Health Rep 1991;106(3):254-8. Excluded; Not a research study.

Cookson HM. Alcohol use and offence type in young offenders. Br J Criminol 1992;32(3):352-60. Excluded; Not a U.S. study.

Cooley-Quille MR, Turner SM, Beidel DC. Emotional impact of children's exposure to community violence: a preliminary study. J Am Acad Child Adolesc Psychiatry 1995;34(10):1362-8. Excluded; Outcome is not violence.

Coppens NM, Gentry LK. Video analysis of playground injury-risk situations. Res Nurs Health 1991;14(2):129-36. Excluded; Outcome is not violence.

Corbett M, Duggan C, Larkin E. Substance misuse and violence: A comparison of special hospital inpatients diagnosed with either schizophrenia or personality disorder. Crim Behav Ment Health 1998;8(4):311-21. Excluded; Not a U.S. study.

Cornell DG. Prior adjustment of violent juvenile offenders. Law Hum Behav 1990;14(6):569-77. Excluded; Study design not used.

Cornell DG. Juvenile homicide: A growing national problem. Behav Sci Law 1993;11(4):389-96. Excluded; Not addressing they key questions.

Cornell DG, Loper AB. Assessment of violence and other high-risk behaviors with a school survey. School Psych Rev 1998;27(2):317-30. Excluded; Study design not used.

Cornell DG, Peterson CS, Richards H. Anger as a predictor of aggression among incarcerated adolescents. J Consult Clin Psychol 1999;67(1):108-15. Excluded; Study design not used.

Cornell DG, Wilson LA. The PIQ greater than VIQ discrepancy in violent and nonviolent delinquents. J Clin Psychol 1992;48(2):256-61. Excluded; Study design not used.

Cortoni F, Marshall WL. Sex as a coping strategy and its relationship to juvenile sexual history and intimacy in sexual offenders. Sex Abuse 2001;13(1):27-43. Excluded; Outcome is not violence.

Corwyn RF, Benda BB. Violent youths in southern public schools in America. Int J Adolesc Youth 2001;10(1-2):69-90. Excluded; Study design not used.

Costello BJ, Dunaway RG. Egotism and delinquent behavior. J Interpers Violence 2003;18(5):572-90. Excluded; Study design not used.

Cota-Robles S, Neiss M, Rowe DC. The role of puberty in violent and nonviolent delinquency among Anglo American, Mexican American, and African American boys. J Adolesc Res 2002;17(4):364-76. Excluded; Study design not used.

Cotten NU, Resnick J, Browne DC, et al. Aggression and fighting behavior among African-American adolescents: individual and family factors. Am J Public Health 1994;84(4):618-22. Excluded; Study design not used.

Cotton P. Violence decreases with gang truce. JAMA 1992;268(4):443-4. Excluded; Not a research study.

Cottrol C, Frances R. Substance abuse, comorbid psychiatric disorder, and repeated traumatic injuries. Hosp Community Psychiatry 1993;44(8):715-6. Excluded; Outcome is not violence.

Courtenay WH. Youth violence? Let's call it what it is. J Am Coll Health 1999;48(3):141-2. Excluded; Not a research study.

Cousins LH. Toward a sociocultural context for understanding violence and disruption in Black urban schools and communities. J Sociol Soc Welf 1997;24(2):41-63. Excluded; Not a research study.

Cousins LH. Moral markets for troubling youths: A disruption! Child Glob J Child Res 2001;8(2):193-211. Excluded; Not a research study.

Cousins LH, Mabrey T. Re-gendering social work practice and education: The case for African-American girls. J Hum Behav Soc Environ 1998;1(2-3):91-104. Excluded; Not a research study.

Cowie H, Olafsson R. The role of peer support in helping the victims of bullying in a school with high levels of aggression. Sch Psychol Int 2000;21(1):79-95. Excluded; Outcome is not violence.

Cox RD, Schopler E. Aggression and self-injurious behaviors in persons with autism: The TEACCH approach. Acta Paedopsychiatr 1993;56(2):85-90. Excluded; Not a research study.

Coyne-Beasley T, Schoenbach VJ, Herman-Giddens ME. The epidemiology of adolescent homicide in North Carolina from 1990 to 1995. Arch Pediatr Adolesc Med 1999;153(4):349-56. Excluded; Study does not focus on youth as perpetrators.

Craig WM. The relationship among bullying, victimization, depression, anxiety, and aggression in elementary school children. Pers Individ Dif 1998;24(1):123-30. Excluded; Data not abstractable.

Craig WM, Pepler D, Atlas R. Observations of bullying in the playground and in the classroom. Sch Psychol Int 2000;21(1):22-36. Excluded; Not a U.S. study.

Cramer E, McFarlane J. Pornography and abuse of women. Public Health Nurs 1994;11(4):268-72. Excluded; Age of study population greater than 17 years.

Crane-Ross D, Tisak MS, Tisak J. Aggression and conventional rule violation among adolescents: Social-reasoning predictors of social behavior. Aggress Behav 1998;24(5):347-65. Excluded; Outcome is not violence.

Crick NR. Engagement in gender normative versus nonnormative forms of aggression: Links to social-psychological adjustment. Dev Psychol 1997;33(4):610-7. Excluded; Study does not focus on youth as perpetrators.

Crick NR, Dodge KA. Social information-processing mechanisms on reactive and proactive aggression. Child Dev 1996;67(3):993-1002. Excluded; Outcome is not violence.

Crick NR, Grotpeter JK, Bigbee MA. Relationally and physically aggressive children's intent attributions and feelings of distress for relational and instrumental peer provocations. Child Dev 2002;73(4):1134-42. Excluded; Study does not focus on youth as perpetrators.

Crimmins S, Langley S, Brownstein HH, et al. Convicted

women who have killed children: A self-psychology perspective. J Interpers Violence 1997;12(1):49-69. Excluded; Age of study population greater than 17 years.

Crimmins SM, Cleary SD, Brownstein HH, et al. Trauma, drugs and violence among juvenile offenders. J Psychoactive Drugs 2000;32(1):43-54. Excluded; Study design not used.

Crittenden PM, Craig SE. Developmental trends in the nature of child homicide. J Interpers Violence 1990;5(2):202-16. Excluded; Age of study population greater than 17 years.

Crowley TJ, Mikulich SK, MacDonald M, et al. Substance-dependent, conduct-disordered adolescent males: severity of diagnosis predicts 2-year outcome. Drug Alcohol Depend 1998;49(3):225-37. Excluded; Not addressing they key questions.

Crowner ML, Douyon R, Convit A, et al. Akathisia and violence. Psychopharmacol Bull 1990;26(1):115-7. Excluded; Age of study population greater than 17 years.

Crowner ML, Douyon R, Convit A, et al. Videotape recording of assaults on a state hospital inpatient ward. J Neuropsychiatry Clin Neurosci 1991;3(2):S9-S14. Excluded; Age of study population greater than 17 years.

Crowner ML, Stepcic F, Peric G, et al. Typology of patient-patient assaults detected by videocameras. Am J Psychiatry 1994;151(11):1669-72. Excluded; Age of study population greater than 17 years.

Ctr NGCR. Bomb and arson crimes among American gang members: A behavioral science profile. J Gang Res 2001;9(1):1-38. Excluded; Not a research study.

Cubbin C, Pickle LW, Fingerhut L. Social context and geographic patterns of homicide among US black and white males. Am J Public Health 2000;90(4):579-87. Excluded; Study does not focus on youth as perpetrators.

Cuddy ME, Frame C. Comparison of aggressive and nonaggressive boys' self-efficacy and outcome expectancy beliefs. Child Study J 1991;21(2):135-52. Excluded; Outcome is not violence.

Cuffel BJ, Shumway M, Chouljian TL, et al. A longitudinal study of substance use and community violence in schizophrenia. J Nerv Ment Dis 1994;182(12):704-8. Excluded; Age of study population greater than 17 years.

Cummings AL, Leschied AW. Understanding aggression with adolescent girls: Implications for policy and practice. Can J Commun Ment Health 2001;20(2):43-57. Excluded; Outcome is not violence.

Cummings P, Koepsell TD, Grossman DC, et al. The association between the purchase of a handgun and homicide or suicide. Am J Public Health 1997;87(6):974-8. Excluded; Study does not focus on youth as perpetrators.

Cunningham CE, Cunningham LJ, Martorelli V, et al. The effects of primary division, student-mediated conflict resolution programs on playground aggression. Journal of Child Psychology and Psychiatry, and Allied Disciplines 1998;39(5):653-62. Excluded; Not a U.S. study.

Cunningham PB, Henggeler SW. Implementation of an empirically based drug and violence prevention and intervention program in public school settings. J Clin Child Psychol 2001;30(2):221-32. Excluded; Not a research study.

Cunningham PB, Henggeler SW, Limber SP, et al. Patterns and correlates of gun ownership among nonmetropolitan and rural middle school students. J Clin Child Psychol 2000;29(3):432-42. Excluded; Not addressing they key questions.

Curtner-Smith ME. Mechanisms by which family processes contribute to school-age boy's bullying. Child Study J 2000;30(3):169-86. Excluded; Study does not focus on youth as perpetrators.

Dabbs JM, Jurkovic GJ, Frady RL. Salivary testosterone and cortisol among late adolescent male offenders. J Abnorm Child Psychol 1991;19(4):469-78. Excluded; Study design not used.

Daderman AM, Edman G. Flunitrazepam abuse and personality characteristics in male forensic psychiatric patients. Psychiatry Res 2001;103(1):27-42. Excluded; Not a U.S. study.

Daldin H. Assaultive behavior in the analysis of children. Psychoanal Psychol 1992;9(4):477-88. Excluded; Not a research study.

Daly M, Wilson M. Killing the competition: Female/female and male/male homicide. Hum Nat 1990;1(1):81-107. Excluded; Not a U.S. study.

Daly M, Wilson M, Salmon CA, et al. Siblicide and seniority. Homicide Stud 2001;5(1):30-45. Excluded; Not a U.S. study.

Daly RC, Su T-P, Schmidt PJ, et al. Neuroendocrine and behavioral effects of high-dose anabolic steroid administration in male normal volunteers. Psychoneuroendocrinology 2003;28(3):317-31. Excluded; Outcome is not violence.

Danov R, Bucci W. Attachment processes among violence-prone minority youths and their caretakers. NYS Psychol 2002;14(1):28-32. Excluded; Outcome is not violence.

Darby PJ, Allan WD, Kashani JH, et al. Analysis of 112 juveniles who committed homicide: Characteristics and a closer look at family abuse. J Fam Violence 1998;13(4):365-75. Excluded; Not addressing they key questions.

David C, Steele R, Forehand R, et al. The role of family conflict and marital conflict in adolescent functioning. J Fam Violence 1996;11(1):81-91. Excluded; Outcome is not violence.

Davidson P, Koziol-McLain J, Harrison L, et al. Intoxicated ED patients: a 5-year follow-up of morbidity and mortality. Ann Emerg Med 1997;30(5):593-7. Excluded; Outcome is not violence.

Davidson PW, Cain NN, Sloane-Reeves JE, et al. Characteristics of community-based individuals with mental retardation and aggressive behavioral disorders. Am J Ment Retard 1994;98(6):704-16. Excluded; Data not abstractable.

Davidson PW, Others A. Characteristics of children and adolescents with mental retardation and frequent outwardly directed aggressive behavior. Am J Ment Retard 1996;101(3):244-55. Excluded; Data not abstractable.

Davis BT, Hops H, Alpert A, et al. Child responses to parental conflict and their effect on adjustment: A study of triadic relations. J Fam Psychol 1998;12(2):163-77. Excluded; Outcome is not violence.

Davis DL, Boster LH. Cognitive-behavioral-expressive interventions with aggressive and resistant youths. Child Welfare 1992;71(6):557-73. Excluded; Not a research study.

Davis DL, Boster LH. Cognitive-behavioral-expressive interventions with aggressive and resistant youth. Resid Treat Child Youth 1993;10(4):55-68. Excluded; Not a research study.

Davis E, Beverly C. Youth violence: An action research project. J Multicult Soc Work 1991;1(3):33-44. Excluded; Not addressing they key questions.

Davis TC, Byrd RS, Arnold CL, et al. Low literacy and violence among adolescents in a summer sports program. J Adolesc Health 1999;24(6):403-11. Excluded; Study design not used.

Davis TC, Peck GQ, Storment JM. Acquaintance rape and the high school student. J Adolesc Health 1993;14(3):220-4. Excluded; Data not abstractable.

Dawkins MP. Drug use and violent crime among adolescents. Adolescence 1997;32(126):395-405. Excluded; Not addressing they key questions.

Dawson DA. Alternative measures and models of hazardous consumption. Journal of Substance Abuse 2000;12(1-2):79-91. Excluded; Outcome is not violence.

Dawson J. Vortex of evil. New Statesman Soc 1990;3:12-4. Excluded; Not a research study.

Day DM, Bream LA, Pal A. Proactive and reactive aggression: An analysis of subtypes based on teacher perceptions. J Clin Child Psychol 1992;21(3):210-7. Excluded; Not a U.S. study.

Day HD, Franklin JM, Marshall DD. Predictors of aggression in hospitalized adolescents. J Psychol 1998;132(4):427-34. Excluded; Not addressing they key questions.

Day K. Male mentally handicapped sex offenders. Br J Psychiatry 1994;165(5):630-9. Excluded; Study does not focus on youth as perpetrators.

de Anda D. A qualitative evaluation of a mentor program for at-risk youth: The participants' perspective. Child Adolesc Social Work J 2001;18(2):97-117. Excluded; Outcome is not violence.

Deffenbacher JL, Swaim RC. Anger expression in Mexican American and White non-Hispanic adolescents. J Couns Psychol 1999;46(1):61-9. Excluded; Study design not used.

Deibert GR, Miethe TD. Character contests and dispute-related offenses. Deviant Behav 2003;24(3):245-67. Excluded; Age of study population greater than 17 years.

Delva-Tauiliili J. Does brief Aikido training reduce aggression of youth? Percept Mot Skills 1995;80(1):297-8. Excluded; Study does not focus on youth as perpetrators.

Delveaux KD, Daniels T. Children's social cognitions: Physically and relationally aggressive strategies and children's goals in peer conflict situations. Merrill Palmer Q 2000;46(4):672-92. Excluded; Outcome is not violence.

Dembo R. Predictors of recidivism to a juvenile assessment center: An expanded analysis. J Child Adolesc Subst Abus 1996;5(1):27-53. Excluded; Outcome is not violence.

Dembo R, Hughes P, Jackson L, et al. Crack cocaine dealing by adolescents in two public housing projects: A pilot study. Hum Organ 1993;52(1):89-96. Excluded; Outcome is not violence.

Dembo R, Schmeidler J, Nini-Gough B, et al. Predictors of recidivism to a juvenile assessment center: A three year study. J Child Adolesc Subst Abus 1998;7(3):57-77. Excluded; Not addressing they key questions.

Dembo R, Turner G, Borden P, et al. Screening high risk youths for potential problems: Field application in the use of the Problem Oriented Screening Instrument for Teenagers (POSIT). J Child Adolesc Subst Abus 1994;3(4):69-93. Excluded; Not addressing they key questions.

Dembo R, Turner G, Sue CC, et al. Predictors of recidivism to a juvenile assessment center. Int J Addict 1995;30(11):1425-52. Excluded; Not addressing they key questions.

Dembo R, Williams L, La Voie L, et al. A longitudinal study of the relationships among alcohol use,

marijuana/hashish use, cocaine use, and emotional/psychological functioning problems in a cohort of high-risk youths. Int J Addict 1990;25(11):1341-82. Excluded; Outcome is not violence.

Dembo R, Williams L, Schmeidler J, et al. Recidivism in a cohort of juvenile detainees: a 3 1/2-year follow-up. Int J Addict 1993;28(7):631-58. Excluded; Study does not focus on youth as perpetrators.

Dembo R, Williams L, Wothke W, et al. The relationship between cocaine use, drug sales, and other delinquency among a cohort of high-risk youths over time. NIDA Res Monogr 1990;103:112-35. Excluded; Study design not used.

Dembo R, Wothke W, Shemwell M, et al. A structural model of the influence of family problems and child abuse factors on serious delinquency among youths processed at a juvenile assessment center. J Child Adolesc Subst Abus 2000;10(1):17-31. Excluded; Outcome is not violence.

Dennis D, Massie JE, Wycoff-Horn M, et al. Weapon carrying among rural southern Illinois elementary school children. J Health Care Poor Underserved 2002;13(4):413-24. Excluded; Outcome is not violence.

Denton JS, Filkins JA, Stephenson D, et al. Criminal consequences of commotio cordis. Am J Cardiol 2002;90(10):1181-2; Discussion 2. Excluded; Not a research study.

Dery M, Toupin J, Pauze R, et al. Neuropsychological characteristics of adolescents with conduct disorder: association with attention-deficit-hyperactivity and aggression. J Abnorm Child Psychol 1999;27(3):225-36. Excluded; Not a U.S. study.

Deschenes EP, Esbensen F-A. Violence and gangs: Gender differences in perceptions and behavior. J Quant Criminol 1999;15(1):63-96. Excluded; Study design not used.

DiClemente RJ, Wingood GM, Crosby R, et al. Parental monitoring: association with adolescents' risk behaviors. Pediatrics 2001;107(6):1363-8. Excluded; Study design not used.

Diego MA, Field T, Hernandez-Reif M, et al. Aggressive adolescents benefit from massage therapy. Adolescence 2002;37(147):597-607. Excluded; Data not abstractable.

DiLiberto L, Katz RC, Beauchamp KL, et al. Using Articulated Thoughts in Simulated Situations to assess cognitive activity in aggressive and nonaggressive adolescents. J Child Fam Stud 2002;11(2):179-89. Excluded; Outcome is not violence.

DiLillo D, Giuffre D, Tremblay GC, et al. A closer look at the nature of intimate partner violence reported by women with a history of child sexual abuse. J Interpers Violence 2001;16(2):116-32. Excluded; Age of study population greater than 17 years.

Dimsdale JE. The Nacirema revisited. Ann Behav Med 2001;23(1):75-6. Excluded; Not a research study.

DiNapoli PP. Adolescent violent behavior and ego development. J Adolesc Health 2002;31(6):446-8. Excluded; Study design not used.

DiNapoli PP. Guns and dolls: an exploration of violent behavior in girls. ANS Adv Nurs Sci 2003;26(2):140-8. Excluded; Data not abstractable.

Ding CS, Nelsen EA, Lassonde CT. Correlates of gun involvement and aggressiveness among adolescents. Youth Soc 2002;34(2):195-213. Excluded; Outcome is not violence.

Dodge KA, Bates JE, Pettit GS. Mechanisms in the cycle of violence. Science 1990;250(4988):1678-83. Excluded; Study does not focus on youth as perpetrators.

Dodge KA, Lansford JE, Burks VS, et al. Peer rejection and social information-processing factors in the development of aggressive behavior problems in children. Child Dev 2003;74(2):374-93. Excluded; Outcome is not violence.

Dodge KA, Lochman JE, Harnish JD, et al. Reactive and proactive aggression in school children and psychiatrically impaired chronically assaultive youth. J Abnorm Psychol 1997;106(1):37-51. Excluded; Study does not focus on youth as perpetrators.

Dodge KA, Price JM, Bachorowski J-A. Hostile attributional biases in severely aggressive adolescents. J Abnorm Psychol 1990;99:385-92. Excluded; Duplicated citation or findings.

Dodge KA, Price JM, Bachorowski JA, et al. Hostile attributional biases in severely aggressive adolescents. J Abnorm Psychol 1990;99(4):385-92. Excluded; Study design not used.

Dogra A, Veeraraghavan V. A study of psychological intervention of children with aggressive conduct disorder. Indian J Clin Psychol 1994;21(1):28-32. Excluded; Not a U.S. study.

Dolin IH, Kelly DB, Beasley TM. Chronic self-destructive behavior in normative and delinquent adolescents. J Adolesc 1992;15:57-66. Excluded; Outcome is not violence.

Dorn LD, Burgess ES, Dichek HL, et al. Thyroid hormone concentrations in depressed and nondepressed adolescents: Group differences and behavioral relations. J Am Acad Child Adolesc Psychiatry 1996;35(3):299-306. Excluded; Outcome is not violence.

Dornbusch SM, Erickson KG, Laird J, et al. The relation of family and school attachment to adolescent deviance in diverse groups and communities. J Adolesc Res

2001;16(4):396-422. Excluded; Study design not used.

Doswell WM. After Littleton. Am J Nurs 1999;99(10):9. Excluded; Not a research study.

Doumas D, Margolin G, John RS. The intergenerational transmission of aggression across three generations. J Fam Violence 1994;9(2):157-75. Excluded; Study does not focus on youth as perpetrators.

Dowd MD, Knapp JF, Fitzmaurice LS. Pediatric firearm injuries, Kansas City, 1992: a population-based study. Pediatrics 1994;94(6 Pt 1):867-73. Excluded; Study does not focus on youth as perpetrators.

Dowdell E, Burgess, Santucci ME. The relationship between health risk behaviors and fear in one urban seventh grade class. J Pediatr Nurs 2003;18(3):187-94. Excluded; Study design not used.

Downey G, Walker E. Distinguishing family-level and child-level influences on the development of depression and aggression in children at risk. Dev Psychopathol 1992;4(1):81-95. Excluded; Age of study population greater than 17 years.

Drake ME, Hietter SA, Pakalnis A. EEG and evoked potentials in episodic-dyscontrol syndrome. Neuropsychobiology 1992;26(3):125-8. Excluded; Data not abstractable.

Dukarm CP, Byrd RS, Auinger P, et al. Illicit substance use, gender, and the risk of violent behavior among adolescents. Arch Pediatr Adolesc Med 1996;150(8):797-801. Excluded; Outcome is not violence.

Dukes RL, Martinez RO, Stein JA. Precursors and consequences of membership in youth gangs. Youth Soc 1997;29(2):139-65. Excluded; Outcome is not violence.

Duncan RD. Peer and sibling aggression: An investigation of intra- and extra-familial bullying. J Interpers Violence 1999;14(8):871-86. Excluded; Data not abstractable.

Duncan RD, Kennedy WA, Smith DW. Comparison of conduct-disordered behavior in crack-dealing versus nondealing juvenile offenders. Psychol Rep 2000;86(3 Pt 2):1089-96. Excluded; Study design not used.

Duncan SC, Duncan TE, Strycker LA, et al. Relations between youth antisocial and prosocial activities. J Behav Med 2002;25(5):425-38. Excluded; Data not abstractable.

Dunlap G, Robbins FR, Darrow MA. Parents' reports of their children's challenging behaviors: results of a statewide survey. Ment Retard 1994;32(3):206-12. Excluded; Study does not focus on youth as perpetrators.

Durant RH, Altman D, Wolfson M, et al. Exposure to violence and victimization, depression, substance use, and the use of violence by young adolescents. J Pediatr 2000;137(5):707-13. Excluded; Not addressing they key questions.

DuRant RH, Cadenhead C, Pendergrast RA, et al. Factors associated with the use of violence among urban black adolescents. Am J Public Health 1994;84(4):612-7. Excluded; Study design not used.

Durant RH, Getts AG, Cadenhead C, et al. The association between weapon carrying and the use of violence among adolescents living in and around public housing. J Adolesc Health 1995;17(6):376-80. Excluded; Study design not used.

DuRant RH, Getts AG, Cadenhead C, et al. The association between weapon-carrying and the use of violence among adolescents living in or around public housing. J Adolesc 1995;18(5):579-92. Excluded; Outcome is not violence.

DuRant RH, Kahn J, Beckford PH, et al. The association of weapon carrying and fighting on school property and other health risk and problem behaviors among high school students. Arch Pediatr Adolesc Med 1997;151(4):360-6. Excluded; Data not abstractable.

Durant RH, Knight J, Goodman E. Factors associated with aggressive and delinquent behaviors among patients attending an adolescent medicine clinic. J Adolesc Health 1997;21(5):303-8. Excluded; Outcome is not violence.

DuRant RH, Krowchuk DP, Kreiter S, et al. Weapon carrying on school property among middle school students. Arch Pediatr Adolesc Med 1999;153(1):21-6. Excluded; Outcome is not violence.

DuRant RH, Krowchuk DP, Sinal SH. Victimization, use of violence, and drug use at school among male adolescents who engage in same-sex sexual behavior. J Pediatr 1998;133(1):113-8. Excluded; Study design not used.

Durant RH, Pendergrast RA, Cadenhead C. Exposure to violence and victimization and fighting behavior by urban black adolescents. J Adolesc Health 1994;15(4):311-8. Excluded; Study design not used.

DuRant RH, Smith JA, Kreiter SR, et al. The relationship between early age of onset of initial substance use and engaging in multiple health risk behaviors among young adolescents. Arch Pediatr Adolesc Med 1999;153(3):286-91. Excluded; Data not abstractable.

Dutton DG, Hart SD. Risk markers for family violence in a federally incarcerated population. Int J Law Psychiatry 1992;15(1):101-12. Excluded; Not a U.S. study.

Dykeman BF. The social cognitive treatment of anger and aggression in four adolescents with conduct disorder. J Instr Psychol 1995;22(2):194-200. Excluded; Outcome is not violence.

Dykeman C, Daehlin W, Doyle S, et al. Psychological predictors of school-based violence: Implications for school counselors. Sch Couns 1996;44(1):35-47. Excluded;

Data not abstractable.

Eargle AE, Guerra NG, Tolan PH. Preventing aggression in inner-city children: Small group training to change cognitions, social skills, and behavior. J Child Adolesc Group Ther 1994;4(4):229-42. Excluded; Not a research study.

Earls F. Understanding and controlling violence. J Health Care Poor Underserved 1991;2(1):156-64; Discussion 65-6. Excluded; Not a research study.

Easley M. Domestic violence. Ann Emerg Med 1996;27(6):762-3. Excluded; Not a research study.

Eckenrode J, Ganzel B, Henderson CR, et al. Preventing child abuse and neglect with a program of nurse home visitation: the limiting effects of domestic violence. JAMA 2000;284(11):1385-91. Excluded; Outcome is not violence.

Eckstein M, Hutson HR. Street gangs: save yourself while saving a life. Emerg Med Serv 1994;23(7):18, 20, 2. Excluded; Not a research study.

Eddy JM, Reid JB, Fetrow RA. An elementary school-based prevention program targeting modifiable antecedents of youth delinquency and violence: Linking the Interests of Families and Teachers (LIFT). J Emot Behav Disord 2000;8(3):165-76. Excluded; Study does not focus on youth as perpetrators.

Edens RM, Smryl T. Reducing disruptive classroom behaviors in physical education: A pilot study. J Real Ther 1994;13(2):40-4. Excluded; Outcome is not violence.

Edwards WJ. A measurement of delinquency differences between a delinquent and nondelinquent sample: what are the implications? Adolescence 1996;31(124):973-89. Excluded; Outcome is not violence.

Egan SK, Monson TC, Perry DG. Social-cognitive influences on change in aggression over time. Dev Psychol 1998;34(5):996-1006. Excluded; Study does not focus on youth as perpetrators.

Egeland B, Susman-Stillman A. Dissociation as a mediator of child abuse across generations. Child Abuse Negl 1996;20(11):1123-32. Excluded; Outcome is not violence.

Egeland B, Yates T, Appleyard K, et al. The long-term consequences of maltreatment in the early years: A developmental pathway model to antisocial behavior. Child Serv (Mahwah NJ) 2002;5(4):249-60. Excluded; Outcome is not violence.

Einfeld S, Hall W, Levy F. Hyperactivity and the fragile x syndrome. J Abnorm Child Psychol 1991;19(3):253-62. Excluded; Outcome is not violence.

Eisenman R. Denigration of a victim in group psychotherapy by violent vs seductive sex offenders. Psychol Rep 1993;72(2):413-4. Excluded; Outcome is not violence.

Eitle D, Turner RJ. Exposure to community violence and young adult crime: The effects of witnessing violence, traumatic victimization, and other stressful life events. J Res Crime Delinq 2002;39(2):214-37. Excluded; Study does not focus on youth as perpetrators.

Elander J, Simonoff E, Pickles A, et al. A longitudinal study of adolescent and adult conviction rates among children referred to psychiatric services for behavioural or emotional problems. Crim Behav Ment Health 2000;10(1):40-59. Excluded; Not a U.S. study.

Elhassani SB. Domestic violence: a perinatal and pediatric risk factor. J S C Med Assoc 1995;91(3):114-5. Excluded; Not a research study.

Ellickson P, Saner H, McGuigan KA. Profiles of violent youth: substance use and other concurrent problems. Am J Public Health 1997;87(6):985-91. Excluded; Not addressing they key questions.

Ellickson PL, McGuigan KA. Early predictors of adolescent violence. Am J Public Health 2000;90(4):566-72. Excluded; Study design not used.

Ellickson PL, Tucker JS, Klein DJ. Ten-year prospective study of public health problems associated with early drinking. Pediatrics 2003;111(5 Pt 1):949-55. Excluded; Duplicated citation or findings.

Ellis RA, Gormley M, Ellis GD, et al. Harm by her own hand: A study of internalized violence among female juveniles. J Hum Behav Soc Environ 2003;6(3):75-90. Excluded; Outcome is not violence.

Ellis RA, Gormley M, Ellis GD, et al. Harm by her own hand: A study of internalized violence among female juveniles. J Hum Behav Soc Environ 2003;6(3):75-90. Excluded; Duplicated citation or findings.

Elze DE, Stiffman AR, Dore P. The association between types of violence exposure and youths' mental health problems. Int J Adolesc Med Health 1999;11(3-4):221-55. Excluded; Outcome is not violence.

Embry DD, Flannery DJ, Vazsonyi AT, et al. Peacebuilders: a theoretically driven, school-based model for early violence prevention. Am J Prev Med 1996;12(5 Suppl):91-100. Excluded; Study does not focus on youth as perpetrators.

Emde K. Cops & docs: a gun violence injury prevention program. Int J Trauma Nurs 2002;8(2):54-6. Excluded; Not a research study.

Emerick RL, Dutton WA. The effect of polygraphy on the self report of adolescent sex offenders: Implications for risk assessment. Ann Sex Res 1993;6(2):83-103. Excluded; Not addressing they key questions.

Emerson E, Shelton D. Using creative arts to build coping skills to reduce domestic violence in the lives of female juvenile offenders. Issues Ment Health Nurs 2001;22(2):181-95. Excluded; Not a research study.

Epps K. The residential treatment of adolescent sex offenders. Issues Criminol Legal Psychol 1991;1(17):58-67. Excluded; Not a research study.

Epps KJ, Haworth R, Swaffer T. Attitudes toward women and rape among male adolescents convicted of sexual versus nonsexual crimes. J Psychol 1993;127(5):501-6. Excluded; Not a U.S. study.

Epstein JA, Botvin GJ, Diaz T, et al. Aggression, victimization and problem behavior among inner-city minority adolescents. J Child Adolesc Subst Abus 2000;9(3):51-66. Excluded; Study design not used.

Epstein MH, Cullinan D, Quinn KP, et al. Characteristics of children with emotional and behavioral disorders in community-based programs designed to prevent placement in residential facilities. J Emot Behav Disord 1994;2(1):51-7. Excluded; Outcome is not violence.

Erkut S, Szalacha LA, Alarcon O, et al. Stereotyped perceptions of adolescents' health risk behaviors. Cultur Divers Ethnic Minor Psychol 1999;5(4):340-9. Excluded; Outcome is not violence.

Ernst M, Zametkin AJ, Pascualvaca D, et al. Adrenergic and noradrenergic plasma levels in Lesch-Nyhan disease. Neuropsychopharmacology 2000;22(3):320-6. Excluded; Outcome is not violence.

Eron L, Huesmann R, Spindler A, et al. A cognitive-ecological approach to preventing aggression in urban settings: Initial outcomes for high-risk children. J Consult Clin Psychol 2002;70(1):179-94. Excluded; Study does not focus on youth as perpetrators.

Eron LD. Media violence. Pediatr Ann 1995;24(2):84-7. Excluded; Not a research study.

Escarela G, Francis B, Soothill K. Competing risks, persistence and desistance in analyzing recidivism. J Quant Criminol 2000;16(4):385-414. Excluded; Not a U.S. study.

Escobar-Chaves SL, Tortolero SR, Markham C, et al. Violent behavior among urban youth attending alternative schools. J Sch Health 2002;72(9):357-62. Excluded; Study design not used.

Eslea M, Smith PK. The long-term effectiveness of anti-bullying work in primary schools. Educ Res 1998;40(2):203-18. Excluded; Not a U.S. study.

Espelage DL, Bosworth K, Simon TR. Examining the social context of bullying behaviors in early adolescence. J Couns Dev 2000;78(3):326-33. Excluded; Outcome is not violence.

Espelage DL, Bosworth K, Simon TR. Short-term stability and prospective correlates of bullying in middle-school students: an examination of potential demographic, psychosocial, and environmental influences. Violence Vict 2001;16(4):411-26. Excluded; Data not abstractable.

Espelage DL, Holt MK, Henkel RR. Examination of peer-group contextual effects on aggression during early adolescence. Child Dev 2003;74(1):205-20. Excluded; Study design not used.

Espelage DL, Holt MK, Henkel RR. Examination of peer-group contextual effects on aggression during early adolescence. Child Dev 2003;74(1):205-20. Excluded; Duplicated citation or findings.

Etscheidt S. Reducing aggressive behavior and improving self-control: A cognitive-behavioral training program for behaviorally disordered adolescents. Behav Disord 1991;16(2):107-15. Excluded; Data not abstractable.

Evans GD, Rey J, Hemphill MM, et al. Academic-community collaboration. An ecology for early childhood violence prevention. Am J Prev Med 2001;20(1 Suppl):22-30. Excluded; Not a research study.

Evans JP, Taylor J. Understanding violence in contemporary and earlier gangs: An exploratory application of the theory of reasoned action. J Black Psychol 1995;21(1):71-81. Excluded; Outcome is not violence.

Evans W, Mason A. Factors associated with gang involvement among incarcerated youth. J Gang Res 1996;3(4):31-40. Excluded; Not addressing they key questions.

Evans WP, Fitzgerald C, Weigel D. Are rural gang members similar to their urban peers? Implications for rural communities. Youth Soc 1999;30(3):267-82. Excluded; Duplicated citation or findings.

Evans WP, Fitzgerald C, Weigel D, et al. Are rural gang members similar to their urban peers? Implications for rural communities. Youth Soc 1999;30(3):267-82. Excluded; Outcome is not violence.

Everett SA, Price JH. Students' perceptions of violence in the public schools: the MetLife survey. J Adolesc Health 1995;17(6):345-52. Excluded; Outcome is not violence.

Ezell ME, Cohen LE. Age, crime, and crime control policies: A longitudinal analysis of youthful, serious, chronic offenders with implications for the "Three Strikes" legislation. Stud Crime Crime Prev 1997;6(2):169-99. Excluded; Age of study population greater than 17 years.

Fackler ML. Firearm violence among youth. Ann Emerg Med 1997;29(3):425-6. Excluded; Not a research study.

Fagan J. Policing guns and youth violence. Future Child 2002;12(2):132-51. Excluded; Not a research study.

Fagan J, Chin KL. Violence as regulation and social control in the distribution of crack. NIDA Res Monogr 1990;103:8-43. Excluded; Outcome is not violence.

Famularo R, Kinscherff R, Fenton T, et al. Child maltreatment histories among runaway and delinquent children. Clin Pediatr (Phila) 1990;29(12):713-8. Excluded; Study design not used.

Fanshel D, Finch SJ, Grundy JF. Testing the measurement properties of risk assessment instruments in child protective services. Child Abuse Negl 1994;18(12):1073-84. Excluded; Outcome is not violence.

Farber EW, Burge-Callaway K. Differences in anger, hostility, and interpersonal aggressiveness in Type A and Type B adolescents. J Clin Psychol 1998;54(7):945-52. Excluded; Outcome is not violence.

Farmer JA. Juvenile exploitation of juvenile correctional workers: A content analysis. J Correct Educ 1990;41(3):118-19. Excluded; Outcome is not violence.

Farrell AD, Bruce SE. Impact of exposure to community violence on violent behavior and emotional distress among urban adolescents. J Clin Child Psychol 1997;26(1):2-14. Excluded; Study design not used.

Farrell AD, Kung EM, White KS, et al. The structure of self-reported aggression, drug use, and delinquent behaviors during early adolescence. J Clin Child Psychol 2000;29(2):282-92. Excluded; Data not abstractable.

Farrell AD, Meyer AL. The effectiveness of a school-based curriculum for reducing violence among urban sixth-grade students. Am J Public Health 1997;87(6):979-84. Excluded; Study does not focus on youth as perpetrators.

Farrell AD, Meyer AL, Dahlberg LL. Richmond youth against violence: a school-based program for urban adolescents. Am J Prev Med 1996;12(5 Suppl):13-21. Excluded; Not a research study.

Farrell AD, Meyer AL, Sullivan TN, et al. Evaluation of the responding in peaceful and positive ways (RIPP) seventh grade violence prevention curriculum. J Child Fam Stud 2003;12(1):101-20. Excluded; Duplicated citation or findings.

Farrell AD, Meyer AL, White KS. Evaluation of Responding in Peaceful and Positive Ways (RIPP): a school-based prevention program for reducing violence among urban adolescents. J Clin Child Psychol 2001;30(4):451-63. Excluded; Study does not focus on youth as perpetrators.

Farrell M. Personality and anti-social behaviour among emotionally/behaviourally disturbed boys. Pers Individ Dif 1992;13(5):511-7. Excluded; Not a U.S. study.

Fatum WR, Hoyle JC. Is it violence? School violence from the student perspective: Trends and interventions. Sch Couns 1996;44(1):28-34. Excluded; Not a research study.

Faulkner AH, Cranston K. Correlates of same-sex sexual behavior in a random sample of Massachusetts high school students. Am J Public Health 1998;88(2):262-6. Excluded; Outcome is not violence.

Fehon DC, Grilo CM, Lipschitz DS. Gender differences in violence exposure and violence risk among adolescent inpatients. J Nerv Ment Dis 2001;189(8):532-40. Excluded; Study design not used.

Feigelman S, Howard DE, Li X, et al. Psychosocial and environmental correlates of violence perpetration among African-American urban youth. J Adolesc Health 2000;27(3):202-9. Excluded; Data not abstractable.

Feigelman W, Hyman MM, Amann K, et al. Correlates of persisting drug use among former youth multiple drug abuse patients. J Psychoactive Drugs 1990;22(1):63-75. Excluded; Outcome is not violence.

Feiring C, Deblinger E, Hoch-Espada A, et al. Romantic relationship aggression and attitudes in high school students: The role of gender, grade, and attachment and emotional styles. J Youth Adolesc 2002;31(5):373-85. Excluded; Study design not used.

Feldman SS, Gowen LK. Conflict negotiation tactics in romantic relationships in high school students. J Youth Adolesc 1998;27(6):691-717. Excluded; Data not abstractable.

Felkenes GT, Becker HK. Female gang members: A growing issue for policy makers. J Gang Res 1995;2(4):1-10. Excluded; Age of study population greater than 17 years.

Felson RB. Pubertal development, social factors, and delinquency among adolescent boys. Criminology 2002;40(4):967-88. Excluded; Study design not used.

Felson RB, Liska AE, South SJ, et al. The subculture of violence and delinquency: Individual vs. school context effects. Soc Forces 1994;73(1):155-73. Excluded; Study design not used.

Felson RB, Messner SF. The control motive in intimate partner violence. Soc Psychol Q 2000;63(1):86-94. Excluded; Study does not focus on youth as perpetrators.

Fendrich M, Mackesy-Amiti ME, Goldstein P, et al. Substance involvement among juvenile murderers: comparisons with older offenders based on interviews with prison inmates. Int J Addict 1995;30(11):1363-82. Excluded; Not addressing they key questions.

Ferman J. Integrated mental health and substance abuse services to at-risk families. The Family Health Program of the Center for Mental Health, Inc., Washington, D.C. Psychiatr Serv 1996;47(10):1112-4. Excluded; Not a research study.

Fetsch RJ, Schultz CJ, Wahler JJ. A preliminary evaluation of the Colorado RETHINK Parenting and Anger Management program. Child Abuse Negl 1999;23(4):353-60. Excluded; Outcome is not violence.

Field T. American adolescents touch each other less and are more aggressive toward their peers as compared with French adolescents. Adolescence 1999;34(136):753-8. Excluded; Outcome is not violence.

Fiester L, Nathanson SP, Visser L, et al. Lessons learned from three violence prevention projects. J Sch Health 1996;66(9):344-6. Excluded; Not a research study.

Figueroa EF, Silk KR, Huth A, et al. History of childhood sexual abuse and general psychopathology. Compr Psychiatry 1997;38(1):23-30. Excluded; Age of study population greater than 17 years.

Fine PR, Roseman JM, Constandinou CM, et al. Homicide among black males in Jefferson County, Alabama 1978-1989. J Forensic Sci 1994;39(3):674-84. Excluded; Study does not focus on youth as perpetrators.

Finkelstein JW, Susman EJ, Chinchilli VM, et al. Estrogen or testosterone increases self-reported aggressive behaviors in hypogonadal adolescents. J Clin Endocrinol Metab 1997;82(8):2433-8. Excluded; Study design not used.

Finkelstein JW, Von Eye A, Preece MA. The relationship between aggressive behavior and puberty in normal adolescents: a longitudinal study. J Adolesc Health 1994;15(4):319-26. Excluded; Not a U.S. study.

Finzi R, Ram A, Har-Even D, et al. Attachment styles and aggression in physically abused and neglected children. J Youth Adolesc 2001;30(6):769-86. Excluded; Not a U.S. study.

Firestone P, Bradford JM, Greenberg DM, et al. Homicidal sex offenders: psychological, phallometric, and diagnostic features. J Am Acad Psychiatry Law 1998;26(4):537-52. Excluded; Not a U.S. study.

Firestone P, Bradford JM, Greenberg DM, et al. Differentiation of homicidal child molesters, nonhomicidal child molesters, and nonoffenders by phallometry. Am J Psychiatry 2000;157(11):1847-50. Excluded; Age of study population greater than 17 years.

Fishbein DH, Reuland M. Psychological correlates of frequency and type of drug use among jail inmates. Addictive Behaviors Addict Behav 1994;19(6):583-98. Excluded; Outcome is not violence.

Fitzmaurice LS, Gaddis GM, Knapp JF. Firearms injuries in children: an increase in violent intent, frequency and severity. Mo Med 1993;90(5):233-7. Excluded; Study does not focus on youth as perpetrators.

Fitzpatrick KM. Aggression and environmental risk among low-income African-American youth. J Adolesc Health 1997;21(3):172-8. Excluded; Data not abstractable.

Fitzpatrick KM. Fighting among America's youth: a risk and protective factors approach. J Health Soc Behav 1997;38(2):131-48. Excluded; Study design not used.

Flanagan P, Coll CG, Andreozzi L, et al. Predicting maltreatment of children of teenage mothers. Arch Pediatr Adolesc Med 1995;149(4):451-5. Excluded; Study does not focus on youth as perpetrators.

Flannery DJ, Singer M, Williams L, et al. Adolescent violence exposure and victimization at home: Coping and psychological trauma symptoms. Int Rev Vict 1998;6(1):29-48. Excluded; Study design not used.

Flannery DJ, Williams LL, Vazsonyi AT. Who are they with and what are they doing? Delinquent behavior, substance use, and early adolescents' after-school time. Am J Orthopsychiatry 1999;69(2):247-53. Excluded; Outcome is not violence.

Flannery RB, Rachlin S, Walker A, et al. Characteristics of repetitively assaultive patients: ten year analysis of the Assaulted Staff Action Program (ASAP). Int J Emerg Ment Health 2002;4(3):173-9. Excluded; Age of study population greater than 17 years.

Flannery RB, Rachlin S, Walker AP. Characteristics of assaultive patients with schizophrenia versus personality disorder: six year analysis of the Assaulted Staff Action Program (ASAP). J Forensic Sci 2002;47(3):558-61. Excluded; Age of study population greater than 17 years.

Flannery RB, Stevens V, Juliano J, et al. Past violence and substance use disorder and subsequent violence towards others: six year analysis of the Assaulted Staff Action Program (ASAP). Int J Emerg Ment Health 2000;2(4):241-7. Excluded; Age of study population greater than 17 years.

Flay BR, Allred CG, Ordway N. Effects of the Positive Action program on achievement and discipline: two matched-control comparisons. Prev Sci 2001;2(2):71-89. Excluded; Study does not focus on youth as perpetrators.

Fleming CB, Catalano RF, Oxford ML, et al. A test of generalizability of the social development model across gender and income groups with longitudinal data from the elementary school developmental period. J Quant Criminol 2002;18(4):423-39. Excluded; Not a research study.

Fleming J, Barner CI, Hudson B, et al. Anger, violence, and academic performance: A wtudy of troubled minority youth. Urban Educ 2000;35(2):175-204. Excluded; Outcome is not violence.

Fling S, Smith L, Rodriguez T, et al. Videogames, aggression, and self-esteem: A survey. Soc Behav Pers 1992;20(1):39-45. Excluded; Data not abstractable.

Flitcraft A. Clinical violence intervention: opportunities and barriers. Bull N Y Acad Med 1996;73(1):124-9. Excluded; Not a research study.

Fontaine RG, Salzer Burks V, Dodge KA. Response decision processes and externalizing behavior problems in adolescents. Dev Psychopathol 2002;14(1):107-22. Excluded; Data not abstractable.

Ford ME, Linney JA. Comparative analysis of juvenile sexual offenders, violent nonsexual offenders, and status offenders. J Interpers Violence 1995;10(1):56-70. Excluded; Study design not used.

Forth AE. Psychopathy in adolescent offenders: Assessment, family background, and violence. Issues Criminol Legal Psychol 1995;No 24:42-4. Excluded; Not a research study.

Forth AE, Mailloux DL. Psychopathy in youth: what do we know? In: Gacono CB, editor. The clinical and forensic assessment of psychopathy: a practitioners guide. Mahwah, New Jersey: Lawrence Erlbaum; 2000. Excluded; Not a research study.

Foshee VA. Gender differences in adolescent dating abuse prevalence, types and injuries. Health Educ Res 1996;11(3):275-86. Excluded; Study design not used.

Foshee VA, Bauman KE, Linder GF. Family violence and the perpetration of adolescent dating violence: examining social learning and social control processes. J Marriage Fam 1999;61(2):331-42. Excluded; Study design not used.

Foshee VA, Linder GF, Bauman KE, et al. The Safe Dates Project: theoretical basis, evaluation design, and selected baseline findings. Am J Prev Med 1996;12(5 Suppl):39-47. Excluded; Not a research study.

Franke TM. The role of attachment as a protective factor in adolescent violent behavior. Adolesc Fam Health 2000;1(1):40-51. Excluded; Study design not used.

Franke TM. Adolescent violent behavior: an analysis across and within racial/ethnic groups. J Multicult Soc Work 2000;8(1/2):47-70. Excluded; Study design not used.

Franklin RD, Allison DB, Sutton TR. Alcohol, substance abuse, and violence among North Carolina prison admissions, 1988. J Offender Rehabil 1992;17(3-4):101-11. Excluded; Not addressing they key questions.

Fras I, Major LF. Clinical experience with risperidone. J Am Acad Child Adolesc Psychiatry 1995;34(7):833. Excluded; Not a research study.

French DC, Jansen EA, Pidada S. United States and Indonesian children's and adolescents' reports of relational aggression by disliked peers. Child Dev 2002;73(4):1143-50. Excluded; Outcome is not violence.

Frey KS, Hirschstein MK, Guzzo BA. Second Step: Preventing aggression by promoting social competence. J Emot Behav Disord 2000;8(2):102-12. Excluded; Study does not focus on youth as perpetrators.

Friday JC. The psychological impact of violence in underserved communities. J Health Care Poor Underserved 1995;6(4):403-9. Excluded; Not a research study.

Fried S. Bullies & victims: Children abusing children. Am J Dance Ther 1997;19(2):127-33. Excluded; Not a research study.

Friedman AS, Kramer S, Kreisher C. Childhood predictors of violent behavior. J Clin Psychol 1999;55(7):843-55. Excluded; Study does not focus on youth as perpetrators.

Friedman AS, Utada AT. Effects of two group interaction models on substance-using adjudicated adolescent males. J Community Psychol 1992:106-17. Excluded; Outcome is not violence.

Fritsch EJ, Caeti TJ, Taylor RW. Gang suppression through saturation patrol, aggressive curfew and truancy enforcement: A quasi-experimental test of the Dallas anti-gang initiative. Crime Delinq 1999;45(1):122-39. Excluded; Data not abstractable.

Fritsch RC, Heinssen RK, Delga I, et al. Predicting hospital adjustment by adolescent inpatients. Hosp Community Psychiatry 1992;43(1):49-53. Excluded; Outcome is not violence.

Fromuth ME, Burkhart BR, Jones CW. Hidden child molestation: An investigation of adolescent perpetrators in a nonclinical sample. J Interpers Violence 1991;6(3):376-84. Excluded; Age of study population greater than 17 years.

Frydman M. Television, aggressiveness and violence. Int J Adolesc Med Health 1999;11(3-4):335-44. Excluded; Not a research study.

Frye V, Wilt S. Femicide and social disorganization. Violence Against Women 2001;7(3):335-51. Excluded; Study does not focus on youth as perpetrators.

Fulginiti VA. Violence and children in the United States. Am J Dis Child 1992;146(6):671-2. Excluded; Not a research study.

Fulwiler C, Grossman H, Forbes C, et al. Early-onset substance abuse and community violence by outpatients with chronic mental illness. Psychiatr Serv 1997;48(9):1181-5. Excluded; Age of study population greater than 17 years.

Fulwiler C, Ruthazer R. Premorbid risk factors for violence in adult mental illness. Compr Psychiatry 1999;40(2):96-100. Excluded; Age of study population greater than 17 years.

Funk JB, Hagan J, Schimming J, et al. Aggression and

psychopathology in adolescents with a preference for violent electronic games. Aggress Behav 2002;28(2):134-44. Excluded; Data not abstractable.

Furlong M, Casas JM, Corral C, et al. Drugs and school violence. Educ Treat Child 1997;20(3):263-80. Excluded; Data not abstractable.

Gabel S, Shindledecker R. Aggressive behavior in youth: characteristics, outcome, and psychiatric diagnoses. J Am Acad Child Adolesc Psychiatry 1991;30(6):982-8. Excluded; Outcome is not violence.

Gabel S, Shindledecker R. Behavior problems in sons and daughters of substance abusing parents. Child Psychiatry Hum Dev 1992;23(2):99-115. Excluded; Data not abstractable.

Gabel S, Shindledecker R. Adolescent psychiatric inpatients: Characteristics, outcome, and comparison between discharged patients from a specialized adolescent unit and nonspecialized units. J Youth Adolesc 1992;21(4):391-407. Excluded; Outcome is not violence.

Gabel S, Shindledecker R. Parental substance abuse and its relationship to severe aggression and antisocial behavior in youth. Am J Addict 1993;2(1):48-58. Excluded; Data not abstractable.

Gabel S, Swanson AJ, Shindledecker R. Aggressive children in a day treatment program: Changed outcome and possible explanations. Child Abuse Negl 1990;14(4):515-23. Excluded; Study does not focus on youth as perpetrators.

Gabriel RM, Hopson T, Haskins M, et al. Building relationships and resilience in the prevention of youth violence. Am J Prev Med 1996;12(5 Suppl):48-55. Excluded; Not a research study.

Gadow KD, Nolan EE, Sverd J. Methylphenidate in hyperactive boys with comorbid tic disorder: II. Short-term behavioral effects in school settings. J Am Acad Child Adolesc Psychiatry 1992;31(3):462-71. Excluded; Study does not focus on youth as perpetrators.

Gadow KD, Nolan EE, Sverd J, et al. Methylphenidate in aggressive-hyperactive boys: I. Effects on peer aggression in public school settings. J Am Acad Child Adolesc Psychiatry 1990;29(5):710-8. Excluded; Study does not focus on youth as perpetrators.

Gaertner L, Foshee V. Commitment and the perpetration of relationship violence. Pers Relatsh 1999;6(2):227-39. Excluded; Study design not used.

Gagne M-H, Lavoie F. Young people's views on the causes of violence in adolescents' romantic relationships. Can Ment Health 1993;41(3):11-5. Excluded; Outcome is not violence.

Gainer PS, Webster DW, Champion HR. A youth violence prevention program. Description and preliminary evaluation. Arch Surg 1993;128(3):303-8. Excluded; Outcome is not violence.

Gardner W, Lidz CW, Mulvey EP, et al. Clinical versus actuarial predictions of violence of patients with mental illnesses. J Consult Clin Psychol 1996;64(3):602-9. Excluded; Study does not focus on youth as perpetrators.

Garnefski N, Okma S. Addiction-risk and aggressive/criminal behavior in adolescence: Influence of family, school and peers. J Adolesc 1996;19(6):503-12. Excluded; Not a U.S. study.

Garrison J, Barry VJ. Family violence. J Am Dent Assoc 1994;125(4):360, 2. Excluded; Not a research study.

Garrison WT, Ecker B, Friedman M, et al. Aggression and counteraggression during child psychiatric hospitalization. J Am Acad Child Adolesc Psychiatry 1990;29(2):242-50. Excluded; Data not abstractable.

Gartner R-. Family structure, welfare spending, and child homicide in developed democracies. J Marriage Fam 1991;53:231-40. Excluded; Not a U.S. study.

Gartstein MA, Noll RB, Vannatta K. Childhood aggression and chronic illness: Possible protective mechanisms. J Appl Dev Psychol 2000;21(3):315-33. Excluded; Outcome is not violence.

Garvey K, al. e. Alliance working to stop youth violence. WMJ 2002;101(6):22-3. Excluded; Not a research study.

Gelles RJ. Poverty and violence toward children. Am Behav Sci 1992;35(3):258-74. Excluded; Outcome is not violence.

Gentry J, Eron LD. American Psychological Association Commission on Violence and Youth. Am Psychol 1993;48(2):89. Excluded; Not a research study.

Gerra G, Zaimovic A, Ampollini R, et al. Experimentally induced aggressive behavior in subjects with 3,4-methylenedioxy-methamphetamine ("Ecstasy") use history: psychobiological correlates. Journal of Substance Abuse 2001;13(4):471-91. Excluded; Not a U.S. study.

Gerstein LH, Briggs JR. Psychological and sociological discriminants of violent and nonviolent serious juvenile offenders. J Addict Offender Couns 1993;14(1):2-13. Excluded; Study design not used.

Giancola PR, Martin CS, Tarter RE, et al. Executive cognitive functioning and aggressive behavior in preadolescent boys at high risk for substance abuse/dependence. J Stud Alcohol 1996;57(4):352-9. Excluded; Data not abstractable.

Giancola PR, Mezzich AC. Executive cognitive functioning mediates the relation between language competence and antisocial behavior in conduct-disordered adolescent

females. Aggress Behav 2000;26(5):359-75. Excluded; Study design not used.

Giancola PR, Mezzich AC, Clark DB, et al. Cognitive distortions, aggressive behavior, and drug use in adolescent boys with and without a family history of a substance use disorder. Psychol Addict Behav 1999;13(1):22-32. Excluded; Outcome is not violence.

Giancola PR, Mezzich AC, Tarter RE. Disruptive, delinquent and aggressive behavior in female adolescents with a psychoactive substance use disorder: relation to executive cognitive functioning. J Stud Alcohol 1998;59(5):560-7. Excluded; Study design not used.

Giancola PR, Mezzich AC, Tarter RE. Executive cognitive functioning, temperament, and antisocial behavior in conduct-disordered adolescent females. J Abnorm Psychol 1998;107(4):629-41. Excluded; Data not abstractable.

Giancola PR, Moss HB, Martin CS, et al. Executive cognitive functioning predicts reactive aggression in boys at high risk for substance abuse: A prospective study. Alcoholism: Clinical & Experimental Research 1996;20(4):740-4. Excluded; Outcome is not violence.

Giancola PR, Parker AM. A six-year prospective study of pathways toward drug use in adolescent boys with and without a family history of a substance use disorder. J Stud Alcohol 2001;62(2):166-78. Excluded; Data not abstractable.

Giancola PR, Shoal GD, Mezzich AC. Constructive thinking, executive functioning, antisocial behavior, and drug use involvement in adolescent females with a substance use disorder. Exp Clin Psychopharmacol 2001;9(2):215-27. Excluded; Data not abstractable.

Gierowski JK. The influence of the type and level of aggression on homicidal behavior. Psychiatr Pol 1996;30(3, Suppl):27-37. Excluded; Outcome is not violence.

Ginsberg C. Violence-related attitudes and behaviors of high school students--New York City, 1992. J Sch Health 1993;63(10):438-40. Excluded; Study design not used.

Giordano PC, Cernkovich SA, Groat HT, et al. The quality of adolescent friendships: long-term effects? J Health Soc Behav 1998;39(1):55-71. Excluded; Age of study population greater than 17 years.

Giordano PC, Millhollin TJ, Cernkovich SA. Delinquency, identity, and women's involvement in relationship violence. Criminology 1999;37(1):17-40. Excluded; Study does not focus on youth as perpetrators.

Giuliano JD. A peer education program to promote the use of conflict resolution skills among at-risk school age males. Public Health Rep 1994;109(2):158-61. Excluded; Not a research study.

Gjone H, Stevenson J. A longitudinal twin study of temperament and behavior problems: Common genetic or environmental influences? J Am Acad Child Adolesc Psychiatry 1997;36(10):1448-56. Excluded; Not a U.S. study.

Glod CA, Teicher MH, Butler M, et al. Modifying quiet room design enhances calming of children and adolescents. J Am Acad Child Adolesc Psychiatry 1994;33(4):558-66. Excluded; Study does not focus on youth as perpetrators.

Goddard HW, Goff BG, Melancon MV, et al. Profiles of delinquency: A comparison of delinquent behavioral groups. J Soc Behav Pers 2000;15(1):19-50. Excluded; Data not abstractable.

Goetting A. Child victims of homicide: a portrait of their killers and the circumstances of their deaths. Violence Vict 1990;5(4):287-96. Excluded; Age of study population greater than 17 years.

Goetting A. Female victims of homicide: a portrait of their killers and the circumstances of their deaths. Violence Vict 1991;6(2):159-68. Excluded; Age of study population greater than 17 years.

Goldstein AP, Glick B. Aggression replacement training: Curriculum and evaluation. Simul Gaming 1994;25(1):9-26. Excluded; Data not abstractable.

Goodman G, Hull JW, Clarkin JF, et al. Childhood antisocial behaviors as predictors of psychotic symptoms and DSM-III-R borderline criteria among inpatients with borderline personality disorder. J Personal Disord 1999;13(1):35-46. Excluded; Outcome is not violence.

Goodwin MP, Roscoe B. Sibling violence and agonistic interactions among middle adolescents. Adolescence 1990;25(98):451-67. Excluded; Study design not used.

Goren S, Singh NN, Best AM. The aggression-coercion cycle: Use of seclusion and restraint in a child psychiatric hospital. J Child Fam Stud 1993;2(1):61-73. Excluded; Outcome is not violence.

Gorman-Smith D, Tolan P. The role of exposure to community violence and developmental problems among inner-city youth. Dev Psychopathol 1998;10(1):101-16. Excluded; Not addressing they key questions.

Gorman-Smith D, Tolan PH, Sheidow AJ, et al. Partner violence and street violence among urban adolescents: Do the same family factors relate? J Res Adolesc 2001;11(3):273-95. Excluded; Data not abstractable.

Gorman-Smith D, Tolan PH, Zelli A, et al. The relation of family functioning to violence among inner-city minority youths. J Fam Psychol 1996;10(2):115-29. Excluded; Study design not used.

Gover AR. The effects of child maltreatment on violent offending among institutionalized youth. Violence Vict

2002;17(6):655-68. Excluded; Study design not used.

Graham S, Hudley C, Williams E. Attributional and emotional determinants of aggression among African-American and Latino young adolescents. Dev Psychol 1992;28(4):731-40. Excluded; Outcome is not violence.

Graham-Bermann SA, Cutler SE, Litzenberger BW, et al. Perceived conflict and violence in childhood sibling relationships and later emotional adjustment. J Fam Psychol 1994;8(1):85-97. Excluded; Age of study population greater than 17 years.

Grange JT, Corbett SW. Violence against emergency medical services personnel. Prehosp Emerg Care 2002;6(2):186-90. Excluded; Age of study population greater than 17 years.

Granger DA, Weisz JR, McCracken JT, et al. Testosterone and conduct problems. J Am Acad Child Adolesc Psychiatry 1994;33(6):908. Excluded; Not a research study.

Granic I, Butler S. The relation between anger and antisocial beliefs in young offenders. Pers Individ Dif 1998;24(6):759-65. Excluded; Outcome is not violence.

Granic I, Dishion TJ. Deviant talk in adolescent friendships: A step toward measuring a pathogenic attractor process. Soc Dev 2003;12(3):314-34. Excluded; Outcome is not violence.

Grann M. The PCL-R and gender. Eur J Psychol Assess 2000;16(3):147-9. Excluded; Not a U.S. study.

Gray C, Chisholm D, Smith P, et al. The role of the child psychiatric ward in health care: Experiences with different types of admissions over a period of twenty-one years. Ir J Psychol Med 1992;9(1):17-23. Excluded; Outcome is not violence.

Gray HM, Foshee V. Adolescent dating violence: Differences between one-sided and mutually violent profiles. J Interpers Violence 1997;12(1):126-41. Excluded; Not addressing they key questions.

Greco CM, Cornell DG. Rorschach object relations of adolescents who committed homicide. J Pers Assess 1992;59(3):574-83. Excluded; Study design not used.

Greenberg DM, Bradford JM, Curry S. A comparison of sexual victimization in the childhoods of pedophiles and hebephiles. J Forensic Sci 1993;38(2):432-6. Excluded; Not a U.S. study.

Greene LW, Smith MS, Peters SR. "I have a future" comprehensive adolescent health promotion: cultural considerations in program implementation and design. J Health Care Poor Underserved 1995;6(2):267-81; Discussion 82-3. Excluded; Data not abstractable.

Gretton HM, McBride M, Hare RD, et al. Psychopathy and recidivism in adolescent sex offenders. Crim Justice Behav 2001;28(4):427-49. Excluded; Not a U.S. study.

Grietens H, Rink J, Hellinckx W. Nonbehavioral correlates of juvenile delinquency: Communications of detained and nondetained young people about social limits. J Adolesc Res 2003;18(1):68-89. Excluded; Not a U.S. study.

Griffin KW, Botvin GJ, Scheier LM, et al. Parenting practices as predictors of substance use, delinquency, and aggression among urban minority youth: Moderating effects of family structure and gender. Psychol Addict Behav 2000;14(2):174-84. Excluded; Study design not used.

Griffin KW, Scheier LM, Botvin GJ, et al. Interpersonal aggression in urban minority youth: Mediators of perceived neighborhood, peer, and parental influences. J Community Psychol 1999;27(3):281-98. Excluded; Study design not used.

Grimm KT. Violence against infants. Mt Sinai J Med 1996;63(2):101-2. Excluded; Not a research study.

Grisso JA, Schwarz DF, Hirschinger N, et al. Violent injuries among women in an urban area. N Engl J Med 1999;341(25):1899-905. Excluded; Study does not focus on youth as perpetrators.

Grizenko N, Pawliuk N. Risk and protective factors for disruptive behavior disorders in children. Am J Orthopsychiatry 1994;64(4):534-44. Excluded; Not a U.S. study.

Groebel J. Media violence and children. Educ Media Int 1998;35(3):216-27. Excluded; Not a U.S. study.

Grossman LS, Haywood TW, Cavanaugh JL, et al. State psychiatric hospital patients with past arrests for violent crimes. Psychiatr Serv 1995;46(8):790-5. Excluded; Age of study population greater than 17 years.

Gruber E, DiClemente RJ, Anderson MM, et al. Early drinking onset and its association with alcohol use and problem behavior in late adolescence. Prev Med 1996;25(3):293-300. Excluded; Study design not used.

Grunbaum JA, Basen-Engquist K. Comparison of health risk behaviors between students in a regular high school and students in an alternative high school. J Sch Health 1993;63(10):421-5. Excluded; Study does not focus on youth as perpetrators.

Grunbaum JA, Basen-Engquist K, Pandey D. Association between violent behaviors and substance use among Mexican-American and non-Hispanic white high school students. J Adolesc Health 1998;23(3):153-9. Excluded; Study design not used.

Grunbaum JA, Kann L, Kinchen SA, et al. Youth risk behavior surveillance--United States, 2001. J Sch Health 2002;72(8):313-28. Excluded; Study design not used.

Grunbaum JA, Lowry R, Kann L. Prevalence of health-related behaviors among alternative high school students as compared with students attending regular high schools. J Adolesc Health 2001;29(5):337-43. Excluded; Study design not used.

Guagliardo MF, Huang Z, D'Angelo LJ. Fathering pregnancies: marking health-risk behaviors in urban adolescents. J Adolesc Health 1999;24(1):10-5. Excluded; Outcome is not violence.

Guarnaccia V, Curry K. Contingent reinforcement effects on movement responses of prison inmates to the Holtzman Inkblot Technique. J Pers Assess 1990;55(1-2):263-9. Excluded; Age of study population greater than 17 years.

Guerra NG. Violence prevention. Prev Med 1994;23(5):661-4. Excluded; Not a research study.

Guerra NG, Huesmann LR, Tolan PH, et al. Stressful events and individual beliefs as correlates of economic disadvantage and aggression among urban children. J Consult Clin Psychol 1995;63(4):518-28. Excluded; Study does not focus on youth as perpetrators.

Guerra NG, Huesmann LR, Zelli A. Attributions for social failure and aggression in incarcerated delinquent youth. J Abnorm Child Psychol 1990;18(4):347-55. Excluded; Not addressing they key questions.

Guerra NG, Huesmann LR, Zelli A. Attributions for social failure and adolescent aggression. Aggress Behav 1993;19(6):421-34. Excluded; Not addressing they key questions.

Guilleminault C, Moscovitch A, Leger D. Forensic sleep medicine: nocturnal wandering and violence. Sleep 1995;18(9):740-8. Excluded; Age of study population greater than 17 years.

Gundersen L. Intimate-partner violence: the need for primary prevention in the community. Ann Intern Med 2002;136(8):637-40. Excluded; Not a research study.

Gupta VB, Nwosa NM, Nadel TA, et al. Externalizing behaviors and television viewing in children of low-income minority parents. Clin Pediatr (Phila) 2001;40(6):337-41. Excluded; Data not abstractable.

Guterman NB, Cameron M, Hahm HC. Community violence exposure and associated behavior problems among children and adolescents in residential treatment. J Aggress Maltreat Trauma 2003;6(2):111-35. Excluded; Data not abstractable.

Haapasalo J, Hamalainen T. Childhood family problems and current psychiatric problems among young violent and property offenders. J Am Acad Child Adolesc Psychiatry 1996;35(10):1394-401. Excluded; Data not abstractable.

Haapasalo J, Kankkonen M. Self-reported childhood abuse among sex and violent offenders. Arch Sex Behav 1997;26(4):421-31. Excluded; Age of study population greater than 17 years.

Haapasalo J, Tremblay RE. Physically aggressive boys from ages 6 to 12: Family background, parenting behavior, and prediction of delinquency. J Consult Clin Psychol 1994;62(5):1044-52. Excluded; Not a U.S. study.

Haemaelaeinen M, Pulkkinen L. Aggressive and non-prosocial behaviour as precursors of criminality. Stud Crime Crime Prev 1995;4(1):6-21. Excluded; Not a U.S. study.

Haemaelaeinen M, Pulkkinen L. Problem behavior as a precursor of male criminality. Dev Psychopathol 1996;8(2):443-55. Excluded; Not a U.S. study.

Hagan MP. An analysis of adolescent perpetrators of homicide and attempted homicide upon return to the community. Int J Offender Ther Comp Criminol 1997;41:250-9. Excluded; Age of study population greater than 17 years.

Hagan MP, Cho ME. A comparison of treatment outcomes between adolescent rapists and child sexual offenders. Int J Offender Ther Comp Criminol 1996;40(2):113-22. Excluded; Outcome is not violence.

Hagan MP, Cho ME, Jensen JA, et al. An assessment of the effectiveness of an intensive treatment program for severely mentally disturbed juvenile offenders. Int J Offender Ther Comp Criminol 1997;41(4):340-50. Excluded; Outcome is not violence.

Hagan MP, Gust-Brey KL. A ten-year longitudinal study of adolescent rapists upon return to the community. Int J Offender Ther Comp Criminol 1999;43(4):448-58. Excluded; Age of study population greater than 17 years.

Hagan MP, Gust-Brey KL. A ten-year longitudinal study of adolescent perpetrators of sexual assault against children. J Offender Rehabil 2000;31(1-2):117-26. Excluded; Not addressing they key questions.

Hagan MP, Gust-Brey KL, Cho ME. Eight-year comparative analyses of adolescent rapists, adolescent child molesters, other adolescent delinquents, and the general population. Int J Offender Ther Comp Criminol 2001;45(3):314-24. Excluded; Duplicated citation or findings.

Hagan MP, Gust-Brey KL, Cho ME, et al. Eight-year comparative analyses of adolescent rapists, adolescent child molesters, other adolescent delinquents, and the general population. Int J Offender Ther Comp Criminol 2001;45(3):314-24. Excluded; Not addressing they key questions.

Hagan MP, King RP, Patros RL. Recidivism among adolescent perpetrators of sexual assault against children. J Offender Rehabil 1994;21(1-2):127-37. Excluded; Not addressing they key questions.

Hagan MP, King SL. Dx = extremely dangerous: Prognostic validity for future violence. J Offender Rehabil 1998;27(1-2):23-35. Excluded; Not addressing they key questions.

Hailer JA, Hart CB. A new breed of warrior: The emergence of American Indian youth gangs. J Gang Res 1999;7(1):23-33. Excluded; Not a research study.

Hallberg J. Boys and their toys. Minn Med 2000;83(9):14-7. Excluded; Not a research study.

Halliday-Boykins CA, Graham S. At both ends of the gun: testing the relationship between community violence exposure and youth violent behavior. J Abnorm Child Psychol 2001;29(5):383-402. Excluded; Not addressing they key questions.

Halperin JM, McKay KE, Newcorn JH. Development, reliability, and validity of the children's aggression scale-parent version. J Am Acad Child Adolesc Psychiatry 2002;41(3):245-52. Excluded; Not a research study.

Halperin JM, Newcorn JH, Matier K, et al. Impulsivity and the initiation of fights in children with disruptive behavior disorders. J Child Psychol Psychiatry 1995;36(7):1199-211. Excluded; Study design not used.

Halpern R. The role of after-school programs in the lives of inner-city children: a study of the "urban youth network". Child Welfare 1992;71(3):215-30. Excluded; Outcome is not violence.

Hammett M, Powell KE, O'Carroll PW, et al. Homicide surveillance--United States, 1979-1988. MMWR CDC Surveill Summ 1992;41(3):1-33. Excluded; Not a research study.

Hammig BJ, Dahlberg LL, Swahn MH. Predictors of injury from fighting among adolescent males. Inj Prev 2001;7(4):312-5. Excluded; Outcome is not violence.

Hammock G, O'Hearn R. Psychological aggression in dating relationships: predictive models for males and females. Violence Vict 2002;17(5):525-40. Excluded; Age of study population greater than 17 years.

Hanna GL, Yuwiler A, Coates JK. Whole blood serotonin and disruptive behaviors in juvenile obsessive-compulsive disorder. J Am Acad Child Adolesc Psychiatry 1995;34(1):28-35. Excluded; Outcome is not violence.

Hannon L. AFDC and homicide. J Sociol Soc Welf 1997;24(4):125-36. Excluded; Not a research study.

Hannon L, DeFronzo J, Prochnow J. Moral commitment and the effects of social influences on violent delinquency. Violence Vict 2001;16(4):427-39. Excluded; Study design not used.

Hanson RF. Adolescent dating violence: prevalence and psychological outcomes. Child Abuse Negl 2002;26(5):449-53. Excluded; Not a research study.

Hanson RK, Bussiere MT. Predicting relapse: a meta-analysis of sexual offender recidivism studies. J Consult Clin Psychol 1998;66(2):348-62. Excluded; Not a research study.

Harden PW, Pihl RO, Vitaro F, et al. Stress response in anxious and nonanxious disruptive boys. J Emot Behav Disord 1995;3(3):183-90. Excluded; Not a U.S. study.

Hardy MS. Physical aggression and sexual behavior among siblings: A retrospective study. J Fam Violence 2001;16(3):255-68. Excluded; Age of study population greater than 17 years.

Harmon-Jones E, Barratt ES, Wigg C. Impulsiveness, aggression, reading, and the P300 of the event-related potential. Pers Individ Dif 1997;22(4):439-45. Excluded; Data not abstractable.

Harper GW, Robinson WL. Pathways to risk among inner-city African-American adolescent females: the influence of gang membership. Am J Community Psychol 1999;27(3):383-404. Excluded; Study design not used.

Harris P. The nature and extent of aggressive behaviour amongst people with learning difficulites (mental handicap) in a single health district. J Intellect Disabil Res 1993;37(3):221-4. Excluded; Not a U.S. study.

Harrison LD, Erickson PG, Adlaf E, et al. The drugs-violence nexus among American and Canadian youth. Subst Use Misuse 2001;36(14):2065-86. Excluded; Study design not used.

Harrison PA, Luxenberg MG. Comparisons of alcohol and other drug problems among Minnesota adolescents in 1989 and 1992. Arch Pediatr Adolesc Med 1995;149(2):137-44. Excluded; Study design not used.

Harry B, Pierson TR, Kuznetsov A. Correlates of sex offender and offense traits by victim age. J Forensic Sci 1993;38(5):1068-74. Excluded; Age of study population greater than 17 years.

Harty-Golder B. Domestic violence. J Fla Med Assoc 1994;81(10):697-8. Excluded; Not a research study.

Hartz DT. Comparative conflict resolution patterns among parent-teen dyads of four ethnic groups in Hawaii. Child Abuse Negl 1995;19(6):681-9. Excluded; Data not abstractable.

Hastings TL, Kelley ML. Development and validation of the Screen for Adolescent Violence Exposure (SAVE). J Abnorm Child Psychol 1997;25(6):511-20. Excluded;

Outcome is not violence.

Hausman A, Pierce G, Briggs L. Evaluation of comprehensive violence prevention education: effects on student behavior. J Adolesc Health 1996;19(2):104-10. Excluded; Data not abstractable.

Hausman AJ, Spivak H, Prothrow-Stith D. Adolescents' knowledge and attitudes about and experience with violence. J Adolesc Health 1994;15(5):400-6. Excluded; Study design not used.

Hawke JM, Jainchill N, De Leon G. Posttreatment victimization and violence among adolescents following residential drug treatment. Child Maltreat 2003;8(1):58-71. Excluded; Data not abstractable.

Hawke JM, Jainchill N, De Leon G. Posttreatment victimization and violence among adolescents following residential drug treatment. Child Maltreat 2003;8(1):58-71. Excluded; Duplicated citation or findings.

Hawkins SR, Campanaro A, Pitts TB, et al. Weapons in an affluent suburban school. J Sch Violence 2002;1(1):53-65. Excluded; Outcome is not violence.

Haynes NM. Creating safe and caring school communities: Comer School Development Program schools. J Negro Educ 1996;65(3):308-14. Excluded; Not a research study.

Haynie DL, Alexander C, Walters SR. Considering a decision-making approach to youth violence prevention programs. J Sch Health 1997;67(5):165-70. Excluded; Outcome is not violence.

Haynie DL, Nansel T, Eitel P, et al. Bullies, victims, and bully/victims: Distinct groups of at-risk youth. J Early Adolesc 2001;21(1):29-49. Excluded; Outcome is not violence.

Heads TC, Taylor PJ, Leese M. Childhood experiences of patients with schizophrenia and a history of violence: A special hospital sample. Crim Behav Ment Health 1997;7(2):117-30. Excluded; Not a U.S. study.

Heath E, Kosky R. Are children who steal different from those who are aggressive? Child Psychiatry Hum Dev 1992;23(1):9-18. Excluded; Not a U.S. study.

Heath L, Kruttschnitt C, Ward D. Television and violent criminal behavior: beyond the Bobo doll. Violence Vict 1986;1(3):177-90. Excluded; Age of study population greater than 17 years.

Heaven PCL. Personality and self-reported delinquency: Analysis of the "Big Five" personality dimensions. Pers Individ Dif 1996;20(1):47-54. Excluded; Not a U.S. study.

Heck C, Walsh A. The effects of maltreatment and family structure on minor and serious delinquency. Int J Offender Ther Comp Criminol 2000;44(2):178-93. Excluded; Not addressing they key questions.

Heide KM. Weapons used by juveniles and adults to kill parents. Behav Sci Law 1993;11(4):397-405. Excluded; Outcome is not violence.

Heide KM. Parents who get killed and the children who kill them. J Interpers Violence 1993;8(4):531-44. Excluded; Age of study population greater than 17 years.

Heide KM, Spencer E, Thompson A, et al. Who's in, who's out, and who's back: follow-up data on 59 juveniles incarcerated in adult prison for murder or attempted murder in the early 1980s. Behav Sci Law 2001;19(1):97-108. Excluded; Outcome is not violence.

Heimer K. Socioeconomic status, subcultural definitions, and violent delinquency. Soc Forces 1997;75(3):799-833. Excluded; Data not abstractable.

Hemenway D. Lethal violence in the schools. J Health Polit Policy Law 2002;27(2):267-71. Excluded; Not a research study.

Hemmings A. Youth culture of hostility: Discourses of money, respect, and difference. Int J Qual Stud Educ 2002;15(3):291-307. Excluded; Not a research study.

Hendricks-Matthews MK. A survey on violence education: a report of the STFM Violence Education Task Force. Fam Med 1991;23(3):194-7. Excluded; Outcome is not violence.

Hendrix K, Molloy PJ. Forum on youth violence in minority communities. Interventions in early childhood. Public Health Rep 1991;106(3):275-6. Excluded; Not a research study.

Henggeler SW, Melton GB, Brondino MJ, et al. Multisystemic therapy with violent and chronic juvenile offenders and their families: The role of treatment fidelity in successful dissemination. J Consult Clin Psychol 1997;65(5):821-33. Excluded; Data not abstractable.

Henggeler SW, Melton GB, Smith LA, et al. Assessing violent offending in serious juvenile offenders. J Abnorm Child Psychol 1993;21(3):233-43. Excluded; Outcome is not violence.

Henry B, Others A. Temperamental and familial predictors of violent and nonviolent criminal convictions: Age 3 to age 18. Dev Psychol 1996;32(4):614-23. Excluded; Not a U.S. study.

Henry DB, Tolan PH, Gorman-Smith D. Longitudinal family and peer group effects on violence and nonviolent delinquency. J Clin Child Psychol 2001;30(2):172-86. Excluded; Included violent and non-violent behaviors.

Herkov MJ, Gynther MD, Thomas S, et al. MMPI differences among adolescent inpatients, rapists, sodomists, and sexual abusers. J Pers Assess 1996;66(1):81-90. Excluded; Not addressing they key questions.

Hernandez JT, Lodico M, DiClemente RJ. The effects of child abuse and race on risk-taking in male adolescents. J Natl Med Assoc 1993;85(8):593-7. Excluded; Study design not used.

Herrenkohl RC, Egolf BP, Herrenkohl EC. Preschool antecedents of adolescent assaultive behavior: a longitudinal study. Am J Orthopsychiatry 1997;67:422-32. Excluded; Duplicated citation or findings.

Herrenkohl TI, Huang B, Kosterman R, et al. A comparison of social development processes leading to violent behavior in late adolescence for childhood initiators and adolescent initiators of violence. J Res Crime Delinq 2001;38(1):45-63. Excluded; Not addressing they key questions.

Herrenkohl TI, Huang B, Tajima EA, et al. Examining the link between child abuse and youth violence: An analysis of mediating mechanisms. J Interpers Violence 2003;18(10):1189-208. Excluded; Data not abstractable.

Herrera VM, McCloskey LA. Gender differences in the risk for delinquency among youth exposed to family violence. Child Abuse Negl 2001;25(8):1037-51. Excluded; Included violent and non-violent behaviors.

Herrmann DS, McWhirter JJ. Anger & aggression management in young adolescents: An experimental validation of the SCARE program. Educ Treat Child 2003;26(3):273-302. Excluded; Data not abstractable.

Hess P. The gang's all here. Emerg Med Serv 1994;23(7):44-5, 7-54, 6. Excluded; Not a research study.

Hickey DC. Public health and violence. J Tenn Med Assoc 1994;87(5):197-8. Excluded; Not a research study.

Hicks MM, Rogers R, Cashel M. Predictions of violent and total infractions among institutionalized male juvenile offenders. J Am Acad Psychiatry Law 2000;28(2):183-90. Excluded; Data not abstractable.

Hill SC, Drolet JC. School-related violence among high school students in the United States, 1993-1995. J Sch Health 1999;69(7):264-72. Excluded; Study design not used.

Hillbrand M, Spitz RT, Foster HG, et al. Creatine kinase elevations and aggressive behavior in hospitalized forensic patients. Psychiatr Q 1998;69(1):69-82. Excluded; Age of study population greater than 17 years.

Hilton NZ, Harris GT, Rice ME. The functions of aggression by male teenagers. J Pers Soc Psychol 2000;79(6):988-94. Excluded; Not a U.S. study.

Hinshaw SP, Melnick SM. Peer relationships in boys with attention-deficit hyperactivity disorder with and without comorbid aggression. Dev Psychopathol 1995;7(4):627-47. Excluded; Outcome is not violence.

Hinton PM. Domestic violence. J Fla Med Assoc 1996;83(3):211-2. Excluded; Not a research study.

Hirose S, Ashby J, Charles R., Mills MJ. Effectiveness of ECT combined with risperidone against aggression in schizophrenia. J ECT 2001;17(1):22-6. Excluded; Age of study population greater than 17 years.

Hixon AL. Preventing street gang violence. Am Fam Physician 1999;59(8):2121-2, 5, 32. Excluded; Not a research study.

Hobbie C. Violence prevention. J Pediatr Health Care 1995;9(5):234-6. Excluded; Not a research study.

Hodge S, Canter D. Victims and perpetrators of male sexual assault. J Interpers Violence 1998;13(2):222-39. Excluded; Not a U.S. study.

Hodges K. Domestic violence--a health crisis. N C Med J 1993;54(5):213-6. Excluded; Not a research study.

Hodgins S, Lapalme M, Toupin J. Criminal activities and substance use of patients with major affective disorders and schizophrenia: a 2-year follow-up. J Affect Disord 1999;55(2-3):187-202. Excluded; Not a U.S. study.

Hoekelman RA. Causes of death among the young. Pediatr Ann 1992;21(7):407-8. Excluded; Not a research study.

Holden GW, Ritchie KL. Linking extreme marital discord, child rearing, and child behavior problems: evidence from battered women. Child Dev 1991;62(2):311-27. Excluded; Age of study population greater than 17 years.

Holmes SR, Brandenburg-Ayres SJ. Bullying behavior in school: A predictor of later gang involvement. J Gang Res 1998;5(2):1-6. Excluded; Outcome is not violence.

Honig J. Perceived health status in urban minority young adolescents. MCN Am J Matern Child Nurs 2002;27(4):233-7. Excluded; Outcome is not violence.

Hoover JH, Oliver R, Hazler RJ. Bullying: Perceptions of adolescent victims in the Midwestern USA. Sch Psychol Int 1992;13(1):5-16. Excluded; Outcome is not violence.

Hops H, Davis B, Leve C, et al. Cross-generational transmission of aggressive parent behavior: A prospective, mediational examination. J Abnorm Child Psychol 2003;31(2):161-9. Excluded; Study does not focus on youth as perpetrators.

Horner RH, Day HM, Sprague JR, et al. Interspersed requests: a nonaversive procedure for reducing aggression and self-injury during instruction. J Appl Behav Anal 1991;24(2):265-78. Excluded; Data not abstractable.

Horton A. The prevention of juvenile delinquency: New evidence to consider. J Hum Behav Soc Environ 1998;1(4):1-10. Excluded; Outcome is not violence.

Horton A. The prevention of school violence: New

evidence to consider. J Hum Behav Soc Environ 2001;4(1):49-59. Excluded; Not addressing they key questions.

Horton A. Violent crime: New evidence to consider. J Hum Behav Soc Environ 2002;5(2):77-88. Excluded; Age of study population greater than 17 years.

Howard D, Qiu Y, Boekeloo B. Personal and social contextual correlates of adolescent dating violence. J Adolesc Health 2003;33(1):9-17. Excluded; Study does not focus on youth as perpetrators.

Howard DE, Cross SI, Li X, et al. Parent-youth concordance regarding violence exposure: relationship to youth psychosocial functioning. J Adolesc Health 1999;25(6):396-406. Excluded; Study design not used.

Howard DE, Wang MQ. Risk profiles of adolescent girls who were victims of dating violence. Adolescence 2003;38(149):1-14. Excluded; Study does not focus on youth as perpetrators.

Howard PE. Protecting our most precious resource. Del Med J 1997;69(7):327-8. Excluded; Not a research study.

Howell AJ, Reddon JR, Enns RA. Immediate antecedents to adolescents' offenses. J Clin Psychol 1997;53(4):355-60. Excluded; Not a U.S. study.

Howell AJ, Reddon JR, Enns RA. Immediate antecedents to adolescents' offenses. J Clin Psychol 1997;53:355-60. Excluded; Duplicated citation or findings.

Hsu LG, Starzynski J. Adolescent rapists and adolescent child sexual assaulters. Int J Offender Ther Comp Criminol 1990;34(1):23-30. Excluded; Not addressing they key questions.

Huang B, White HR, Kosterman R, et al. Developmental associations between alcohol and interpersonal aggression during adolescence. J Res Crime Delinq 2001;38(1):64-83. Excluded; Study design not used.

Huang DB, Cherek DR, Lane SD. Laboratory measurement of aggression in high school age athletes: Provocation in a nonsporting context. Psychol Rep 1999;85(3, Pt 2 [Spec Issue]):1251-62. Excluded; Outcome is not violence.

Hubbard JA, Dodge KA, Cillessen AHN, et al. The dyadic nature of social information processing in boys' reactive and proactive aggression. J Pers Soc Psychol 2001;80(2):268-80. Excluded; Study does not focus on youth as perpetrators.

Hudley C, Friday J. Attributional bias and reactive aggression. Am J Prev Med 1996;12(5 Suppl):75-81. Excluded; Study does not focus on youth as perpetrators.

Huefner DS. Another point of the suspension and expulsion cases. Except Child 1991;57(4):360-4; Discussion 4-8. Excluded; Not a research study.

Huesmann LR, Maxwell CD, Eron L, et al. Evaluating a cognitive/ecological program for the prevention of aggression among urban children. Am J Prev Med 1996;12(5 Suppl):120-8. Excluded; Study does not focus on youth as perpetrators.

Hughes SA, Deville C, Chalhoub M, et al. The Rorschach human anatomy response: Predicting sexual offending behavior in juveniles. J Psychiatry Law 1992;20(3):313-33. Excluded; Not addressing they key questions.

Hunt G, Joe-Laidler K. Situations of violence in the lives of girl gang members. Health Care Women Int 2001;22(4):363-84. Excluded; Data not abstractable.

Hunter JA, Figueredo AJ. The influence of personality and history of sexual victimization in the prediction of juvenile perpetrated child molestation. Behav Modif 2000;24(2):241-63. Excluded; Study design not used.

Hunter JA, Figueredo AJ, Malamuth NM, et al. Juvenile sex offenders: Toward the development of a typology. Sex Abuse 2003;15(1):27-48. Excluded; Not addressing they key questions.

Hunter JA, Hazelwood RR, Slesinger D. Juvenile-perpetrated sex crimes: Patterns of offending and predictors of violence. J Fam Violence 2000;15(1):81-93. Excluded; Not addressing they key questions.

Hutchins JJ. Prevention of handgun deaths. N J Med 1990; 87(4):283-5. Excluded; Not a research study.

Hutchison IW, Hirschel JD, Pesackis CE. Family violence and police utilization. Violence Vict 1994;9(4):299-313. Excluded; Outcome is not violence.

Hutton M. Violence in America. Reaching epidemic proportions. J Fla Med Assoc 1995;82(10):667-8. Excluded; Not a research study.

Hwang SD, Segal SP. Criminality of the mentally ill in sheltered care: are they more dangerous? Int J Law Psychiatry 1996;19(1):93-105. Excluded; Age of study population greater than 17 years.

Hyde CE, Harrower-Wilson C, Morris J. Violence, dissatisfaction and rapid tranquillisation in psychiatric intensive care. Psychiatr Bull R Coll Psychiatr 1998;22(8):477-80. Excluded; Not a U.S. study.

Ialongo NS, Vaden-Kiernan N, Kellam S. Early peer rejection and aggression: Longitudinal relations with adolescent behavior. J Dev Phys Disabil 1998;10(2):199-213. Excluded; Data not abstractable.

Inciardi JA. The crack-violence connection within a population of hard-core adolescent offenders. NIDA Res Monogr 1990;103:92-111. Excluded; Study design not used.

Ireland JL. Do juveniles bully more than young offenders? J Adolesc 2002;25(2):155-68. Excluded; Not a U.S. study.

Ireland JL. Official records of bullying incidents among young offenders: what can they tell us and how useful are they? J Adolesc 2002;25(6):669-79. Excluded; Not a U.S. study.

Jackson C, Foshee VA. Violence-related behaviors of adolescents: Relations with responsive and demanding parenting. J Adolesc Res 1998;13(3):343-59. Excluded; Study design not used.

Jacobs WL, Kennedy WA, Meyer JB. Juvenile delinquents: A between-group comparison study of sexual and nonsexual offenders. Sex Abuse 1997;9(3):201-17. Excluded; Study design not used.

Jaffee S, Caspi A, Moffitt TE, et al. Why are children born to teen mothers at risk for adverse outcomes in young adulthood? Results from a 20-yr longitudinal study. Dev Psychopathol 2001;13(2):377-97. Excluded; Not a U.S. study.

Jaffee S, Caspi A, Moffitt TE, et al. Why are children born to teen mothers at risk for adverse outcomes in young adulthood? Results from a 20-year longitudinal study. Dev Psychopathol 2001;13(2):377-97. Excluded; Not a U.S. study.

Jagers RJ, Mock LO. Culture and social outcomes among inner-city African American children: An Afrographic exploration. J Black Psychol 1993;19(4):391-405. Excluded; Outcome is not violence.

James E. Royal Society of Medicine: the roots of violence in children and young people. Med Confl Surviv 1999;15(4):420-2. Excluded; Not a research study.

James WH, West C, Deters KE, et al. Youth dating violence. Adolescence 2000;35(139):455-65. Excluded; Study design not used.

Jamieson S, Marshall WL. Attachment styles and violence in child molesters. J Sex Aggress 2000;5(2):88-98. Excluded; Not a U.S. study.

Jarjoura GR, May DC. Integrating criminological theories to explain violent forms of delinquency. Caribb J Criminol Soc Psychol 2000;5(1-2):81-102. Excluded; Not addressing they key questions.

Jasinski JL. Physical violence among Anglo, African American, and Hispanic couples: Ethnic differences in persistence and cessation. Violence Vict 2001;16(5):479-90. Excluded; Age of study population greater than 17 years.

Jenkins PH. School delinquency and the school social bond. J Res Crime Delinq 1997;34:337-67. Excluded; Data not abstractable.

Jenkins RS. Enhancing violence prevention in at-risk youth. J Health Care Poor Underserved 1992;3(2):270-1. Excluded; Not a research study.

Jenson JM, Howard MO. Youth crime, public policy, and practice in the juvenile justice system: recent trends and needed reforms. Soc Work 1998;43(4):324-34. Excluded; Not a research study.

Johnson CC, Myers L, Webber LS, et al. Assertiveness and cardiovascular disease risk factors in children and adolescents: The Bogalusa heart study. J Soc Behav Pers 1997;12(1):243-55. Excluded; Outcome is not violence.

Johnson JG, Cohen P, Smailes E, et al. Adolescent personality disorders associated with violence and criminal behavior during adolescence and early adulthood. Am J Psychiatry 2000;157(9):1406-12. Excluded; Data not abstractable.

Johnson JG, Cohen P, Smailes EM, et al. Television viewing and aggressive behavior during adolescence and adulthood. Science 2002;295(5564):2468-71. Excluded; Data not abstractable.

Johnson SD. The social context of youth violence: A study of African American youth. Int J Adolesc Med Health 1999;11(3-4):159-75. Excluded; Outcome is not violence.

Jones TS, Bodtker AM. Conflict education in a special needs population. Mediat Q 1999;17(2):109-24. Excluded; Data not abstractable.

Jonson-Reid M, Barth RP. From maltreatment report to juvenile incarceration: the role of child welfare services. Child Abuse Negl 2000;24(4):505-20. Excluded; Data not abstractable.

Jonson-Reid M, Barth RP. From placement to prison: the path to adolescent incarceration from child welfare supervised foster or group care. Child Youth Serv Rev 2000;22(7):493-516. Excluded; Outcome is not violence.

Jonson-Reid M, Bivens L. Foster youth and dating violence. J Interpers Violence 1999;14(12):1249-62. Excluded; Study design not used.

Jonson-Reid M, Williams JH, Webster D. Severe emotional disturbance and violent offending among incarcerated adolescents. Soc Work Res 2001;25(4):213-22. Excluded; Not addressing they key questions.

Jordan E, Cowan A, Roberts J. Knowing the rules: Discursive strategies in young children's power struggles. Early Child Res Q 1995;10(3):339-58. Excluded; Not a U.S. study.

Joshi P, Hamel L, Joshi ART, et al. Use of droperidol in hospitalized children. J Am Acad Child Adolesc Psychiatry 1998;37(2):228-30. Excluded; Not addressing they key questions.

Jossi F. Stopping the violence. Healthplan 1998;39(3):95-100. Excluded; Not a research study.

Jouriles EN, Norwood WD, McDonald R, et al. Physical violence and other forms of marital aggression: Links with children's behavior problems. J Fam Psychol 1996;10(2):223-34. Excluded; Outcome is not violence.

Kang SY, Magura S, Shapiro JL. Correlates of cocaine/crack use among inner-city incarcerated adolescents. Am J Drug Alcohol Abuse 1994;20(4):413-29. Excluded; Not addressing they key questions.

Kann L, Kinchen SA, Williams BI, et al. Youth risk behavior surveillance--United States, 1999. State and local YRBSS coordinators. J Sch Health 2000;70(7):271-85. Excluded; Study design not used.

Kann L, Kinchen SA, Williams BI, et al. Youth risk behavior surveillance--United States, 1999. MMWR CDC Surveill Summ 2000;49(5):1-32. Excluded; Not addressing they key questions.

Kann L, Kinchen SA, Williams BI, et al. Youth risk behavior surveillance--United States, 1997. State and local YRBSS coordinators. J Sch Health 1998;68(9):355-69. Excluded; Study design not used.

Kann L, Kinchen SA, Williams BI, et al. Youth risk behavior surveillance--United States, 1997. MMWR CDC Surveill Summ 1998;47(3):1-89. Excluded; Not addressing they key questions.

Kann L, Warren CW, Harris WA, et al. Youth risk behavior surveillance--United States, 1995. J Sch Health 1996;66(10):365-77. Excluded; Study design not used.

Kann L, Warren W, Collins JL, et al. Results from the national school-based 1991 Youth Risk Behavior Survey and progress toward achieving related health objectives for the nation. Public Health Rep 1993;108 Suppl 1:47-67. Excluded; Study design not used.

Kaplan GA, Pamuk ER, Lynch JW, et al. Inequality in income and mortality in the United States: analysis of mortality and potential pathways. BMJ 1996;312(7037):999-1003. Excluded; Study does not focus on youth as perpetrators.

Kaplan HB, Peck BM. Self-rejection, coping style, and mode of deviant response. Soc Sci Q 1992;73(4):903-19. Excluded; Study design not used.

Kaplan SJ, Labruna V, Pelcovitz D, et al. Physically abused adolescents: behavior problems, functional impairment, and comparison of informants' reports. Pediatrics 1999;104(1 Pt 1):43-9. Excluded; Outcome is not violence.

Kaplan SJ, Pelcovitz D, Salzinger S, et al. Adolescent physical abuse: risk for adolescent psychiatric disorders. Am J Psychiatry 1998;155(7):954-9. Excluded; Study does not focus on youth as perpetrators.

Kaplan SL, Busner J, Kupietz S, et al. Effects of methylphenidate on adolescents with aggressive conduct disorder and ADDH: A preliminary report. J Am Acad Child Adolesc Psychiatry 1990;29(5):719-23. Excluded; Not addressing they key questions.

Kashani JH, Darby PJ, Allan WD, et al. Intrafamilial homicide committed by juveniles: Examination of a sample with recommendations for prevention. J Forensic Sci 1997;42(5):873-8. Excluded; Not addressing they key questions.

Kashani JH, Deuser W, Reid JC. Aggression and anxiety: a new look at an old notion. J Am Acad Child Adolesc Psychiatry 1991;30(2):218-23. Excluded; Data not abstractable.

Kashani JH, Jones MR, Borduin CM, et al. Individual characteristics and peer relations of psychiatrically hospitalized aggressive youths: Implications for treatment. Child Psychiatry Hum Dev 2000;30(3):145-59. Excluded; Data not abstractable.

Kashani JH, Shepperd JA. Aggression in adolescents: the role of social support and personality. Can J Psychiatry 1990;35(4):311-5. Excluded; Study design not used.

Kassirer JP. Private arsenals and public peril. N Engl J Med 1998;338(19):1375-6. Excluded; Not a research study.

Kastner JW. Clinical change in adolescent aggressive behavior: A group therapy approach. J Child Adolesc Group Ther 1998;8(1):23-33. Excluded; Data not abstractable.

Katz RC, Marquette j. Psychosocial characteristics of young violent offenders: A comparative study. Crim Behav Ment Health 1996;6(4):339-48. Excluded; Data not abstractable.

Kazdin AE, Crowley MJ. Moderators of treatment outcome in cognitively based treatment of antisocial children. Cognit Ther Res 1997;21(2):185-207. Excluded; Study does not focus on youth as perpetrators.

Keiley MK, Howe TR, Dodge KA, et al. The timing of child physical maltreatment: a cross-domain growth analysis of impact on adolescent externalizing and internalizing problems. Dev Psychopathol 2001;13(4):891-912. Excluded; Outcome is not violence.

Kelder SH, Orpinas P, McAlister A, et al. The students for peace project: a comprehensive violence-prevention program for middle school students. Am J Prev Med 1996;12(5 Suppl):22-30. Excluded; Not a research study.

Kellam SG, Ling X, Merisca R, et al. The effect of the level of aggression in the first grade classroom on the course and malleability of aggressive behavior into middle school. Dev Psychopathol 1998;10(2):165-85. Excluded; Study does not focus on youth as perpetrators.

Kellam SG, Ling X, Merisca R, et al. The effect of the level of aggression in the first grade classroom on the course and malleability of aggressive behavior into middle school: Erratum. Dev Psychopathol 1999;11(1):193. Excluded; Not a research study.

Kellam SG, Ling X, Merisca R, et al. The effect of the level of aggression in the first grade classroom on the course and malleability of aggressive behavior into middle school: Erratum. Dev Psychopathol 2000;12(1):107. Excluded; Not a research study.

Kellam SG, Rebok GW, Ialongo N, et al. The course and malleability of aggressive behavior from early first grade into middle school: results of a developmental epidemiologically-based preventive trial. Journal of Child Psychology and Psychiatry, and Allied Disciplines 1994;35(2):259-81. Excluded; Study does not focus on youth as perpetrators.

Kelley BR, Beauchesne MA. Interventions for violence in children and adolescents. School Nurse News 2002;19(3):36-9; Quiz 40. Excluded; Not a research study.

Kelley D. Shots fired ... children down. JEMS 1998;23(8):38-42, 5. Excluded; Not a research study.

Keltikangas-Jaervinen L. Aggressive behaviour and social problem-solving strategies: A review of the findings of a seven-year follow-up from childhood to late adolescence. Crim Behav Ment Health 2001;11(4):236-50. Excluded; Not a U.S. study.

Keltikangas-Jaervinen L. Aggressive problem-solving strategies, aggressive behavior, and social acceptance in early and late adolescence. J Youth Adolesc 2002;31(4):279-87. Excluded; Not a U.S. study.

Keltikangas-Jaervinen L, Pakaslahti L. Development of social problem-solving strategies and changes in aggressive behavior: A 7-year follow-up from childhood to late adolescence. Aggress Behav 1999;25(4):269-79. Excluded; Outcome is not violence.

Kemph JP, Braley RO, Ciotola PV. A comparison of youthful inmates who have committed violent versus nonviolent crimes. J Am Acad Psychiatry Law 1998;26(1):67-74. Excluded; Data not abstractable.

Kemph JP, DeVane CL, Levin GM, et al. Treatment of aggressive children with clonidine: results of an open pilot study. J Am Acad Child Adolesc Psychiatry 1993;32(3):577-81. Excluded; Data not abstractable.

Kempton T, Forehand R. Juvenile sex offenders: similar to, or different from, other incarcerated delinquent offenders? Behav Res Ther 1992;30(5):533-6. Excluded; Outcome is not violence.

Kennedy LW, Baron SW. Routine activities and a subculture of violence: A study of violence on the street. J Res Crime Delinq 1993;30(1):88-112. Excluded; Not a research study.

Kennedy M. What's the matter with kids today? WMJ 1998;97(8):40-3. Excluded; Not a research study.

Kennedy M. Teens today facing familiar problems. WMJ 2000;99(2):28-32. Excluded; Not a research study.

Kent C. Perspectives. Public health attacks violence. Faulkner Grays Med Health 1992;46(25):Suppl 4 P. Excluded; Not a research study.

Kesner JE, McKenry PC. The role of childhood attachment factors in predicting male violence toward female intimates. J Fam Violence 1998;13(4):417-32. Excluded; Age of study population greater than 17 years.

Kettl PA. Homicide in Alaska Natives. Alaska Med 1993;35(2):168-72. Excluded; Age of study population greater than 17 years.

Khatri P, Kupersmidt JB, Patterson C. Aggression and peer victimization as predictors of self-reported behavioral and emotional adjustment. Aggress Behav 2000;26(5):345-58. Excluded; Study does not focus on youth as perpetrators.

Kheder S, VandenBosch T. Intimate partner violence: a health system's response. Continuum Soc Soc Work Leadersh Health Care 2001;21(1):15-22. Excluded; Not a research study.

Kho K, Sensky T, Mortimer A, et al. Prospective study into factors associated with aggressive incidents in psychiatric acute admission wards. Br J Psychiatry 1998;172:38-43. Excluded; Not a U.S. study.

Killeen MR. Ten years after: examination of adolescent screening questions that predict future violence-related injury. J Child Fam Nurs 2000;3(2):115-6. Excluded; Data not abstractable.

Kindlon DJ, Tremblay RE, Mezzacappa E, et al. Longitudinal patterns of heart rate and fighting behavior in 9- through 12-year-old boys. J Am Acad Child Adolesc Psychiatry 1995;34(3):371-7. Excluded; Not a U.S. study.

King KA, Vidourek RA, Davis B, et al. Increasing self-esteem and school connectedness through a multidimensional mentoring program. J Sch Health 2002;72(7):294-9. Excluded; Outcome is not violence.

King SR. Acting on what they (may) know: children's culpability for violent behavior. J Dev Behav Pediatr 2000;21(6):429-31. Excluded; Not a research study.

Kingery PM, McCoy-Simandle L, Clayton R. Risk factors for adolescent violence: The importance of vulnerability. Sch Psychol Int 1997;18(1):49-60. Excluded; Not addressing they key questions.

Kingery PM, Mirzaee E, Pruitt BE, et al. Rural

communities near large metropolitan areas: Safe havens from adolescent violence and drug use? Health Values 1991;15(4):39-48. Excluded; Study design not used.

Kingery PM, Pruitt BE, Heuberger G. A profile of rural Texas adolescents who carry handguns to school. J Sch Health 1996;66(1):18-22. Excluded; Study design not used.

Kingery PM, Pruitt BE, Heuberger G, et al. Violence in rural schools: An emerging problem near the United States^Mexico border. Sch Psychol Int 1995;16(4):335-44. Excluded; Study design not used.

Kingery PM, Pruitt BE, Hurley RS. Violence and illegal drug use among adolescents: evidence from the U.S. National Adolescent Student Health Survey. Int J Addict 1992;27(12):1445-64. Excluded; Study design not used.

Kipke MD, Simon TR, Montgomery SB, et al. Homeless youth and their exposure to and involvement in violence while living on the streets. J Adolesc Health 1997;20(5):360-7. Excluded; Study does not focus on youth as perpetrators.

Kirkish P, Sreenivasan S, Welsh R, et al. The future of criminal violence: juveniles tried as adults. J Am Acad Psychiatry Law 2000;28(1):38-46. Excluded; Age of study population greater than 17 years.

Klevens J, Roca J. Nonviolent youth in a violent society: Resilience and vulnerability in the country of Columbia. Violence Vict 1999;14(3):311-22. Excluded; Not a U.S. study.

Knox GW. The "get out of the gang thermometer": An application to a large national sample of African-American male youths. J Gang Res 1997;5(1):21-43. Excluded; Outcome is not violence.

Knox M, King C, Hanna GL, et al. Aggressive behavior in clinically depressed adolescents. J Am Acad Child Adolesc Psychiatry 2000;39(5):611-8. Excluded; Data not abstractable.

Kodjo CM, Auinger P, Ryan SA, et al. Demographic, intrinsic, and extrinsic factors associated with weapon carrying at school. Arch Pediatr Adolesc Med 2003;157(1):96-103. Excluded; Duplicated citation or findings.

Kodjo CM, Auinger P, Ryan SA, et al. Demographic, intrinsic, and extrinsic factors associated with weapon carrying at school. Arch Pediatr Adolesc Med 2003;157(1):96-103. Excluded; Outcome is not violence.

Kohn R. Homicide among adolescents in the Americas: a growing epidemic. Bull World Health Organ 2001;79(2):172. Excluded; Not a research study.

Kolko DJ. Conduct disorder and attention deficit disorder with hyperactivity in child inpatients: Comparisons on home and hospital measures. J Emot Behav Disord 1993;1(2):75-86. Excluded; Study does not focus on youth as perpetrators.

Kosterman R, Graham JW, Hawkins JD, et al. Childhood risk factors for persistence of violence in the transition to adulthood: a social development perspective. Violence Vict 2001;16(4):355-69. Excluded; Duplicated citation or findings.

Kostinsky S, Bixler EO, Kettl PA. Threats of school violence in Pennsylvania after media coverage of the Columbine High School massacre: examining the role of imitation. Arch Pediatr Adolesc Med 2001;155(9):994-1001. Excluded; Outcome is not violence.

Krakowski M, Czobor P. Violence in psychiatric patients: the role of psychosis, frontal lobe impairment, and ward turmoil. Compr Psychiatry 1997;38(4):230-6. Excluded; Age of study population greater than 17 years.

Krakowski M, Czobor P, Carpenter MD, et al. Community violence and inpatient assaults: neurobiological deficits. J Neuropsychiatry Clin Neurosci 1997;9(4):549-55. Excluded; Age of study population greater than 17 years.

Kreiter SR, Krowchuk DP, Woods CR, et al. Gender differences in risk behaviors among adolescents who experience date fighting. Pediatrics 1999;104(6):1286-92. Excluded; Study design not used.

Kruesi MJ, Hibbs ED, Zahn TP, et al. A 2-year prospective follow-up study of children and adolescents with disruptive behavior disorders. Prediction by cerebrospinal fluid 5-hydroxyindoleacetic acid, homovanillic acid, and autonomic measures? Arch Gen Psychiatry 1992;49(6):429-35. Excluded; Study does not focus on youth as perpetrators.

Kruesi MJ, Rapoport JL, Hamburger S, et al. Cerebrospinal fluid monoamine metabolites, aggression, and impulsivity in disruptive behavior disorders of children and adolescents. Arch Gen Psychiatry 1990;47(5):419-26. Excluded; Data not abstractable.

Krug EG, Brener ND, Dahlberg LL, et al. The impact of an elementary school-based violence prevention program on visits to the school nurse. Am J Prev Med 1997;13(6):459-63. Excluded; Study does not focus on youth as perpetrators.

Kruttschnitt C, Dornfeld M. Exposure to family violence: A partial explanation for initial and subsequent levels of delinquency? Crim Behav Ment Health 1993;3(2):61-75. Excluded; Outcome is not violence.

Kulig J, Valentine J, Griffith J, et al. Predictive model of weapon carrying among urban high school students: Results and validation. J Adolesc Health 1998;22(4):312-9. Excluded; Outcome is not violence.

Kundu R, Basu J. Aggression in reaction to frustration among adolescent boys with depression and conduct

disorder. SIS J Project Psychol Ment Health 1998;5(2):119-26. Excluded; Not a U.S. study.

Kunitz SJ, Levy JE, McCloskey J, et al. Alcohol dependence and domestic violence as sequelae of abuse and conduct disorder in childhood. Child Abuse Negl 1998;22(11):1079-91. Excluded; Age of study population greater than 17 years.

Kyriacou DN, Hutson HR, Anglin D, et al. The relationship between socioeconomic factors and gang violence in the City of Los Angeles. J Trauma 1999;46(2):334-9. Excluded; Age of study population greater than 17 years.

Labelle A, Bradford JM, Bourget D, et al. Adolescent murderers. Can J Psychiatry 1991;36(8):583-7. Excluded; Not a U.S. study.

Lacourse E, Cote S, Nagin DS, et al. A longitudinal-experimental approach to testing theories of antisocial behavior development. Dev Psychopathol 2002;14(4):909-24. Excluded; Not a U.S. study.

Lahey BB, Goodman SH, Waldman ID, et al. Relation of age of onset to the type and severity of child and adolescent conduct problems. J Abnorm Child Psychol 1999;27(4):247-60. Excluded; Data not abstractable.

Lahey BB, Loeber R, Quay HC, et al. Validity of DSM-IV subtypes of conduct disorder based on age of onset. J Am Acad Child Adolesc Psychiatry 1998;37(4):435-42. Excluded; Outcome is not violence.

Lamberg L. Preventing school violence: no easy answers. JAMA 1998;280(5):404-7. Excluded; Not a research study.

Lamberg L. Younger children, more girls commit acts of violence: some get help, others receive only punishment. JAMA 2002;288(5):566-8. Excluded; Not a research study.

Lancaster W, Jr., Compton D, White N, et al. MMPI-A and dissociative experiences scale responses of violent and non-violent youth offenders. J Offender Rehabil 1997;26(1-2):45-52. Excluded; Study design not used.

Lanclos NF, Gordon ST, Kelley ML. The effects of community violence exposure on Louisiana's children. J La State Med Soc 2000;152(10):504-8. Excluded; Not a research study.

Langhinrichsen-Rohling J, Neidig P. Violent backgrounds of economically disadvantaged youth: Risk factors for perpetrating violence? J Fam Violence 1995;10(4):379-97. Excluded; Outcome is not violence.

Langrock AM, Compas BE, Keller G, et al. Coping with the stress of parental depression: Parents' reports of children's coping, emotional, and behavioral problems. J Clin Child Adolesc Psychol 2002;31(3):312-24. Excluded; Outcome is not violence.

Lansford JE, Dodge KA, Pettit GS, et al. A 12-year prospective study of the long-term effects of early child physical maltreatment on psychological, behavioral, and academic problems in adolescence. Arch Pediatr Adolesc Med 2002;156(8):824-30. Excluded; Data not abstractable.

Larson JD. Anger and aggression management techniques through the Think First curriculum. J Offender Rehabil 1992;18(1-2):101-17. Excluded; Data not abstractable.

Lattimore PK, Others A. Predicting rearrest for violence among serious youthful offenders. J Res Crime Delinq 1995;32(1):54-83. Excluded; Not addressing they key questions.

Lau MA, Pihl RO. Alcohol and the Taylor aggression paradigm: a repeated measures study. J Stud Alcohol 1994;55(6):701-6. Excluded; Outcome is not violence.

Lavoie F, Hebert M, Tremblay R, et al. History of family dysfunction and perpetration of dating violence by adolescent boys; A longitudinal study. J Adolesc Health 2002;30(5):375-83. Excluded; Not a U.S. study.

Lawrence LE. Perspectives on violence. J Natl Med Assoc 1993;85(11):825-7. Excluded; Not a research study.

Leenaars AA, Lester D. Suicide and homicide rates in Canada and the United States. Suicide Life Threat Behav 1994;24(2):184-91. Excluded; Study does not focus on youth as perpetrators.

Lego S. Children killing children. Perspect Psychiatr Care 1998;34(3):3-4. Excluded; Not a research study.

Lehman C. Striking back. Minn Med 2000;83(9):24-6. Excluded; Not a research study.

LeMarquand DG, Pihl RO, Young SN, et al. Tryptophan depletion, executive functions, and disinhibition in aggressive, adolescent males. Neuropsychopharmacology 1998;19(4):333-41. Excluded; Outcome is not violence.

Lempp R. To the diagnostic of "incomprehensible" offences of adolescents and juveniles. Acta Paedopsychiatr 1990;53(2):173-5. Excluded; Not a research study.

Leon-Carrion J, Ramos FJC. Blows to the head during development can predispose to violent criminal behaviour: rehabilitation of consequences of head injury is a measure for crime prevention. Brain Inj 2003;17(3):207-16. Excluded; Not a U.S. study.

Leon-Carrion J, Ramos FJC. Blows to the head during development can predispose to violent criminal behaviour: rehabilitation of consequences of head injury is a measure for crime prevention. Brain Inj 2003;17(3):207-16. Excluded; Duplicated citation or findings.

Lester D. The Holinger/Easterlin cohort hypothesis about youth suicide and homicide rates. Percept Mot Skills 1994;79(3 Pt 2):1545-6. Excluded; Not a research study.

LeSure-Lester GE. Relation between empathy and aggression and behavior compliance among abused group home youth. Child Psychiatry Hum Dev 2000;31(2):153-61. Excluded; Not addressing they key questions.

LeSure-Lester GE. An application of cognitive-behavior principles in the reduction of aggression among abused African American adolescents. J Interpers Violence 2002;17(4):394-402. Excluded; Outcome is not violence.

Leventhal JM, Horwitz SM, Rude C, et al. Maltreatment of children born to teenage mothers: a comparison between the 1960s and 1980s. J Pediatr 1993;122(2):314-9. Excluded; Study does not focus on youth as perpetrators.

Levine GN, Parra F. The gangbangers of East Los Angeles: Sociopsycho-analytic considerations. J Gang Res 2000;7(4):9-12. Excluded; Outcome is not violence.

Lewin LM, Davis B, Hops H. Childhood social predictors of adolescent antisocial behavior: Gender differences in predictive accuracy and efficacy. J Abnorm Child Psychol 1999;27(4):277-92. Excluded; Outcome is not violence.

Lewis DO, Lovely R, Yeager C, et al. Toward a theory of the genesis of violence: A follow-up study of delinquents. Annu Prog Child Psych Child Dev 1990:547-60. Excluded; Study does not focus on youth as perpetrators.

Lewis DO, Yeager CA, Cobham-Portorreal CS, et al. A follow-up of female delinquents: maternal contributions to the perpetuation of deviance. J Am Acad Child Adolesc Psychiatry 1991;30(2):197-201. Excluded; Age of study population greater than 17 years.

Lewis DO, Yeager CA, Gidlow B, et al. Six adoptees who murdered: Neuropsychiatric vulnerabilities and characteristics of biological and adoptive parents. J Am Acad Psychiatry Law 2001;29(4):390-7. Excluded; Not a research study.

Lewis SF, Travea L, Fremouw WJ. Characteristics of female perpetrators and victims of dating violence. Violence Vict 2002;17(5):593-606. Excluded; Age of study population greater than 17 years.

Li X, Feigelman S, Stanton B. Perceived parental monitoring and health risk behaviors among urban low-income African-American children and adolescents. J Adolesc Health 2000;27(1):43-8. Excluded; Study design not used.

Li X, Stanton B, Feigelman S. Exposure to drug trafficking among urban, low-income African American children and adolescents. Arch Pediatr Adolesc Med 1999;153(2):161-8. Excluded; Data not abstractable.

Lingle EA. Treating children by faith. Colliding constitutional issues. J Leg Med 1996;17(2):301-30. Excluded; Not a research study.

Litt IF. Violence among adolescents: don't overlook the girls. J Adolesc Health 1995;17(6):333. Excluded; Not a research study.

Little SA, Garber J. Interpersonal and achievement orientations and specific stressors predicting depressive and aggressive symptoms in children. Cognit Ther Res 2000;24(6):651-70. Excluded; Data not abstractable.

Livingston R, Lawson L, Jones JG. Predictors of self-reported psychopathology in children abused repeatedly by a parent. J Am Acad Child Adolesc Psychiatry 1993;32(5):948-53. Excluded; Study does not focus on youth as perpetrators.

Lochman JE, Dodge KA. Social-cognitive processes of severely violent, moderately aggressive, and nonaggressive boys. J Consult Clin Psychol 1994;62(2):366-74. Excluded; Study design not used.

Lochman JE, Wayland KK. Aggression, social acceptance, and race as predictors of negative adolescent outcomes. J Am Acad Child Adolesc Psychiatry 1994;33(7):1026-35. Excluded; Outcome is not violence.

Lochman JE, Wells KC. Contextual social-cognitive mediators and child outcome: A test of the theoretical model in the Coping Power program. Dev Psychopathol 2002;14(4):945-67. Excluded; Data not abstractable.

Lockwood D. Violence prevention among African American middle school children. Res Middle Level Educ Q 1998;21(3):33-49. Excluded; Not addressing they key questions.

Lodico MA, Gruber E, DiClemente RJ. Childhood sexual abuse and coercive sex among school-based adolescents in a midwestern state. J Adolesc Health 1996;18(3):211-7. Excluded; Not addressing they key questions.

Loeber R, Burke JD, Lahey BB. What are adolescent antecedents to antisocial personality disorder? Crim Behav Ment Health 2002;12(1):24-36. Excluded; Age of study population greater than 17 years.

Loeber R, Farrington DP, Stouthamer-Loeber M, et al. The development of male offending: Key findings from the first decade of the Pittsburgh Youth Study. Stud Crime Crime Prev 1998;7(2):141-71. Excluded; Not addressing they key questions.

Loeber R, Green SM, Keenan K, et al. Which boys will fare worse? Early predictors of the onset of conduct disorder in a six-year longitudinal study. J Am Acad Child Adolesc Psychiatry 1995;34(4):499-509. Excluded; Outcome is not violence.

Long JJ, Fabricius WV, Musheno M, et al. Exploring the cognitive and affective capacities of child mediators in a "successful" inner-city peer mediation program. Mediat Q 1998;15(4):289-302. Excluded; Outcome is not violence.

Loper AB, Cornell DG. Homicide by juvenile girls. J Child

Fam Stud 1996;5(3):323-36. Excluded; Not addressing they key questions.

Loper AB, Hoffschmidt SJ, Ash E. Personality features and characteristics of violent events committed by juvenile offenders. Behav Sci Law 2001;19(1):81-96. Excluded; Data not abstractable.

Lopez VA, Emmer ET. Adolescent male offenders: A grounded theory study of cognition, emotion, and delinquent crime contexts. Crim Justice Behav 2000;27(3):292-311. Excluded; Not a research study.

Lopez VA, Emmer ET. Influences of beliefs and values on male adolescents' decision to commit violent offenses. Psychol Men Masc 2002;3(1):28-40. Excluded; Outcome is not violence.

Losada-Paisey G. Use of the MMPI-A to assess personality of juvenile male delinquents who are sex offenders and nonsex offenders. Psychol Rep 1998;83(1):115-22. Excluded; Not addressing they key questions.

Loskota M. G is for gangsta. Understanding gangs in Minnesota. Minn Med 1998;81(4):28-32. Excluded; Not a research study.

Lowenstein LF. Bullying: An intensive and multi-dimensional treatment approach in a therapeutic community. Educ Today 1995;45(1):19-24. Excluded; Not a U.S. study.

Lowenstein LF. Perception and accuracy of perception by bullying children of potential victims. Educ Today 1995;45(2):28-31. Excluded; Data not abstractable.

Lowry R, Cohen LR, Modzeleski W, et al. School violence, substance use, and availability of illegal drugs on school property among US high school students. J Sch Health 1999;69(9):347-55. Excluded; Study design not used.

Lowry R, Powell KE, Kann L, et al. Weapon-carrying, physical fighting, and fight-related injury among U.S. adolescents. Am J Prev Med 1998;14(2):122-9. Excluded; Study design not used.

Luengo MA, Otero JM, Carrillo-de-la-Pena MT, et al. Dimensions of antisocial behaviour in juvenile delinquency: A study of personality variables. Psychol Crime Law 1994;1(1):27-37. Excluded; Not a U.S. study.

Luiselli JK, Arons M, Marchese N, et al. Incidence of law-violating behavior in a community sample of children and adolescents with traumatic brain injury. Int J Offender Ther Comp Criminol 2000;44(6):647-56. Excluded; Data not abstractable.

Lurie S. Child psychiatrists address problem of youth violence. JAMA 1999;282(20):1906-7. Excluded; Not a research study.

Lykken DT. The causes and costs of crime and a controversial cure. J Pers 2000;68(3):559-605. Excluded; Not a research study.

Lyons JS, Schaefer K. Mental health and dangerousness: Characteristics and outcomes of children and adolescents in residential placements. J Child Fam Stud 2000;9(1):67-73. Excluded; Data not abstractable.

Lysaker PH, Wright DE, Clements CA, et al. Neurocognitive and psychosocial correlates of hostility among persons in a post-acute phase of schizophrenia spectrum disorders. Compr Psychiatry 2002;43(4):319-24. Excluded; Age of study population greater than 17 years.

Ma X. Bullying and being bullied: To what extent are bullies also victims? Am Educ Res J 2001;38(2):351-70. Excluded; Not a U.S. study.

Macgowan MJ. An evaluation of a dating violence prevention program for middle school students. Violence Vict 1997;12(3):223-35. Excluded; Outcome is not violence.

MacKinnon-Lewis C, Lofquist A. Antecedents and consequences of boys' depression and aggression: Family and school linkages. J Fam Psychol 1996;10(4):490-500. Excluded; Study does not focus on youth as perpetrators.

Madan A, Beech DJ, Flint L. Drugs, guns, and kids: the association between substance use and injury caused by interpersonal violence. J Pediatr Surg 2001;36(3):440-2. Excluded; Study does not focus on youth as perpetrators.

Madsen P. Drive-by shootings in Los Angeles. N Engl J Med 1994;330(25):1833. Excluded; Not a research study.

Malek MK, Chang BH, Davis TC. Self-reported characterization of seventh-grade students' fights. J Adolesc Health 1998;23(2):103-9. Excluded; Not addressing they key questions.

Malek MK, Chang BH, Davis TC. Fighting and weapon-carrying among seventh-grade students in Massachusetts and Louisiana. J Adolesc Health 1998;23(2):94-102. Excluded; Study design not used.

Males M. Youth behavior: subcultural effect or mirror of adult behavior? J Sch Health 1990;60(10):505-8. Excluded; Not a research study.

Males M. California trends reveal teenage violence myths. Am J Public Health 1998;88(7):1123. Excluded; Not a research study.

Males MA. America's youth violence hoax. Lancet 1999;354(9189):1563-4. Excluded; Not a research study.

Malik S, Sorenson SB, Aneshensel CS. Community and dating violence among adolescents: perpetration and victimization. J Adolesc Health 1997;21(5):291-302. Excluded; Study design not used.

Malmquist CP. Depression in homicidal adolescents. Bull Am Acad Psychiatry Law 1990;18(1):23-36. Excluded; Outcome is not violence.

Malone RP, Bennett DS, Luebbert JF, et al. Aggression classification and treatment response. Psychopharmacol Bull 1998;34(1):41-5. Excluded; Outcome is not violence.

Malone RP, Delaney MA, Leubbert JF, et al. A double-blind placebo-controlled study of lithium in hospitalized aggressive children and adolescents with conduct disorder. Arch Gen Psychiatry 2000;57(7):649-54. Excluded; Duplicated citation or findings.

Malone RP, Luebbert J, Pena-Ariet M, et al. The Overt Aggression Scale in a study of lithium in aggressive conduct disorder. Psychopharmacol Bull 1994;30(2):215-8. Excluded; Data not abstractable.

Malone RP, Luebbert JF, Delaney MA, et al. Nonpharmacological response in hospitalized children with conduct disorder. J Am Acad Child Adolesc Psychiatry 1997;36(2):242-7. Excluded; Data not abstractable.

Malpique C, Barrias P, Morais L, et al. Violence and alcoholism in the family: How are the children affected? Alcohol Alcohol 1998;33(1):42-6. Excluded; Outcome is not violence.

Manning JT, Wood D. Fluctuating asymmetry and aggression in boys. Hum Nat 1998;9(1):53-65. Excluded; Not a U.S. study.

Marans S, Berkowitz SJ, Cohen DJ. Police and mental health professionals. Collaborative responses to the impact of violence on children and families. Child Adolesc Psychiatr Clin N Am 1998;7(3):635-51. Excluded; Not a research study.

Marcelle DR, Melzer-Lange MD. Project UJIMA: working together to make things right. WMJ 2001;100(2):22-5. Excluded; Study does not focus on youth as perpetrators.

Marciniak LM. Adolescent attitudes toward victim precipitation of rape. Violence Vict 1998;13(3):287-300. Excluded; Outcome is not violence.

Marcus BA, Vollmer TR, Swanson V, et al. An experimental analysis of aggression. Behav Modif 2001;25(2):189-213. Excluded; Study does not focus on youth as perpetrators.

Marcus NE, Lindahl KM, Malik NM. Interparental conflict, children's social cognitions, and child aggression: A test of a mediational model. J Fam Psychol 2001;15(2):315-33. Excluded; Data not abstractable.

Marcus RF. A gender-linked exploratory factor analysis of antisocial behavior in young adolescents. Adolescence 1999;34(133):33-46. Excluded; Outcome is not violence.

Marcus RF, Gray L. Close relationships of violent and nonviolent African American delinquents. Violence Vict 1998;13(1):31-46. Excluded; Study design not used.

Margolin A, Youga J, Ballou M. Voices of violence: A study of male adolescent aggression. J Humanist Educ Dev 2002;41(2):215-31. Excluded; Outcome is not violence.

Margolin L, Craft JL. Child abuse by adolescent caregivers. Child Abuse Negl 1990;14(3):365-73. Excluded; Study design not used.

Marlowe M, Schneider HG, Bliss LB. Hair mineral analysis in emotionally disturbed and violence prone children. Int J Biosoc Med Res 1991;13(2):169-79. Excluded; Study does not focus on youth as perpetrators.

Marsh HW, Parada RH, Yeung AS, et al. Aggressive school troublemakers and victims: A longitudinal model examining the pivotal role of self-concept. J Educ Psychol 2001;93(2):411-9. Excluded; Outcome is not violence.

Marsh TY, Cornell DG. The contribution of student experiences to understanding ethnic differences in high-risk behaviors at school. Behav Disord 2001;26(2):152-63. Excluded; Study design not used.

Marshall JE. Street Soldiers: violence prevention over the airwaves, a phenomenon. J Health Care Poor Underserved 1995;6(2):246-51; Discussion 52-3. Excluded; Not a research study.

Martin CA, Milich R, Martin WR, et al. Gender differences in adolescent psychiatric outpatient substance use: associated behaviors and feelings. J Am Acad Child Adolesc Psychiatry 1997;36(4):486-94. Excluded; Data not abstractable.

Martin CS, Earleywine M, Blackson TC, et al. Aggressivity, inattention, hyperactivity, and impulsivity in boys at high and low risk for substance abuse. J Abnorm Child Psychol 1994;22(2):177-203. Excluded; Study does not focus on youth as perpetrators.

Martin JL, Ross HS. Do mitigating circumstances influence family reactions to physical aggression? Child Dev 1996;67(4):1455-66. Excluded; Outcome is not violence.

Martin SE, Bryant K. Gender differences in the association of alcohol intoxication and illicit drug abuse among persons arrested for violent and property offenses. Journal of Substance Abuse 2001;13(4):563-81. Excluded; Age of study population greater than 17 years.

Martin SE, Bryant K, Fitzgerald N. Self-reported alcohol use and abuse by arrestees in the 1998 Arrestee Drug Abuse Monitoring Program. Alcohol Res Health 2001;25(1):72-9. Excluded; Age of study population greater than 17 years.

Marty F. Linking work: from violence to subjectivization. Am J Psychoanal 2002;62(3):255-72. Excluded; Not a research study.

Mason JO. Forum on youth violence in minority communities. Prevention of violence: a public health commitment. Public Health Rep 1991;106(3):265-8. Excluded; Not a research study.

Mason JO. The dimensions of an epidemic of violence. Public Health Rep 1993;108(1):1-3. Excluded; Not a research study.

Matthys W, Cuperus JM, Van Engeland H. Deficient social problem-solving in boys with ODD/CD, with ADHD, and with both disorders. J Am Acad Child Adolesc Psychiatry 1999;38(3):311-21. Excluded; Outcome is not violence.

Matykiewicz L, La Grange L, Vance P, et al. Adjudicated adolescent males: Measures of urinary 5-hydroxyindoleacetic acid and reactive hypoglycemia. Pers Individ Dif 1997;22(3):327-32. Excluded; Outcome is not violence.

Maughan B, Pickles A, Rowe R, et al. Developmental trajectories of aggressive and non-aggressive conduct problems. J Quant Criminol 2000;16(2):199-221. Excluded; Data not abstractable.

Maxfield MG, Widom CS. The cycle of violence. Revisited 6 years later. Arch Pediatr Adolesc Med 1996;150(4):390-5. Excluded; Duplicated citation or findings.

McBurnett K, Harris SM, Swanson JM, et al. Neuropsychological and psychophysiological differentiation of inattention/overactivity and aggression/defiance symptom groups. J Clin Child Psychol 1993;22(2):165-71. Excluded; Study does not focus on youth as perpetrators.

McBurnett K, Lahey BB, Rathouz PJ, et al. Low salivary cortisol and persistent aggression in boys referred for disruptive behavior. Arch Gen Psychiatry 2000;57(1):38-43. Excluded; Outcome is not violence.

McCabe KM, Hough R, Wood PA, et al. Childhood and adolescent onset conduct disorder: a test of the developmental taxonomy. J Abnorm Child Psychol 2001;29(4):305-16. Excluded; Data not abstractable.

McCafferty C. Adolescent homicide. No quick fixes. Minn Med 1998;81(11):25-6. Excluded; Not a research study.

McCarthy-Tucker S, Gold A, Garcia E. Effects of anger management training on aggressive behavior in adolescent boys. J Offender Rehabil 1999;29(3-4):129-41. Excluded; Outcome is not violence.

McCloskey LA, Lichter EL. The contribution of marital violence to adolescent aggression across different relationships. J Interpers Violence 2003;18(4):390-412. Excluded; Duplicated citation or findings.

McColloch MA, Gilbert DG, Johnson S. Effects of situational variables on the interpersonal behavior of families with an aggressive adolescent. Pers Individ Dif 1990;11(1):1-11. Excluded; Outcome is not violence.

McCormick KF. Corporal punishment and violence. Arch Fam Med 1992;1(2):203-4. Excluded; Not a research study.

McCurrie TF. White racist extremist gang members: A behavioral profile. J Gang Res 1998;5(2):51-60. Excluded; Not a research study.

McElroy SL. Recognition and treatment of DSM-IV intermittent explosive disorder. J Clin Psychiatry 1999;60 Suppl 15:12-6. Excluded; Study does not focus on youth as perpetrators.

McFarlane JM, Groff JY, O'Brien JA, et al. Behaviors of children who are exposed and not exposed to intimate partner violence: an analysis of 330 black, white, and Hispanic children. Pediatrics 2003;112(3 Pt 1):E202-7. Excluded; Outcome is not violence.

McGaha JE, Leoni EL. Family violence, abuse, and related family issues of incarcerated delinquents with alcoholic parents compared to those with nonalcoholic parents. Adolescence 1995;30(118):473-82. Excluded; Outcome is not violence.

McGee JP, DeBernardo CR. The classroom avenger: A behavioral profile of school based shootings. Forensic Exam 1999;8(5-6):16-8. Excluded; Not a research study.

McGee RA, Wolfe DA, Wilson SK. Multiple maltreatment experiences and adolescent behavior problems: adolescents' perspectives. Dev Psychopathol 1997;9(1):131-49. Excluded; Outcome is not violence.

McGee ZT, Davis BL, Brisbane T, et al. Urban stress and mental health among African-American youth: assessing the link between exposure to violence, problem behavior, and coping strategies. J Cult Divers 2001;8(3):94-104. Excluded; Outcome is not violence.

McGloin JM, Widom CS. Resilience among abused and neglected children grown up. Dev Psychopathol 2001;13(4):1021-38. Excluded; Outcome is not violence.

McGuffin PW. The effect of timeout duration on frequency of aggression in hospitalized children with conduct disorders. Behav Resid Treat 1991;6(4):279-88. Excluded; Study does not focus on youth as perpetrators.

McIntyre T, Cowell K. Effects of various music conditions on multiple dimensions of behavior of emotionally disturbed adolescents. Psychol Rep 1991;69(3, Pt 1):1007-8. Excluded; Data not abstractable.

McKenney A, Dattilo J. Effects of an intervention within a sport context on the prosocial behavior and antisocial behavior of adolescents with disruptive behavior disorders. Ther Recreation J 2001;35(2):123-40. Excluded; Data not abstractable.

McKeown RE, Jackson KL, Valois RF. The frequency and correlates of violent behaviors in a statewide sample of high school students. Fam Community Health 1998;20(4):38-53. Excluded; Study design not used.

Mclaughlin CR, Daniel J, Joost TF. The relationship between substance use, drug selling, and lethal violence in 25 juvenile murderers. J Forensic Sci 2000;45(2):349-53. Excluded; Study design not used.

McLaughlin CR, Reiner SM, Reams PN, et al. Factors associated with parenting among incarcerated juvenile offenders. Adolescence 1999;34(136):665-70. Excluded; Outcome is not violence.

McLaughlin CR, Reiner SM, Smith BW, et al. Firearm injuries among Virginia juvenile drug traffickers, 1992 through 1994. Am J Public Health 1996;86(5):751-2. Excluded; Not a research study.

McNeal C, Amato PR. Parents' marital violence: Long-term consequences for children. J Fam Issues 1998;19(2):123-39. Excluded; Age of study population greater than 17 years.

McNeil DE, Binder RL. The relationship between acute psychiatric symptoms, diagnosis, and short-term risk of violence. Hosp Community Psychiatry 1994;45(2):133-7. Excluded; Age of study population greater than 17 years.

McNiel DE, Binder RL. Clinical assessment of the risk of violence among psychiatric inpatients. Am J Psychiatry 1991;148(10):1317-21. Excluded; Age of study population greater than 17 years.

McNiel DE, Binder RL. Clinical assessment of the risk of violence among psychiatric inpatients. Am J Psychiatry 1991;148(10):1317-21. Excluded; Duplicated citation or findings.

McNiel DE, Eisner JP, Binder RL. The relationship between command hallucinations and violence. Psychiatr Serv 2000;51(10):1288-92. Excluded; Age of study population greater than 17 years.

Meehan PJ, O'Carroll PW. Gangs, drugs, and homicide in Los Angeles. Am J Dis Child 1992;146(6):683-7. Excluded; Study does not focus on youth as perpetrators.

Meller WH, Borchardt CM. Comorbidity of major depression and conduct disorder. J Affect Disord 1996;39(2):123-6. Excluded; Outcome is not violence.

Meloy JR, Gacono GB, Kenney L. A Rorschach investigation of sexual homicide. J Pers Assess 1994;62(1):58-67. Excluded; Age of study population greater than 17 years.

Meloy JR, Hempel AG, Mohandie K, et al. Offender and offense characteristics of a nonrandom sample of adolescent mass murderers. J Am Acad Child Adolesc Psychiatry 2001;40(6):719-28. Excluded; Not addressing they key questions.

Menard S, Mihalic S. The tripartite conceptual framework in adolescence and adulthood: Evidence from a national sample. J Drug Issues 2001;31(4):905-39. Excluded; Data not abstractable.

Menken M. Grappling with the enigma of violence. An educational approach. Arch Neurol 1992;49(6):592-4. Excluded; Not a research study.

Mercy JA, Potter LB. Combining analysis and action to solve the problem of youth violence. Am J Prev Med 1996;12(5 Suppl):1-2. Excluded; Not a research study.

Merrick J, Kessel S, Morad M, et al. Trends in school violence. Int J Adolesc Med Health 2002;14(1):77-80. Excluded; Not a research study.

Merrill LL, Hervig LK, Milner JS. Childhood parenting experiences, intimate partner conflict resolution, and adult risk for child physical abuse. Child Abuse Negl 1996;20:1049-65. Excluded; Age of study population greater than 17 years.

Merrill LL, Thomsen CJ, Gold SR, et al. Childhood abuse and premilitary sexual assault in male navy recruits. J Consult Clin Psychol 2001;69(2):252-61. Excluded; Age of study population greater than 17 years.

Messer SC, Gross AM. Childhood depression and aggression: A covariance structure analysis. Behav Res Ther 1994;32(6):663-77. Excluded; Outcome is not violence.

Metzler CW, Noell J, Biglan A, et al. The social context for risky sexual behavior among adolescents. J Behav Med 1994;17(4):419-38. Excluded; Outcome is not violence.

Mezzich AC. Diagnostic formulations for violent delinquent adolescents. J Psychiatry Law 1990;18(1):165-90. Excluded; Not addressing they key questions.

Mezzich AC, Coffman G, Mezzich JE. A typology of violent delinquent adolescents. J Psychiatry Law 1991;19(1-2):63-78. Excluded; Not addressing they key questions.

Miccio-Fonseca LC. Comparative differences in the psychological histories of sex offenders, victims, and their families. J Offender Rehabil 1996;23(3-4):71-83. Excluded; Study does not focus on youth as perpetrators.

Miccio-Fonseca LC. Adult and adolescent female sex offenders: Experiences compared to other female and male sex offenders. J Psychol Human Sex 2000;11(3):75-88. Excluded; Age of study population greater than 17 years.

Middleton MB, Cartledge G. The effects of social skills instruction and parental involvement on the aggressive behaviors of African American males. Behav Modif 1995;19(2):192-210. Excluded; Study does not focus on

youth as perpetrators.

Mihalic SW, Elliott D. A social learning theory model of marital violence. J Fam Violence 1997;12(1):21-47. Excluded; Age of study population greater than 17 years.

Miller DB. Treatment of adolescent interpersonal violence: A cognitive-behavioral group approach. J Child Adolesc Group Ther 1995;5(4):191-200. Excluded; Not a research study.

Miller F, Webb J. Theoretical perspectives on violence and youth. Med Health R I 1996;79(7):261-3. Excluded; Not a research study.

Miller JM, DiIorio C, Dudley W. Parenting style and adolescent's reaction to conflict: is there a relationship? J Adolesc Health 2002;31(6):463-8. Excluded; Not a research study.

Miller KS, Knutson JF. Reports of severe physical punishment and exposure to animal cruelty by inmates convicted of felonies and by university students. Child Abuse Negl 1997;21(1):59-82. Excluded; Age of study population greater than 17 years.

Miller M, Azrael D, Hemenway D. Firearm availability and unintentional firearm deaths, suicide, and homicide among 5-14 year olds. J Trauma 2002;52(2):267-74; Discussion 74-5. Excluded; Study does not focus on youth as perpetrators.

Miller-Johnson S, Coie JD, Maumary-Gremaud A, et al. Peer rejection and aggression and early starter models of conduct disorder. J Abnorm Child Psychol 2002;30(3):217-30. Excluded; Study does not focus on youth as perpetrators.

Millstein SG, Irwin CE, Adler NE, et al. Health-risk behaviors and health concerns among young adolescents. Pediatrics 1992;89(3):422-8. Excluded; Outcome is not violence.

Minden J, Henry DB, Tolan PH, et al. Urban boys' social networks and school violence. Prof Sch Couns 2000;4(2):95-104. Excluded; Study design not used.

Mitka M. Hospital study offers hope of changing lives prone to violence. JAMA 2002;287(5):576-7. Excluded; Not a research study.

Moffit TE, Caspi A, Dickson N, et al. Childhood-onset versus adolescent-onset antisocial conduct problems in males: Natural history from ages 3 to 18 years. Dev Psychopathol 1996;8(2):399-424. Excluded; Outcome is not violence.

Moise JF, Huesmann LR. Television violence viewing and aggression in females. Ann N Y Acad Sci 1996;794:380-3. Excluded; Study does not focus on youth as perpetrators.

Molidor C, Tolman RM. Gender and contextual factors in adolescent dating violence. Violence Against Women 1998;4(2):180-94. Excluded; Study does not focus on youth as perpetrators.

Molidor CE. Gender differences of psychological abuse in high school dating relationships. Child Adolesc Social Work J 1995;12(2):119-34. Excluded; Outcome is not violence.

Molidor CE. Female gang members: A profile of aggression and victimization. Soc Work 1996;41(3):251-7. Excluded; Outcome is not violence.

Molliconi SA, Runyan CW. Detecting domestic violence. A pilot study of family practitioners. N C Med J 1996;57(3):136-8. Excluded; Outcome is not violence.

Mooney A, Creeser R, Blatchford P. Children's views on teasing and fighting in junior schools. Educ Res 1991;33(2):103-12. Excluded; Not a U.S. study.

Moore MH. Violence prevention: criminal justice or public health? Health Aff (Millwood) 1993;12(4):34-45. Excluded; Not a research study.

Moretti MM, Holland R, McKay S. Self-other representations and relational and overt aggression in adolescent girls and boys. Behav Sci Law 2001;19(1):109-26. Excluded; Not a U.S. study.

Moretti MM, Holland R, Peterson S. Long term outcome of an attachment-based program for conduct disorder. Can J Psychiatry 1994;39(6):360-70. Excluded; Not a U.S. study.

Moriarty N, Stough C, Tidmarsh P, et al. Deficits in emotional intelligence underlying adolescent sex offending. J Adolesc 2001;24(6):743-51. Excluded; Not a U.S. study.

Morris RE, Anderson MM, Knox GW. Incarcerated adolescents' experiences as perpetrators of sexual assault. Arch Pediatr Adolesc Med 2002;156(8):831-5. Excluded; Study design not used.

Morrison EF. A coercive interactional style as an antecedent to aggression in psychiatric patients. Res Nurs Health 1992;15(6):421-31. Excluded; Age of study population greater than 17 years.

Moscovitz H, Degutis L, Bruno GR, et al. Emergency department patients with assault injuries: previous injury and assault convictions. Ann Emerg Med 1997;29(6):770-5. Excluded; Study does not focus on youth as perpetrators.

Moscovitz H, Milzman D, Haywood Y. The Washington, DC, Youth Curfew: effect on transports of injured youth and homicides. Prehosp Emerg Care 2000;4(4):294-8. Excluded; Outcome is not violence.

Moss HB, Mezzich A, Yao JK, et al. Aggressivity among sons of substance-abusing fathers: Association with psychiatric disorder in the father and son, paternal personality, pubertal development, and socioeconomic

status. Am J Drug Alcohol Abuse 1995;21(2):195-208. Excluded; Data not abstractable.

Mulder RT, Joyce PR. Relationship of temperament and behaviour measures to the prolactin response to fenfluramine in depressed men. Psychiatry Res 2002;109(3):221-8. Excluded; Outcome is not violence.

Mullen PE, Pathe M, Purcell R, et al. Study of stalkers. Am J Psychiatry 1999;156(8):1244-9. Excluded; Not a U.S. study.

Mulvey EP, Lidz CW. Clinical prediction of violence as a conditional judgment. Soc Psychiatry Psychiatr Epidemiol 1998;33 Suppl 1:s107-13. Excluded; Study does not focus on youth as perpetrators.

Munroe RL, Hulefeld R, Rodgers JM, et al. Aggression among children in four cultures. Cross Cult Res 2000;34(1):3-25. Excluded; Not a U.S. study.

Muris P, Merckelbach H, Walczak S. Aggression and threat perception abnormalities in children with learning and behavior problems. Child Psychiatry Hum Dev 2002;33(2):147-63. Excluded; Not a U.S. study.

Murray NG, Kelder SH, Parcel GS, et al. Padres Trabajando por la Paz: a randomized trial of a parent education intervention to prevent violence among middle school children. Health Educ Res 1999;14(3):421-6. Excluded; Outcome is not violence.

Murrey GJ, Briggs D, Davis C. Psychopathic disordered, mentally ill, and mentally handicapped sex offenders: a comparative study. Med Sci Law 1992;32(4):331-6. Excluded; Not addressing they key questions.

Muscari ME, Phillips C, Bears T. Health beliefs and behaviors in rural high school juniors. Pediatr Nurs 1997;23(4):380-9. Excluded; Outcome is not violence.

Myaard MJ, Crawford C, Jackson M, et al. Applying behavior analysis within the wraparound process: A multiple baseline study. J Emot Behav Disord 2000;8(4):216-29. Excluded; Not a research study.

Myeroff R, Mertlich G, Gross J. Comparative effectiveness of holding therapy with aggressive children. Child Psychiatry Hum Dev 1999;29(4):303-13. Excluded; Data not abstractable.

Myers WC, Blashfield R. Psychopathology and personality in juvenile sexual homicide offenders. J Am Acad Psychiatry Law 1997;25(4):497-508. Excluded; Not addressing they key questions.

Myers WC, Burgess AW, Nelson JA. Criminal and behavioral aspects of juvenile sexual homicide. J Forensic Sci 1998;43(2):340-7. Excluded; Not addressing they key questions.

Myers WC, Kemph JP. DSM-III-R classification of murderous youth: help or hindrance? J Clin Psychiatry 1990;51(6):239-42. Excluded; Not addressing they key questions.

Myers WC, Monaco L. Anger experience, styles of anger expression, sadistic personality disorder, and psychopathy in juvenile sexual homicide offenders. J Forensic Sci 2000;45(3):698-701. Excluded; Not addressing they key questions.

Myers WC, Mutch PJ. Language disorders in disruptive behavior disordered homicidal youth. J Forensic Sci 1992;37(3):919-22. Excluded; Not addressing they key questions.

Myers WC, Scott K. Psychotic and conduct disorder symptoms in juvenile murderers. Homicide Stud 1998;2(2):160-75. Excluded; Study design not used.

Myers WC, Scott K, Burgess AW, et al. Psychopathology, biopsychosocial factors, crime characteristics, and classification of 25 homicidal youths. J Am Acad Child Adolesc Psychiatry 1995;34(11):1483-9. Excluded; Not addressing they key questions.

Mynard H, Joseph S. Bully/victim problems and their association with Eysenck's personality dimensions in 8 to 13 year-olds. Br J Educ Psychol 1997;67(1):51-4. Excluded; Not a U.S. study.

Myner J, Santman J, Cappelletty GG, et al. Variables related to recidivism among juvenile offenders. Int J Offender Ther Comp Criminol 1998;42(1):65-80. Excluded; Age of study population greater than 17 years.

Nadel H, Spellmann M, Alvarez-Canino T, et al. The cycle of violence and victimization: a study of the school-based intervention of a multidisciplinary youth violence-prevention program. Am J Prev Med 1996;12(5 Suppl):109-19. Excluded; Not addressing they key questions.

Nagin D, Tremblay RE. Trajectories of boys' physical aggression, opposition, and hyperactivity on the path to physically violent and nonviolent juvenile delinquency. Child Dev 1999;70(5):1181-96. Excluded; Not a U.S. study.

Nagy S, DiClemente R, Adcock AG. Adverse factors associated with forced sex among southern adolescent girls. Pediatrics 1995;96(5 Pt 1):944-6. Excluded; Outcome is not violence.

Nagy S, Dunn MS. Alcohol behaviors and deviant behaviors among adolescents in a rural state. J Alcohol Drug Educ 1999;44(3):1-9. Excluded; Study does not focus on youth as perpetrators.

Nansel TR, Overpeck MD, Haynie DL, et al. Relationships between bullying and violence among US youth. Arch Pediatr Adolesc Med 2003;157(4):348-53. Excluded; Duplicated citation or findings.

Nansel TR, Overpeck MD, Haynie DL, et al. Relationships between bullying and violence among US youth. Arch Pediatr Adolesc Med 2003;157(4):348-53. Excluded; Study design not used.

Nathanson AI. Parents versus peers: Exploring the significance of peer mediation of antisocial television. Commun Res 2001;28(3):251-74. Excluded; Age of study population greater than 17 years.

Nelson BV, Patience TH, MacDonald DC. Adolescent risk behavior and the influence of parents and education. J Am Board Fam Pract 1999;12(6):436-43. Excluded; Outcome is not violence.

Nelson C, Valliant PM. Personality dynamics of adolescent boys where the father was absent. Percept Mot Skills 1993;76(2):435-43. Excluded; Outcome is not violence.

Nevin R. How lead exposure relates to temporal changes in IQ, violent crime, and unwed pregnancy. Environ Res 2000;83(1):1-22. Excluded; Age of study population greater than 17 years.

New MJC, Stevenson J, Skuse D. Characteristics of mothers of boys who sexually abuse. Child Maltreat 1999;4(1):21-31. Excluded; Not a U.S. study.

Newhill CE, Mulvey EP, Lidz CW. Characteristics of violence in the community by female patients seen in a psychiatric emergency service. Psychiatr Serv 1995;46(8):785-9. Excluded; Age of study population greater than 17 years.

Nicol R, Stretch D, Whitney I. Mental health needs and services for severely troubled and troubling young people including young offenders in an N.H.S. region. J Adolesc 2000;23(3):243-61. Excluded; Outcome is not violence.

Nijman HLI, Rector G. Crowding and aggression on inpatient psychiatric wards. Psychiatr Serv 1999;50(6):830-1. Excluded; Not a U.S. study.

Ninness HAC, Ellis J, Miller WB, et al. The effect of a self-management training package on the transfer of aggression control procedures in the absence of supervision. Behav Modif 1995;19(4):464-90. Excluded; Not a research study.

Nock MK, Kazdin AE. Parent-directed physical aggression by clinic-referred youths. J Clin Child Adolesc Psychol 2002;31(2):193-205. Excluded; Study does not focus on youth as perpetrators.

Nolin MJ, Davies E, Chandler K. Student victimization at school. J Sch Health 1996;66(6):216-21. Excluded; Study does not focus on youth as perpetrators.

Northrop D, Hamrick K. Weapons and minority youth violence. Public Health Rep 1991;106(3):274-5. Excluded; Not a research study.

Northrop D, Jacklin B, Cohen S, et al. Violence prevention strategies targeted towards high-risk minority youth. Public Health Rep 1991;106(3):272-4. Excluded; Not a research study.

Nugent WR, Bruley C, Allen P. The effects of aggression replacement training on antisocial behavior in a runaway shelter. Res Soc Work Pract 1998;8(6):637-56. Excluded; Outcome is not violence.

Nugent WR, Bruley C, Allen P. The effects of Aggression Replacement Training on male and female antisocial behavior in a runaway shelter. Res Soc Work Pract 1999;9(4):466-82. Excluded; Outcome is not violence.

Nutter DE, Kearns ME. Patterns of exposure to sexually explicit material among sex offenders, child molesters, and controls. J Sex Marital Ther 1993;19(1):77-85. Excluded; Age of study population greater than 17 years.

O'Brien RM, Stockard J, Isaacson L. The enduring effects of cohort characteristics on age-specific homicide rates, 1960-1995. AJS 1999;American Journal of Sociology; 104(4):1061-95. Excluded; Not addressing they key questions.

O'Connor BP, Dvorak T. Conditional associations between parental behavior and adolescent problems: A search for personality-environment interactions. J Res Pers 2001;35(1):1-26. Excluded; Not a U.S. study.

O'Donnell L, Cohen S, Hausman A. Forum on youth violence in minority communities. Evaluation of community-based violence prevention programs. Public Health Rep 1991;106(3):276-7. Excluded; Not a research study.

O'Keefe JJ, Carr A, McQuaid P. Conduct disorder in girls and boys: The identification of distinct psychological profiles. Ir J Psychol 1998;19(2-3):368-85. Excluded; Not a U.S. study.

O'Keefe M. Linking marital violence, mother^child/father^child aggression, and child behavior problems. J Fam Violence 1994;9(1):63-78. Excluded; Study does not focus on youth as perpetrators.

O'Keefe M. The differential effects of family violence on adolescent adjustment. Child Adolesc Social Work J 1996;13(1):51-68. Excluded; Data not abstractable.

O'Keefe M. Adolescents' exposure to community and school violence: prevalence and behavioral correlates. J Adolesc Health 1997;20(5):368-76. Excluded; Outcome is not violence.

O'Keefe M. Predictors of dating violence among high school students. J Interpers Violence 1997;12(4):546-68. Excluded; Study design not used.

O'Keefe M. Factors mediating the link between witnessing interparental violence and dating violence. J Fam Violence

1998;13(1):39-57. Excluded; Study design not used.

Olds D, Henderson CR, Kitzman H, et al. Effects of prenatal and infancy nurse home visitation on surveillance of child maltreatment. Pediatrics 1995;95(3):365-72. Excluded; Outcome is not violence.

Olds D, Pettitt LM, Robinson J, et al. Reducing risks for antisocial behavior with a program of prenatal and early childhood home visitation. J Community Psychol 1998;26(1):65-83. Excluded; Not a research study.

O'Leary KD, Malone J, Tyree A. Physical aggression in early marriage: prerelationship and relationship effects. J Consult Clin Psychol 1994;62(3):594-602. Excluded; Age of study population greater than 17 years.

Oliver LL, Hall GCN, Neuhaus SM. A comparison of the personality and background characteristics of adolescent sex offenders and other adolescent offenders. Crim Justice Behav 1993;20(4):359-70. Excluded; Study design not used.

Olweus D. Bully/victim problems in school: Facts and intervention. Eur J Psychol Educ 1997;12(4):495-510. Excluded; Not a research study.

Omar HA. Adolescent violence as viewed by high school students. Int J Adolesc Med Health 1999;11(3-4):153-8. Excluded; Outcome is not violence.

Onwuachi-Saunders C, Forjuoh SN, West P, et al. Child death reviews: a gold mine for injury prevention and control. Inj Prev 1999;5(4):276-9. Excluded; Study does not focus on youth as perpetrators.

Orpinas P, Murray N, Kelder S. Parental influences on students' aggressive behaviors and weapon carrying. Health Educ Behav 1999;26(6):774-87. Excluded; Study design not used.

Orpinas P, Parcel GS, McAlister A, et al. Violence prevention in middle schools: a pilot evaluation. J Adolesc Health 1995;17(6):360-71. Excluded; Data not abstractable.

Orpinas PK, Basen-Engquist K, Grunbaum JA, et al. The co-morbidity of violence-related behaviors with health-risk behaviors in a population of high school students. J Adolesc Health 1995;16(3):216-25. Excluded; Study design not used.

Orwin RG, Maranda M, Ellis B. The effectiveness of substance abuse treatment in reducing violent behavior. J Psychopathol Behav Assess 2000;22(4):309-24. Excluded; Age of study population greater than 17 years.

Osofsky JD. Community-based approaches to violence prevention. J Dev Behav Pediatr 1997;18(6):405-7. Excluded; Not a research study.

Pack RP, Wallander JL, Browne D. Health risk behaviors of African American adolescents with mild mental retardation: prevalence depends on measurement method. Am J Ment Retard 1998;102(4):409-20. Excluded; Outcome is not violence.

Paikoff RL, Brooks-Gunn J, Warren MP. Effects of girls' hormonal status on depressive and aggressive symptoms over the course of one year. J Youth Adolesc 1991;20(2):191-215. Excluded; Data not abstractable.

Pakaslahti L, Keltikangas-Jaervinen L. Social acceptance and the relationship between aggressive problem-solving strategies and aggressive behaviour in 14-year-old adolescents. Eur J Personal 1996;10(4):249-61. Excluded; Not a U.S. study.

Pakaslahti L, Keltikangas-Jaervinen L. The relationships between moral approval of aggression, aggressive problem-solving strategies, and aggressive behavior in 14-yr-old adolescents. J Soc Behav Pers 1997;12(4):905-24. Excluded; Not a U.S. study.

Pakaslahti L, Keltikangas-Jaervinen L. Types of aggressive behavior among aggressive-preferred, aggressive non-preferred, non-aggressive preferred and non-aggressive non-preferred 14-year-old adolescents. Pers Individ Dif 1998;24(6):821-8. Excluded; Not a U.S. study.

Pakaslahti L, Spoof I, Asplund-Peltola R-L, et al. Parents' social problem-solving strategies in families with aggressive and non-aggressive girls. Aggress Behav 1998;24(1):37-51. Excluded; Not a U.S. study.

Pakiz B, Reinherz HZ, Giaconia RM. Early risk factors for serious antisocial behavior at age 21: a longitudinal community study. Am J Orthopsychiatry 1997;67(1):92-101. Excluded; Age of study population greater than 17 years.

Palermo MT. Preventing filicide in families with autistic children. Int J Offender Ther Comp Criminol 2003;47(1):47-57. Excluded; Not a research study.

Pallone NJ, Hennessy JJ. Blacks and whites as victims and offenders in aggressive crime in the U.S.: myths and realities. J Offender Rehabil 1999;30(1/2):1-33. Excluded; Age of study population greater than 17 years.

Palmer EJ, Farmer S. Victimizing behaviour among juvenile and young offenders: How different are perpetrators? J Adolesc 2002;25(5):469-82. Excluded; Not a U.S. study.

Palmstierna T, Huitfeldt B, Wistedt B. The relationship of crowding and aggressive behavior on a psychiatric intensive care unit. Hosp Community Psychiatry 1991;42(12):1237-40. Excluded; Not a U.S. study.

Palmstierna T, Wistedt B. Changes in the pattern of aggressive behaviour among inpatients with changed ward organization. Acta Psychiatr Scand 1995;91(1):32-5. Excluded; Age of study population greater than 17 years.

Paschall MJ, Ennett ST, Flewelling RL. Relationships among family characteristics and violent behavior by black and white male adolescents. J Youth Adolesc 1996;25(2):177-97. Excluded; Study design not used.

Paschall MJ, Flewelling RL, Ennett ST. Racial differences in violent behavior among young adults: Moderating and confounding effects. J Res Crime Delinq 1998;35(2):148-65. Excluded; Age of study population greater than 17 years.

Paschall MJ, Hubbard ML. Effects of neighborhood and family stressors on African American male adolescents' self-worth and propensity for violent behavior. J Consult Clin Psychol 1998;66(5):825-31. Excluded; Data not abstractable.

Pate RR, Trost SG, Levin S, et al. Sports participation and health-related behaviors among US youth. Arch Pediatr Adolesc Med 2000;154(9):904-11. Excluded; Study design not used.

Paterson R, Luntz H, Perlesz A, et al. Adolescent violence towards parents: Maintaining family connections when the going gets tough. Aust N Z J Fam Ther 2002;23(2):90-100. Excluded; Study does not focus on youth as perpetrators.

Paulson MJ, Coombs RH, Landsverk J. Youth who physically assault their parents. J Fam Violence 1990;5(2):121-33. Excluded; Study design not used.

Pedersen W, Wichstrom L, Blekesaune M. Violent behaviors, violent victimization, and doping agents: A normal population study of adolescents. J Interpers Violence 2001;16(8):808-32. Excluded; Not a U.S. study.

Pellegrini AD, Long JD. A longitudinal study of bullying, dominance, and victimization during the transition from primary school through secondary school. Br J Dev Psychol 2002;20(2):259-80. Excluded; Outcome is not violence.

Pellegrini RJ, Roundtree T, Camagna TF, et al. On the epidemiology of violent juvenile crime in America: a total arrest-referenced approach. Psychol Rep 2000;86(3 Pt 2):1171-86. Excluded; Data not abstractable.

Pepler D, King G, Craig W, et al. The development and evaluation of a multisystem social skills group training program for aggressive children. Child Youth Care Forum 1995;24(5):297-313. Excluded; Not a U.S. study.

Pepler DJ, Craig WM, Roberts WL. Observations of aggressive and nonaggressive children on the school playground. Merrill Palmer Q 1998;44(1):55-76. Excluded; Not a U.S. study.

Perez DM. Ethnic differences in property, violent, and sex offending for abused and nonabused adolescents. J Crim Justice 2001;29(5):407-17. Excluded; Study design not used.

Perry CL, Komro KA, Veblen-Mortenson S, et al. The Minnesota DARE PLUS Project: creating community partnerships to prevent drug use and violence. J Sch Health 2000;70(3):84-8. Excluded; Not a research study.

Perry CL, Komro KA, Veblen-Mortenson S, et al. A randomized controlled trial of the middle and junior high school D.A.R.E. and D.A.R.E. Plus programs. Arch Pediatr Adolesc Med 2003;157(2):178-84. Excluded; Duplicated citation or findings.

Peterson-Badali M, Koegl CJ. Juveniles' experiences of incarceration: The role of correctional staff in peer violence. J Crim Justice 2002;30(1):41-9. Excluded; Not a U.S. study.

Pharris MD. Coming to know ourselves as community through a nursing partnership with adolescents convicted of murder. ANS Adv Nurs Sci 2002;24(3):21-42. Excluded; Not a research study.

Phelps CE. Children's responses to overt and relational aggression. J Clin Child Psychol 2001;30(2):240-52. Excluded; Study does not focus on youth as perpetrators.

Phillips DR, Schwean VL, Saklofske DH. Treatment effect of a school based cognitive-behavioral program for aggressive children. Can J Sch Psychol 1997;13(1):60-7. Excluded; Not a U.S. study.

Pickett W, Schmid H, Boyce WF, et al. Multiple risk behavior and injury: an international analysis of young people. Arch Pediatr Adolesc Med 2002;156(8):786-93. Excluded; Outcome is not violence.

Pihl RO, Young SN, Harden P, et al. Acute effect of altered tryptophan levels and alcohol on aggression in normal human males. Psychopharmacology (Berl) 1995;119(4):353-60. Excluded; Age of study population greater than 17 years.

Pillmann F, Rohde A, Ullrich S, et al. Violence, criminal behavior, and the EEG: significance of left hemispheric focal abnormalities. J Neuropsychiatry Clin Neurosci 1999;11(4):454-7. Excluded; Not a U.S. study.

Pine DS, Coplan JD, Wasserman GA, et al. Neuroendocrine response to fenfluramine challenge in boys: Associations with aggressive behavior and adverse rearing. Arch Gen Psychiatry 1997;54(9):839-46. Excluded; Study does not focus on youth as perpetrators.

Piquero A. Frequency, specialization, and violence in offending careers. J Res Crime Delinq 2000;37(4):392-418. Excluded; Study design not used.

Piquero AR, Brame R, Mazerolle P. Crime in Emerging Adulthood. Criminology 2002;40(1):137-69. Excluded; Age of study population greater than 17 years.

Piquero AR, Buka SL. Linking juvenile and adult patterns of criminal activity in the Providence cohort of the National

Collaborative Perinatal Project. J Crim Justice 2002;30(4):259-72. Excluded; Age of study population greater than 17 years.

Piquero AR, MacDonald JM, Parker KF. Race, local life circumstances, and criminal activity. Soc Sci Q 2002;83(3):654-70. Excluded; Study does not focus on youth as perpetrators.

Pithers WD, Gray A, Busconi A, et al. Caregivers of children with sexual behavior problems: psychological and familial functioning. Child Abuse Negl 1998;22(2):129-41. Excluded; Outcome is not violence.

Pittenger J. Domestic abuse: complicated by rural living. Wis Med J 1997;96(8):22-4. Excluded; Not a research study.

Pollard JA, Hawkins JD, Arthur MW. Risk and protection: Are both necessary to understand diverse behavioral outcomes in adolescence? Soc Work Res 1999;23(3):145-58. Excluded; Data not abstractable.

Pope AW, Bierman KL. Predicting adolescent peer problems and antisocial activities: The relative roles of aggression and dysregulation. Dev Psychol 1999;35(2):335-46. Excluded; Outcome is not violence.

Potthoff SJ, Bearinger LH, Skay CL, et al. Dimensions of risk behaviors among American Indian youth. Arch Pediatr Adolesc Med 1998;152(2):157-63. Excluded; Data not abstractable.

Poulin F, Boivin M. The role of proactive and reactive aggression in the formation and development of boys' friendships. Dev Psychol 2000;36(2):233-40. Excluded; Not a U.S. study.

Powell KB. Correlates of violent and nonviolent behavior among vulnerable inner-city youths. Fam Community Health 1997;20(2):38-47. Excluded; Data not abstractable.

Prentky RA, Knight RA, Lee AF. Risk factors associated with recidivism among extrafamilial child molesters. J Consult Clin Psychol 1997;65(1):141-9. Excluded; Age of study population greater than 17 years.

Preski S, Shelton D. The role of contextual, child and parent factors in predicting criminal outcomes in adolescence. Issues Ment Health Nurs 2001;22(2):197-205. Excluded; Not addressing they key questions.

Prinstein MJ, Boergers J, Spirito A. Adolescents' and their friends' health-risk behavior: Factors that alter or add to peer influence. J Pediatr Psychol 2001;26(5):287-98. Excluded; Study design not used.

Prinstein MJ, Boergers J, Vernberg EM. Overt and relational aggression in adolescents: Social-psychological adjustment of aggressors and victims. J Community Psychol 2001;30(4):479-91. Excluded; Outcome is not violence.

Pritchard C, Cox M. The criminality of former "special educational provision" permanently "excluded from school" adolescents as young adults (16-23): costs and practical implications. J Adolesc 1998;21(5):609-20. Excluded; Not a U.S. study.

Proimos J, DuRant RH, Pierce JD, et al. Gambling and other risk behaviors among 8th- to 12th-grade students. Pediatrics 1998;102(2):E23. Excluded; Outcome is not violence.

Pulkkinen L. Proactive and reactive aggression in early adolescence as precursors to anti- and prosocial behavior in young adults. Aggress Behav 1996;22(4):241-57. Excluded; Not a U.S. study.

Pulkkinen L, Pitkaenen T. Continuities in aggressive behavior from childhood to adulthood. Aggress Behav 1993;19(4):249-63. Excluded; Not a U.S. study.

Putnam FW, Hornstein N, Peterson G. Clinical Phenomenology of Child and Adolescent Dissociative Disorders: Gender and Age Effects. Child Adolesc Psychiatr Clin N Am 1996;5(2):351-60. Excluded; Outcome is not violence.

Quiggle NL, Garber J, Panak WF, et al. Social information processing in aggressive and depressed children. Child Dev 1992;63(6):1305-20. Excluded; Outcome is not violence.

Quinn JF, Downs B. Predictors of gang violence: The impact of drugs and guns on police perceptions in nine states. J Gang Res 1995;2(3):15-27. Excluded; Not a research study.

Quinn KP, Newman DL, Cumblad C. Behavioral characteristics of children and youth at risk for out-of-home placements. J Emot Behav Disord 1995;3(3):166-73. Excluded; Outcome is not violence.

Racey BD, Lopez NL, Schneider HG. Sexually assaultive adolescents: Cue perception, interpersonal competence and cognitive distortions. Int J Adolesc Youth 2000;8(2-3):229-39. Excluded; Study design not used.

Rahey L, Craig WM. Evaluation of an ecological program to reduce bullying in schools. Can J Couns 2002;36(4):281-96. Excluded; Not a U.S. study.

Raine A, Brennan P, Mednick B, et al. High rates of violence, crime, academic problems, and behavioral problems in males with both early neuromotor deficits and unstable family environments. Arch Gen Psychiatry 1996;53(6):544-9. Excluded; Not a U.S. study.

Raine A, Brennan P, Mednick SA. Birth complications combined with early maternal rejection at age 1 year predispose to violent crime at age 18 years. Arch Gen Psychiatry 1994;51(12):984-8. Excluded; Not a U.S. study.

Raine A, Phil D, Stoddard J, et al. Prefrontal glucose

deficits in murderers lacking psychosocial deprivation. Neuropsychiatry Neuropsychol Behav Neurol 1998;11(1):1-7. Excluded; Study does not focus on youth as perpetrators.

Rakoff VM. Trauma and adolescent rites of initiation. Adolesc Psychiatry 1995;20:109-23. Excluded; Not a research study.

Ralph N, Morgan KA. Assessing differences in chemically dependent adolescent males using the Child Behavior Checklist. Adolescence 1991;26(101):183-94. Excluded; Outcome is not violence.

Randall J, Henggeler SW, Pickrel SG, et al. Psychiatric comorbidity and the 16-month trajectory of substance-abusing and substance-dependent juvenile offenders. J Am Acad Child Adolesc Psychiatry 1999;38(9):1118-24. Excluded; Not addressing they key questions.

Rando RA, Rogers JR, Brittan-Powell CS. Gender role conflict and college men's sexually aggressive attitudes and behavior. J Ment Health Couns 1998;20(4):359-69. Excluded; Age of study population greater than 17 years.

Rao U, Carlson GA, Rapport MD. Serum cholesterol and aggressive behavior in psychiatrically hospitalized children. Acta Psychiatr Scand 1991;83(1):77-8. Excluded; Data not abstractable.

Rapp-Paglicci LA, Wodarski JS. Antecedent behaviors of male youth victimization: An exploratory study. Deviant Behav 2000;21(6):519-36. Excluded; Not addressing they key questions.

Rasanen E, Hirvenoja R, Hakko H, et al. A portrait of the juvenile arsonist. Forensic Sci Int 1995;73(1):41-7. Excluded; Not a U.S. study.

Ray JA, English DJ. Comparison of female and male children with sexual behavior problems. J Youth Adolesc 1995;24(4):439-51. Excluded; Outcome is not violence.

Reebye P, Moretti MM, Wiebe VJ, et al. Symptoms of posttraumatic stress disorder in adolescents with conduct disorder: sex differences and onset patterns. Can J Psychiatry 2000;45(8):746-51. Excluded; Outcome is not violence.

Reiss S, Rojahn J. Joint occurrence of depression and aggression in children and adults with mental retardation. J Intellect Disabil Res 1993;37(3):287-94. Excluded; Data not abstractable.

Remington PL, Stahlsmith L, Nashold R. Assessing the increase in firearm-related homicides in Wisconsin, 1979-1993. Wis Med J 1995;94(2):88-90. Excluded; Not a research study.

Resnick MD, Bearman PS, Blum RW, et al. Protecting adolescents from harm. Findings from the National Longitudinal Study on Adolescent Health. JAMA 1997;278(10):823-32. Excluded; Study design not used.

Resnick MD, Harris LJ, Blum RW. The impact of caring and connectedness on adolescent health and well-being. J Paediatr Child Health 1993;29 Suppl 1:s3-9. Excluded; Outcome is not violence.

Rhodes JE, Fischer K. Spanning the gender gap: gender differences in delinquency among inner-city adolescents. Adolescence 1993;28(112):879-89. Excluded; Study design not used.

Rican P, Klicperova M, Koucka Ta. Families of bullies and their victims: A children's view. Stud Psychol (Bratisl) 1993;35(3):261-6. Excluded; Not a U.S. study.

Rich JA, Sullivan LM. Correlates of violent assault among young male primary care patients. J Health Care Poor Underserved 2001;12(1):103-12. Excluded; Age of study population greater than 17 years.

Riggs N, Houry D, Long G, et al. Analysis of 1,076 cases of sexual assault. Ann Emerg Med 2000;35(4):358-62. Excluded; Study does not focus on youth as perpetrators.

Riner ME, Saywell RM. Development of the social ecology model of adolescent interpersonal violence prevention (SEMAIVP). J Sch Health 2002;72(2):65-70. Excluded; Study design not used.

Ringwalt CL, Graham LA, Paschall MJ, et al. Supporting Adolescents with Guidance and Employment (SAGE). Am J Prev Med 1996;12(5 Suppl):31-8. Excluded; Not a research study.

Ritter J, Stewart M, Bernet C, et al. Effects of childhood exposure to familial alcoholism and family violence on adolescent substance use, conduct problems, and self-esteem. J Trauma Stress 2002;15(2):113-22. Excluded; Data not abstractable.

Rivara FP. Injury research and violence: what's our contribution? Inj Prev 1996;2(4):249. Excluded; Not a research study.

Rivara FP, Shepherd JP, Farrington DP, et al. Victim as offender in youth violence. Ann Emerg Med 1995;26(5):609-14. Excluded; Not a U.S. study.

Rivers I, Soutter A. Bullying and the Steiner School ethos: A case study analysis of a group-centered educational philosophy. Sch Psychol Int 1996;17(4):359-77. Excluded; Not a U.S. study.

Roberto AJ, Meyer G, Boster FJ, et al. Adolescents' decisions about verbal and physical aggression: An application of the theory of reasoned action. Hum Commun Res 2003;29(1):135-47. Excluded; Study design not used.

Roberto AJ, Meyer G, Boster FJ, et al. Adolescents' decisions about verbal and physical aggression: An application of the theory of reasoned action. Hum Commun

Res 2003;29(1):135-47. Excluded; Duplicated citation or findings.

Roberts TA, Ryan SA, al. e. Tattooing and high-risk behavior in adolescents. Pediatrics 2002;110(6):1058-63. Excluded; Study design not used.

Robertson S. Separating the men from the boys: masculinity, psychosexual development, and sex crime in the United States, 1930s-1960s. J Hist Med Allied Sci 2001;56(1):3-35. Excluded; Not a research study.

Rodney HE, Tachia HR, Rodney LW. The effect of family and social support on feelings and past acts of violence among African American college men. J Am Coll Health 1997;46(3):103-8. Excluded; Age of study population greater than 17 years.

Rodney HE, Tachia HR, Rodney LW. The home environment and delinquency: A study of African American adolescents. Fam Soc 1999;80(6):551-9. Excluded; Study design not used.

Rodriguez MA, Solorio R, Hayes-Bautista DE, et al. Health risks of Latino children. JAMA 2002;288(16):1981; Discussion 3. Excluded; Not a research study.

Roff JD. Childhood aggression, peer status, and social class as predictors of delinquency. Psychol Rep 1992;70(1):31-4. Excluded; Data not abstractable.

Romi S, Itskowitz R. The relationship between locus of control and type of aggression in middle-class and culturally deprived children. Pers Individ Dif 1990;11(4):327-33. Excluded; Outcome is not violence.

Ronen T. Imparting self-control skills in the school setting. Child Fam Behav Ther 1994;16(1):1-20. Excluded; Not a U.S. study.

Rosen PM, Walsh BW, Rode SA. Interpersonal loss and self-mutilation. Suicide Life Threat Behav 1990;20(2):177-84. Excluded; Outcome is not violence.

Rosenbaum JL. A violent few: Gang girls in the California Youth Authority. J Gang Res 1996;3(3):17-23. Excluded; Not addressing they key questions.

Rosenberg MF, Anthony JC. Aggressive behavior and opportunities to purchase drugs. Drug Alcohol Depend 2001;63(3):245-52. Excluded; Data not abstractable.

Rosenfeld R, Bray TM, Egley A. Facilitating violence: A comparison of gang-motivated, gang-affiliated and nongang youth homicides. J Quant Criminol 1999;15(4):495-516. Excluded; Not addressing they key questions.

Rossman BBR. Multiple risks for children exposed to parental violence: Family factors, psychological maltreatment, and trauma. J Aggress Maltreat Trauma 1999;2(2):207-37. Excluded; Outcome is not violence.

Rowe DC, Almeida DM, Jacobson KC. School context and genetic influences on aggression in adolescence. Psychol Sci 1999;10(3):277-80. Excluded; Study design not used.

Rubenstein JL, Feldman SS. Conflict-resolution behavior in adolescent boys: Antecedents and adaptational correlates. J Res Adolesc 1993;3(1):41-66. Excluded; Outcome is not violence.

Rubin KH, Chen X, McDougall P, et al. The Waterloo Longitudinal Project: Predicting internalizing and externalizing problems in adolescence. Dev Psychopathol 1995;7(4):751-64. Excluded; Not a U.S. study.

Rubinstein M, Yeager CA, Goodstein C, et al. Sexually assaultive male juveniles: a follow-up. Am J Psychiatry 1993;150(2):262-5. Excluded; Age of study population greater than 17 years.

Rucker N, Greene V. The myth of the invulnerable self of adolescence. Am J Psychoanal 1995;55(4):369-79. Excluded; Not a research study.

Russell A, Owens L. Peer estimates of school-aged boys' and girls' aggression to same- and cross-sex targets. Soc Dev 1999;8(3):364-79. Excluded; Not a U.S. study.

Russell ST, Franz BT, Driscoll AK. Same-sex romantic attraction and experiences of violence in adolescence. Am J Public Health 2001;91(6):903-6. Excluded; Study design not used.

Rys GS, Bear GG. Relational aggression and peer relations: Gender and developmental issues. Merrill Palmer Q 1997;43(1):87-106. Excluded; Outcome is not violence.

Sachs JJ, Miller SR. The impact of a wilderness experience on the social interactions and social expectations of behaviorally disordered adolescents. Behav Disord 1992;17(2):89-98. Excluded; Data not abstractable.

Saigal S, Pinelli J, Hoult L, et al. Psychopathology and social competencies of adolescents who were extremely low birth weight. Pediatrics 2003;111(5 Pt 1):969-75. Excluded; Outcome is not violence.

Salekin KL, Ogloff JRP, Ley RG, et al. The overcontrolled hostility scale: An evaluation of its applicability with an adolescent population. Crim Justice Behav 2002;29(6):718-33. Excluded; Not a U.S. study.

Salfati CG, Canter DV. Differentiating stranger murders: Profiling offender characteristics from behavioral styles. Behav Sci Law 1999;17(3):391-406. Excluded; Not a U.S. study.

Salmivalli C. Intelligent, attractive, well-behaving, unhappy: The structure of adolescents' self-concept and its relations to their social behavior. J Res Adolesc 1998;8(3):333-54. Excluded; Not a U.S. study.

Salmivalli C, Karhunen J, Lagerspetz KMJ. How do the victims respond to bullying? Aggress Behav 1996;22(2):99-109. Excluded; Not a U.S. study.

Salmivalli C, Kaukiainen A, Kaistaniemi L, et al. Self-evaluated self-esteem, peer-evaluated self-esteem, and defensive egotism as predictors of adolescents' participation in bullying situations. Pers Soc Psychol Bull 1999;25(10):1268-78. Excluded; Not a U.S. study.

Salmivalli C, Kaukiainen A, Lagerspetz K. Aggression and sociometric status among peers: Do gender and type of aggression matter? Scand J Psychol 2000;41(1):17-24. Excluded; Not a U.S. study.

Salmivalli C, Nieminen E. Proactive and reactive aggression among school bullies, victims, and bully-victims. Aggress Behav 2002;28(1):30-44. Excluded; Not a U.S. study.

Salts CJ, Lindholm BW, Goddard HW, et al. Predictive variables of violent behavior in adolescent males. Youth Soc 1995;26(3):377-99. Excluded; Study design not used.

Salzinger S, Feldman RS, Hammer M, et al. Constellations of family violence and their differential effects on children's behavioral disturbance. Child Fam Behav Ther 1992;14(4):23-41. Excluded; Study does not focus on youth as perpetrators.

Salzinger S, Feldman RS, Ng-Mak DS, et al. Effects of partner violence and physical child abuse on child behavior: A study of abused and comparison children. J Fam Violence 2002;17(1):23-52. Excluded; Outcome is not violence.

Sandor P, Stephens RJ. Risperidone treatment of aggressive behavior in children with Tourette syndrome. J Clin Psychopharmacol 2000;20(6):710-2. Excluded; Not a U.S. study.

Santman J, Myner J, Cappelletty GG, et al. California juvenile gang members: An analysis of case records. J Gang Res 1997;5(1):45-53. Excluded; Not addressing they key questions.

Sarigiani PA, Ryan L, Petersen AC. Prevention of high-risk behaviors in adolescent women. J Adolesc Health 1999;25(2):109-19. Excluded; Study does not focus on youth as perpetrators.

Sarne Y, Mandel J, Goncalves MH, et al. Imipramine binding to blood platelets and aggressive behavior in offenders, schizophrenics and normal volunteers. Neuropsychobiology 1995;31(3):120-4. Excluded; Not a U.S. study.

Satcher D, Powell KE, Mercy JA, et al. Violence prevention is as American as apple pie. Am J Prev Med 1996;12(5 Suppl):V-Vi. Excluded; Not a research study.

Satterfield JH, Swanson J, Schell AM, et al. Prediction of antisocial behavior in attention-deficit hyperactivity disorder boys from aggression/defiant scores. J Am Acad Child Adolesc Psychiatry 1994;33(2):185-90. Excluded; Data not abstractable.

Sayger TV, Horne AM, Glaser BA. Marital satisfaction and social learning family therapy for child conduct problems: Generalization of treatment effects. J Marital Fam Ther 1993;19(4):393-402. Excluded; Age of study population greater than 17 years.

Scerbo AS, Kolko DJ. Salivary testosterone and cortisol in disruptive children: Relationship to aggressive, hyperactive, and internalizing behaviors. J Am Acad Child Adolesc Psychiatry 1994;33(8):1174-84. Excluded; Outcome is not violence.

Scerbo AS, Kolko DJ. Child physical abuse and aggression: preliminary findings on the role of internalizing problems. J Am Acad Child Adolesc Psychiatry 1995;34(8):1060-6. Excluded; Data not abstractable.

Schaal B, Tremblay RE, Soussignan R, et al. Male testosterone linked to high social dominance but low physical aggression in early adolescence. J Am Acad Child Adolesc Psychiatry 1996;35(10):1322-30. Excluded; Not a U.S. study.

Scheidlinger S. The centrality of the peer group's role in two aspects of school violence revisited. Int J Group Psychother 2003;53(2):245-9. Excluded; Not a research study.

Scherer DG, Brondino MJ, Henggeler SW, et al. Multisystemic Family Preservation Therapy: Preliminary findings from a study of rural and minority serious adolescent offenders. J Emot Behav Disord 1994;2(4):198-206. Excluded; Data not abstractable.

Scherer DG, Others A. Multisystemic family preservation therapy: Preliminary findings from a study of rural and minority serious adolescent offenders. J Emot Behav Disord 1994;2(4):198-206. Excluded; Duplicated citation or findings.

Scherzer T, Pinderhughes HL. Violence and gender: reports from an urban high school. Violence Vict 2002;17(1):57-72. Excluded; Study design not used.

Schiff M, Cavaiola AA. Child abuse, adolescent substance abuse, and "deadly violence." J Adolesc Chem Depend 1993;2(3-4):131-41. Excluded; Outcome is not violence.

Schinke S, Jansen M, Kennedy E, et al. Reducing risk-taking behavior among vulnerable youth: An intervention outcome study. Fam Community Health 1994;16(4):49-56. Excluded; Outcome is not violence.

Schoenthaler SJ, Bier ID. The effect of vitamin-mineral supplementation on juvenile delinquency among American schoolchildren: a randomized, double-blind placebo-controlled trial. J Altern Complement Med 2000;6(1):7-17.

Excluded; Age of study population greater than 17 years.

Scholte EM. Factors predicting continued violence into young adulthood. J Adolesc 1999;22(1):3-20. Excluded; Not a U.S. study.

Schreiber EH. A study of the personality of violent children. N Am J Psychol 1999;1(1):51-6. Excluded; Study does not focus on youth as perpetrators.

Schreiber EL, Screiber KN. A study of parents of violent children. Psychol Rep 2002;90(1):101-4. Excluded; Data not abstractable.

Schreier HA. Risperidone for young children with mood disorders and aggressive behavior. J Child Adolesc Psychopharmacol 1998;8(1):49-59. Excluded; Not a research study.

Schubiner H, Scott R, Tzelepis A. Exposure to violence among inner-city youth. J Adolesc Health 1993;14(3):214-9. Excluded; Study does not focus on youth as perpetrators.

Schulenberg SE, Soundy T. Epidemiology of physical and sexual abuse in young persons diagnosed with conduct disorder: a retrospective chart review. S D J Med 2000;53(1):29-32. Excluded; Not addressing they key questions.

Schwab CW, Richmond TS, Cheney RA, et al. Risk factors for violent death in children. JAMA 2002;287(8):983-4. Excluded; Not a research study.

Schwab-Stone M, Chen C, Greenberger E, et al. No safe haven. II: The effects of violence exposure on urban youth. J Am Acad Child Adolesc Psychiatry 1999;38(4):359-67. Excluded; Outcome is not violence.

Schwartz CE, Snidman N, Kagan J. Early childhood temperament as a determinant of externalizing behavior in adolescence. Dev Psychopathol 1996;8(3):527-37. Excluded; Outcome is not violence.

Schwartz D. Subtypes of victims and aggressors in children's peer groups. J Abnorm Child Psychol 2000;28(2):181-92. Excluded; Outcome is not violence.

Schwartz M, O'Leary SG, Kendziora KT. Dating aggression among high school students. Violence Vict 1997;12(4):295-305. Excluded; Study design not used.

Schwartz RH, Little DL. Let's party tonight: drinking patterns and breath alcohol values at high school parties. Fam Med 1997;29(5):326-31. Excluded; Outcome is not violence.

Schwartzberg AZ. Risk factors for adolescent violence: Implications for prevention and treatment. Int J Adolesc Med Health 1999;11(3-4):429-37. Excluded; Not a research study.

Scott KD, Schafer J, Greenfield TK. The role of alcohol in physical assault perpetration and victimization. J Stud Alcohol 1999;60(4):528-36. Excluded; Age of study population greater than 17 years.

Sege R, D, Kharasch S, Perron C, et al. Pediatric violence-related injuries in Boston: results of a city-wide emergency department surveillance program. Arch Pediatr Adolesc Med 2002;156(1):73-6. Excluded; Study does not focus on youth as perpetrators.

Sege R, Stringham P, Short S, et al. Ten years after: examination of adolescent screening questions that predict future violence-related injury. J Adolesc Health 1999;24(6):395-402. Excluded; Study does not focus on youth as perpetrators.

Seguin JR, Arseneault L, Boulerice B, et al. Response perseveration in adolescent boys with stable and unstable histories of physical aggression: The role of underlying processes. J Child Psychol Psychiatry 2002;43(4):481-94. Excluded; Not a U.S. study.

Seguin JR, Boulerice B, Harden PW, et al. Executive functions and physical aggression after controlling for attention deficit hyperactivity disorder, general memory, and IQ. Journal of Child Psychology and Psychiatry, and Allied Disciplines 1999;40(8):1197-208. Excluded; Not a U.S. study.

Seguin JR, Pihl RO, Boulerice B, et al. Low pain sensitivity and stability of physical aggression in boys. Ann N Y Acad Sci 1996;794:408-10. Excluded; Data not abstractable.

Seguin JR, Pihl RO, Harden PW, et al. Cognitive and neuropsychological characteristics of physically aggressive boys. J Abnorm Psychol 1995;104(4):614-24. Excluded; Not a U.S. study.

Seidenwurm D, Pounds TR, Globus A, et al. Abnormal temporal lobe metabolism in violent subjects: correlation of imaging and neuropsychiatric findings. AJNR Am J Neuroradiol 1997;18(4):625-31. Excluded; Age of study population greater than 17 years.

Seidman E, Yoshikawa H, Roberts A, et al. Structural and experiential neighborhood contexts, developmental stage, and antisocial behavior among urban adolescents in poverty. Dev Psychopathol 1998;10(2):259-81. Excluded; Outcome is not violence.

Seifert K, Phillips S, Parker S. Child and Adolescent Risk for Violence (CARV): A tool to assess juvenile risk. J Psychiatry Law 2001;29(3):329-46. Excluded; Not a research study.

Selkurt J. Teens and domestic violence. Wis Med J 1994;93(1):29. Excluded; Not a research study.

Selner-O'Hagan MB, Kindlon DJ, Buka SL, et al. Assessing exposure to violence in urban youth. Journal of Child Psychology and Psychiatry, and Allied Disciplines 1998;39(2):215-24. Excluded; Outcome is not violence.

Sequeira H, Halstead S. "Is it meant to hurt, is it?": Management of violence in women with developmental disabilities. Violence Against Women 2001;7(4):462-76. Excluded; Outcome is not violence.

Shackelford TK. Risk of multiple-offender rape-murder varies with female age. J Crim Justice 2002;30(2):135-41. Excluded; Age of study population greater than 17 years.

Shahinfar A, Kupersmidt JB, Matza LS. The relation between exposure to violence and social information processing among incarcerated adolescents. J Abnorm Psychol 2001;110(1):136-41. Excluded; Outcome is not violence.

Shahpar C, Li G. Homicide mortality in the United States, 1935-1994: age, period, and cohort effects. Am J Epidemiol 1999;150(11):1213-22. Excluded; Study does not focus on youth as perpetrators.

Shapiro JP, Welker CJ, Pierce JL. An evaluation of residential treatment for sexually aggressive youth. J Child Sex Abus 2001;10(1):1-21. Excluded; Outcome is not violence.

Sharps PW, Campbell J, Campbell D, et al. The role of alcohol use in intimate partner femicide. Am J Addict 2001;10(2):122-35. Excluded; Age of study population greater than 17 years.

Shaw JA, Campo-Bowen AE, Applegate B, et al. Young boys who commit serious sexual offenses: demographics, psychometrics, and phenomenology. Bull Am Acad Psychiatry Law 1993;21(4):399-408. Excluded; Data not abstractable.

Shechtman Z, Ben-David M. Individual and group psychotherapy of childhood aggression: A comparison of outcomes and processes. Group Dyn 1999;3(4):263-74. Excluded; Not a U.S. study.

Sheehan K, DiCara JA, LeBailly S, et al. Adapting the gang model: peer mentoring for violence prevention. Pediatrics 1999;104(1 Pt 1):50-4. Excluded; Study does not focus on youth as perpetrators.

Sheley JF. Drugs and guns among inner-city high school students. J Drug Educ 1994;24(4):303-21. Excluded; Study design not used.

Sheley JF, Brewer VE. Possession and carrying of firearms among suburban youth. Public Health Rep 1995;110(1):18-26. Excluded; Data not abstractable.

Shepherd JP, Farrington DP. Preventing crime and violence. BMJ 1995;310(6975):271-2. Excluded; Not a research study.

Sheras PL, Cornell DG, Bostain DS. The Virginia Youth Violence Project: Transmitting psychological knowledge on youth violence to schools and communities. Prof Psychol Res Pract 1996;27(4):401-6. Excluded; Outcome is not violence.

Shields A, Cicchetti D. Reactive aggression among maltreated children: The contributions of attention and emotion dysregulation. J Clin Child Psychol 1998;27(4):381-95. Excluded; Outcome is not violence.

Shields A, Cicchetti D. Parental maltreatment and emotion dysregulation as risk factors for bullying and victimization in middle childhood. J Clin Child Psychol 2001;30(3):349-63. Excluded; Study does not focus on youth as perpetrators.

Shields EW. Intimidation and violence by males in high school athletics. Adolescence 1999;34(135):503-21. Excluded; Study design not used.

Shields N, Pierce L. Factors related to aggressive and violent behavior among preadolescent African-American boys. Int J Adolesc Youth 2001;10(1-2):51-68. Excluded; Study does not focus on youth as perpetrators.

Shoda Y, Mischel W, Wright JC. The role of situational demands and cognitive competencies in behavior organization and personality coherence. J Pers Soc Psychol 1993;65(5):1023-35. Excluded; Study does not focus on youth as perpetrators.

Shumaker DM, McKee GR. Characteristics of homicidal and violent juveniles. Violence Vict 2001;16(4):401-9. Excluded; Outcome is not violence.

Sikand VK. A violence prevention program targeting adolescents. Conn Med 1996;60(1):41. Excluded; Not a research study.

Silverman RA, Kennedy LW. Women who kill their children. Violence Vict 1988;3(2):113-27. Excluded; Not a U.S. study.

Simic M, Fombonne E. Depressive conduct disorder: symptom patterns and correlates in referred children and adolescents. J Affect Disord 2001;62(3):175-85. Excluded; Outcome is not violence.

Simonoff E, Pickles A, Meyer J, et al. Genetic and environmental influences on subtypes of conduct disorder behavior in boys. J Abnorm Child Psychol 1998;26(6):495-509. Excluded; Outcome is not violence.

Simons KJ, Paternite CE, Shore C. Quality of parent/adolescent attachment and aggression in young adolescents. J Early Adolesc 2001;21(2):182-203. Excluded; Outcome is not violence.

Simons RL, Johnson C, Conger RD. Harsh corporal punishment versus quality of parental involvement as an explanation of adolescent maladjustment. J Marriage Fam 1994;56(3):591-607. Excluded; Outcome is not violence.

Simons RL, Whitbeck LB, Beaman J, et al. The impact of

mothers' parenting, involvement by nonresidential fathers, and parental conflict on the adjustment of adolescent children. J Marriage Fam 1994;56(2):356-74. Excluded; Data not abstractable.

Simonson H. Interaction effects of television and socioeconomic status on teenage aggression. Int J Adolesc Youth 1992;3(3-4):333-43. Excluded; Study design not used.

Singer MH. How central is the analysis of aggression to clinical psychoanalysis? J Am Psychoanal Assoc 1999;47(4):1179-89. Excluded; Not a research study.

Singer MI, Flannery DJ. The relationship between children's threats of violence and violent behaviors. Arch Pediatr Adolesc Med 2000;154(8):785-90. Excluded; Data not abstractable.

Singer MI, Miller DB, Guo S, et al. Contributors to violent behavior among elementary and middle school children. Pediatrics 1999;104(4 Pt 1):878-84. Excluded; Data not abstractable.

Singer MI, Slovak K, Frierson T, et al. Viewing preferences, symptoms of psychological trauma, and violent behaviors among children who watch television. J Am Acad Child Adolesc Psychiatry 1998;37(10):1041-8. Excluded; Data not abstractable.

Singleton EG, Dale GAJ. Lack of co-occurring interpersonal violence-related emotional difficulties and alcohol or other drug problems among African American youth with conduct disorder. J Negro Educ 1996;65(4):445-53. Excluded; Outcome is not violence.

Skeem JL, Mulvey EP. Psychopathy and community violence among civil psychiatric patients: results from the MacArthur Violence Risk Assessment Study. J Consult Clin Psychol 2001;69(3):358-74. Excluded; Outcome is not violence.

Skelton DL, Glynn MA, Berta SM. Aggressive behavior as a function of taekwondo ranking. Percept Mot Skills 1991;72(1):179-82. Excluded; Study does not focus on youth as perpetrators.

Skiba RJ, Knesting K, al e. Zero tolerance, zero evidence: an analysis of school disciplinary practice. New Dir Youth Dev 2001;92:17-43. Excluded; Not a research study.

Skinner ML, Elder GH, Conger RD. Linking economic hardship to adolescent aggression. J Youth Adolesc 1992;21(3):259-76. Excluded; Outcome is not violence.

Skovholt T, Cognetta P, Ye G, et al. Violence prevention strategies of inner-city student experts. Prof Sch Couns 1997;1(1):35-8. Excluded; Not a research study.

Slabbekoorn D, Van Goozen SHM, Gooren LJG, et al. Effects of cross-sex hormone treatment on emotionality in transsexuals. Int J Transgenderism 2001;5(3):NP. Excluded; Outcome is not violence.

Slovak K, Singer M. Gun violence exposure and trauma among rural youth. Violence Vict 2001;16(4):389-400. Excluded; Data not abstractable.

Smith AM, Gacono CB, Kaufman L. A Rorschach comparison of psychopathic and nonpsychopathic conduct disordered adolescents. J Clin Psychol 1997;53(4):289-300. Excluded; Outcome is not violence.

Smith AM, Gacono CB, Kaufman L. A Rorschach comparison of psychopathic and nonpsychopathic conduct disordered adolescents. J Clin Psychol 1997;53:289-300. Excluded; Duplicated citation or findings.

Smith AT, Kuller LH, Perper JA, et al. Epidemiology of homicide in Allegheny County, Pennsylvania, between 1966-1974 and 1984-1993. Prev Med 1998;27(3):452-60. Excluded; Study does not focus on youth as perpetrators.

Smith CA. Dis-attachment. Aust N Z J Psychiatry 1994;28(4):691-3. Excluded; Not a research study.

Smith H, Thomas S. Violent and nonviolent girls: contrasting perceptions of anger experiences, school, and relationships. Issues Ment Health Nurs 2000;21(5):547-75. Excluded; Data not abstractable.

Smith JP, Williams JG. From abusive household to dating violence. J Fam Violence 1992;7(2):153-65. Excluded; Study design not used.

Smith MA, Jenkins JM. The effects of marital disharmony on prepubertal children. J Abnorm Child Psychol 1991;19(6):625-44. Excluded; Not a U.S. study.

Smith MD, Feiler SM. Absolute and relative involvement in homicide offending: contemporary youth and the baby boom cohorts. Violence Vict 1995;10(4):327-33. Excluded; Not a research study.

Smith P, Flay BR, Bell CC, et al. The protective influence of parents and peers in violence avoidance among African-American youth. Matern Child Health J 2001;5(4):245-52. Excluded; Data not abstractable.

Smith S, Kern RM, Curlette WL, et al. Lifestyle profiles and interventions for aggressive adolescents. J Individ Psychol 2001;57(3):224-45. Excluded; Not addressing they key questions.

Smith S, Mullis F, Kern RM, et al. An Adlerian model for the etiology of aggression in adjudicated adolescents. Fam J 1999;7(2):135-47. Excluded; Not addressing they key questions.

Smith SL, Howard JA, Monroe AD. Issues underlying behavior problems in at-risk adopted children. Child Youth Serv Rev 2000;22(7):539-62. Excluded; Outcome is not violence.

Snyder R, Turgay A, Aman M, et al. Effects of risperidone on conduct and disruptive behavior disorders in children with subaverage IQs. J Am Acad Child Adolesc Psychiatry 2002;41(9):1026-36. Excluded; Outcome is not violence.

Soderstrom H, Blennow K, Manhem A, et al. CSF studies in violent offenders. II. Blood-brain barrier dysfunction without concurrent inflammation or structure degeneration. J Neural Transm 2001;108(7):879-86. Excluded; Not a U.S. study.

Soderstrom H, Blennow K, Manhem A, et al. CSF studies in violent offenders. I. 5-HIAA as a negative and HVA as a positive predictor of psychopathy. J Neural Transm 2001;108(7):869-78. Excluded; Not a U.S. study.

Sommers I, Baskin DR. Factors related to female adolescent initiation into violent street crime. Youth Soc 1994;25:468-89. Excluded; Not addressing they key questions.

Sommers I, Baskin DR. Situational or generalized violence in drug dealing networks. J Drug Issues 1997;27(4):833-49. Excluded; Age of study population greater than 17 years.

Sommers I, Fagan J, Baskin D. Sociocultural influences on the explanation of delinquency for Puerto Rican youths. Hisp J Behav Sci 1993;15(1):36-62. Excluded; Study design not used.

Song LY, Singer MI, Anglin TM. Violence exposure and emotional trauma as contributors to adolescents' violent behaviors. Arch Pediatr Adolesc Med 1998;152(6):531-6. Excluded; Study design not used.

Sosin DM, Koepsell TD, Rivara FP, et al. Fighting as a marker for multiple problem behaviors in adolescents. J Adolesc Health 1995;16(3):209-15. Excluded; Outcome is not violence.

Sourander A, Aurela A, Piha J. Therapeutic holding in child and adolescent psychiatric inpatient treatment. Nord J Psychiatry 1996;50(5):375-80. Excluded; Not a U.S. study.

Sourander A, Helstela L, Helenius H. Persistence of bullying from childhood to adolescence--a longitudinal 8-year follow-up study. Child Abuse Negl 2000;24(7):873-81. Excluded; Outcome is not violence.

Spaccarelli S, Bowden B, Coatsworth JD, et al. Psychosocial correlates of male sexual aggression in a chronic delinquent sample. Crim Justice Behav 1997;24(1):71-95. Excluded; Study design not used.

Spaccarelli S, Coatsworth JD, Bowden BS. Exposure to serious family violence among incarcerated boys: its association with violent offending and potential mediating variables. Violence Vict 1995;10(3):163-82. Excluded; Study design not used.

Spergel IA, Grossman SF. The Little Village Project: A community approach to the gang problem. Soc Work 1997;42(5):456-70. Excluded; Study does not focus on youth as perpetrators.

Spigelman G, Spigelman A, Englesson I. Hostility, aggression, and anxiety levels of divorce and nondivorce children as manifested in their responses to projective tests. J Pers Assess 1991;56(3):438-52. Excluded; Not a U.S. study.

Spillane-Grieco E. From parent verbal abuse to teenage physical aggression? Child Adolesc Social Work J 2000;17(6):411-30. Excluded; Data not abstractable.

Spingarn RW, DuRant RH. Male adolescents involved in pregnancy: associated health risk and problem behaviors. Pediatrics 1996;98(2 Pt 1):262-8. Excluded; Study design not used.

Spitz RT, Hillbrand M, Foster HG, et al. Ethnicity, aggression and serum creatine kinase in hospitalized male forensic patients. Ethn Dis 1997;7(3):259-70. Excluded; Age of study population greater than 17 years.

Sprague J, Walker HM, Stieber S, et al. Exploring the relationship between school discipline referrals and delinquency. Psychol Sch 2001;38(2):197-206. Excluded; Outcome is not violence.

Spunt B, Goldstein P, Brownstein H, et al. The role of marijuana in homicide. Int J Addict 1994;29(2):195-213. Excluded; Age of study population greater than 17 years.

St George DM, Thomas SB. Perceived risk of fighting and actual fighting behavior among middle school students. J Sch Health 1997;67(5):178-81. Excluded; Study design not used.

St. Lawrence JS, Crosby RA, Belcher L, et al. Sexual risk reduction and anger management interventions for incarcerated male adolescents: A randomized controlled trial of two interventions. J Sex Educ Ther 1999;24(1-2):9-17. Excluded; Outcome is not violence.

Stafford E, Cornell DG. Psychopathy scores predict adolescent inpatient aggression. Assessment 2003;10(1):102-12. Excluded; Study design not used.

Stanislav SW, Fabre T, Crismon ML, et al. Buspirone's efficacy in organic-induced aggression. J Clin Psychopharmacol 1994;14(2):126-30. Excluded; Study does not focus on youth as perpetrators.

Stein DJ, Keating J, Zar HJ, et al. A survey of the phenomenology and pharmacotherapy of compulsive and impulsive-aggressive symptoms in Prader-Willi Syndrome. J Neuropsychiatry Clin Neurosci 1994;6(1):23-9. Excluded; Outcome is not violence.

Steiner H, Stone LA. Violence and related psychopathology. J Am Acad Child Adolesc Psychiatry 1999;38(3):232-4. Excluded; Not a research study.

Steinert T, Woelfle M, Gebhardt RP. No correlation of serum cholesterol levels with measures of violence in patients with schizophrenia and non-psychotic disorders. Eur Psychiatry 1999;14(6):346-8. Excluded; Age of study population greater than 17 years.

Steinert T, Woelfle M, Gebhardt RP. No correlation of serum cholesterol levels with measures of violence in patients with schizophrenia and non-psychotic disorders. Eur Psychiatry 1999;14(6):346-8. Excluded; Duplicated citation or findings.

Steinert T, Wolfle M, Gebhardt RP. Measurement of violence during in-patient treatment and association with psychopathology. Acta Psychiatr Scand 2000;102(2):107-12. Excluded; Not a U.S. study.

Stephens RJ, Sandor P. Aggressive behaviour in children with Tourette syndrome and comorbid attention-deficit hyperactivity disorder and obsessive-compulsive disorder. Can J Psychiatry 1999;44(10):1036-42. Excluded; Not a U.S. study.

Stevens V, De Bourdeaudhuij I, Van Oost P. Relationship of the family environment to children's involvement in bully/victim problems at school. J Youth Adolesc 2002;31(6):419-28. Excluded; Not a U.S. study.

Stevenson HC, Herrero-Taylor T, Cameron R, et al. "Mitigating instigation": Cultural phenomenological influences of anger and fighting among "big-boned' and "baby-faced' African American youth. J Youth Adolesc 2002;31(6):473-85. Excluded; Outcome is not violence.

Stewart EA, Simons RL, Conger RD. Assessing Neighborhood and Social Psychological Influences on Childhood Violence in an African-American Sample. Criminology 2002;40(4):801-29. Excluded; Study does not focus on youth as perpetrators.

Stier DM, Leventhal JM, Berg AT, et al. Are children born to young mothers at increased risk of maltreatment? Pediatrics 1993;91(3):642-8. Excluded; Study does not focus on youth as perpetrators.

Stiffman AR, Dore P, Cunningham RM. Violent behavior in adolescents and young adults: A person and environment model. J Child Fam Stud 1996;5(4):487-501. Excluded; Data not abstractable.

Stoff DM, Pasatiempo AP, Yeung J, et al. Neuroendocrine responses to challenge with dl-fenfluramine and aggression in disruptive behavior disorders of children and adolescents. Psychiatry Res 1992;43(3):263-76. Excluded; Study design not used.

Stolzenberg L, D'Alessio SJ. Gun availability and violent crime: New evidence from the National Incident-Based Reporting System. Soc Forces 2000;78(4):1461-82. Excluded; Age of study population greater than 17 years.

Strain PS, Timm MA. Remediation and prevention of aggression: An evaluation of the Regional Intervention Program over a quarter century. Behav Disord 2001;26(4):297-313. Excluded; Outcome is not violence.

Straus MA. Spanking and the making of a violent society. Pediatrics 1996;98(4 Pt 2):837-42. Excluded; Not a research study.

Straus MA, Kantor GK. Corporal punishment of adolescents by parents: A risk factor in the epidemiology of depression, suicide, alcohol abuse, child abuse, and wife beating. Adolescence 1994;29(115):543-61. Excluded; Age of study population greater than 17 years.

Straus MA, Mouradian VE. Impulsive corporal punishment by mothers and antisocial behavior and impulsiveness of children. Behav Sci Law 1998;16(3):353-74. Excluded; Data not abstractable.

Straznickas KA, McNiel DE, Binder RL. Violence toward family caregivers by mentally ill relatives. Hosp Community Psychiatry 1993;44(4):385-7. Excluded; Study does not focus on youth as perpetrators.

Stricker SJ, Volgas DA. Extremity handgun injuries in children and adolescents. Orthopedics 1998;21(10):1095-110. Excluded; Outcome is not violence.

Strom JP. Breaking the cycle of violence. J S C Med Assoc 1995;91(10):439. Excluded; Not a research study.

Stueve A, O'Donnell L, Link B. Gender differences in risk factors for violent behavior among economically disadvantaged African American and Hispanic young adolescents. Int J Law Psychiatry 2001;24(4-5):539-57. Excluded; Study design not used.

Stulc JP. The cult of violence. J Ky Med Assoc 1998;96(12):497-8. Excluded; Not a research study.

Sullivan AM, Rivera J. Profile of a comprehensive psychiatric emergency program in a New York City municipal hospital. Psychiatr Q 2000;71(2):123-38. Excluded; Not a research study.

Surette R. Self-reported copycat crime among a population of serious and violent juvenile offenders. Crime Delinq 2002;48(1):46-69. Excluded; Not addressing they key questions.

Sussman S, Dent CW, McCullar WJ. Group self-identification as a prospective predictor of drug use and violence in high-risk youth. Psychol Addict Behav 2000;14(2):192-6. Excluded; Data not abstractable.

Sussman S, Dent CW, Stacy AW. The association of current stimulant use with demographic, substance use, violence-related, social and intrapersonal variables among high risk youth. Addictive Behaviors Addict Behav 1999;24(6):741-8. Excluded; Data not abstractable.

Sussman S, Dent CW, Stacy AW, et al. Psychosocial variables as prospective predictors of violent events among adolescents. Health Values 1994;18(3):29-40. Excluded; Outcome is not violence.

Sussman S, Simon TR, Dent CW, et al. One-year prediction of violence perpetration among high-risk youth. Am J Health Behav 1999;23(5):332-44. Excluded; Data not abstractable.

Swanson JW, Swartz MS, Borum R, et al. Involuntary out-patient commitment and reduction of violent behaviour in persons with severe mental illness. Br J Psychiatry 2000;176:324-31. Excluded; Age of study population greater than 17 years.

Swartz MS, Swanson JW, Hiday VA, et al. Taking the wrong drugs: the role of substance abuse and medication noncompliance in violence among severely mentally ill individuals. Soc Psychiatry Psychiatr Epidemiol 1998;33 Suppl 1:s75-80. Excluded; Age of study population greater than 17 years.

Swartz MS, Swanson JW, Hiday VA, et al. Violence and severe mental illness: the effects of substance abuse and nonadherence to medication. Am J Psychiatry 1998;155(2):226-31. Excluded; Age of study population greater than 17 years.

Swett C. Inpatient seclusion: Description and causes. Bull Am Acad Psychiatry Law 1994;22(3):421-30. Excluded; Outcome is not violence.

Swikert N. SAVE--school violence II. J Ky Med Assoc 2000;98(10):459-60. Excluded; Not a research study.

Swinford SP, DeMaris A, Cernkovich SA, et al. Harsh physical discipline in childhood and violence in later romantic involvements: The mediating role of problem behaviors. J Marriage Fam 2000;62(2):508-19. Excluded; Age of study population greater than 17 years.

Talbott E, Celinska D, Simpson J, et al. "Somebody else making somebody else fight": Aggression and the social context among urban adolescent girls. Exceptionality 2002;10(3):203-20. Excluded; Not a research study.

Taliaferro E, Smith D, Rogers J, et al. Violence intervention programs: the Parkland Domestic Violence Project. Tex Dent J 2000;117(10):54-8. Excluded; Not a research study.

Tannenhaus N. Violence in the streets. What can communities do? Trustee 1995;48(4):6-9. Excluded; Not a research study.

Tarter RE, Kirisci L, Vanyukov M, et al. Predicting adolescent violence: impact of family history, substance use, psychiatric history, and social adjustment. Am J Psychiatry 2002;159(9):1541-7. Excluded; Age of study population greater than 17 years.

Tashman NA, Weist MD, Nabors LA, et al. Involvement in meaningful activities and self-reported aggression and delinquency among inner-city teenagers. J Clin Psychol Med Settings 1998;5(3):239-48. Excluded; Data not abstractable.

Taub J. Evaluation of the Second Step Violence Prevention Program at a rural elementary school. School Psych Rev 2002;31(2):186-200. Excluded; Age of study population greater than 17 years.

Taussig HN. Risk behaviors in maltreated youth placed in foster care: a longitudinal study of protective and vulnerability factors. Child Abuse Negl 2002;26(11):1179-99. Excluded; Outcome is not violence.

Taylor E, Chadwick O, Heptinstall E. Hyperactivity and conduct problems as risk factors for adolescent development. J Am Acad Child Adolesc Psychiatry 1996;35:1213-26. Excluded; Duplicated citation or findings.

Taylor E, Chadwick O, Heptinstall E, et al. Hyperactivity and conduct problems as risk factors for adolescent development. J Am Acad Child Adolesc Psychiatry 1996;35(9):1213-26. Excluded; Not a U.S. study.

Taylor ER, Kelly J, Valescu S, et al. Is stealing a gateway crime? Community Ment Health J 2001;37(4):347-58. Excluded; Data not abstractable.

Taylor HG. Family violence and the community pharmacist. Am Pharm 1994;Ns34(4):41-4. Excluded; Not a research study.

Tebbutt J, Swanston H, Oates RK, et al. Five years after child sexual abuse: persisting dysfunction and problems of prediction. J Am Acad Child Adolesc Psychiatry 1997;36(3):330-9. Excluded; Outcome is not violence.

Teevan JJ, Dryburgh HB. First person accounts and sociological explanations of delinquency. Can Rev Sociol Anthropol 2000;37(1):77-93. Excluded; Not a U.S. study.

Tengstroem A, Grann M, Langstroem N, et al. Psychopathy (PCL-R) as a predictor of violent recidivism among criminal offenders with schizophrenia. Law Hum Behav 2000;24(1):45-58. Excluded; Not a U.S. study.

Teplin LA, Abram KM, McClelland GM. Does psychiatric disorder predict violent crime among released jail detainees? A six-year longitudinal study. Am Psychol 1994;49(4):335-42. Excluded; Age of study population greater than 17 years.

Thompson KM, Brownfield D, Sorenson AM. At-risk behavior and group fighting: A latent structure analysis. J Gang Res 1998;5(3):1-14. Excluded; Study design not used.

Thornberry TP, Freeman-Gallant A, Lizotte AJ, et al. Linked lives: The intergenerational transmission of

antisocial behavior. J Abnorm Child Psychol 2003;31(2):171-84. Excluded; Data not abstractable.

Thornberry TP, Krohn MD, Lizotte AJ, et al. The role of juvenile gangs in facilitating delinquent behavior. J Res Crime Delinq 1993;30(1):55-87. Excluded; Included violent and non-violent behaviors.

Tiet QQ, Wasserman GA, Loeber R, et al. Developmental and sex differences in types of conduct problems. J Child Fam Stud 2001;10(2):181-97. Excluded; Data not abstractable.

Tinklenberg JA, Steiner H, Huckaby WJ, et al. Criminal recidivism predicted from narratives of violent juvenile delinquents. Child Psychiatry Hum Dev 1996;27(2):69-79. Excluded; Age of study population greater than 17 years.

Tippins BS. Family violence: a national epidemic. J Med Assoc Ga 1992;81(7):372-3. Excluded; Not a research study.

Tobin T, Sugai G, Colvin G. Patterns in middle school discipline records. J Emot Behav Disord 1996;4(2):82-94. Excluded; Outcome is not violence.

Tobin TJ, Sugai GM. Using sixth-grade school records to predict school violence, chronic discipline problems, and high school outcomes. J Emot Behav Disord 1999;7(1):40-53. Excluded; Study design not used.

Todis B, Severson HH, Walker HM. The Critical Events Scale: Behavioral profiles of students with externalizing and internalizing behavior disorders. Behav Disord 1990;15(2):75-86. Excluded; Study does not focus on youth as perpetrators.

Tolan PH, Gorman-Smith D, Henry DB. Linking family violence to delinquency across generations? Child Serv (Mahwah NJ) 2002;5(4):273-84. Excluded; Age of study population greater than 17 years.

Tolan PH, Gorman-Smith D, Henry DB. The developmental ecology of urban males' youth violence. Dev Psychol 2003;39(2):274-91. Excluded; Age of study population greater than 17 years.

Tolan PH, Gorman-Smith D, Henry DB. The developmental ecology of urban males' youth violence. Dev Psychol 2003;39(2):274-91. Excluded; Duplicated citation or findings.

Tolan PH, Gorman-Smith D, Loeber R. Developmental timing of onsets of disruptive behaviors and later delinquency of inner-city youth. J Child Fam Stud 2000;9(2):203-20. Excluded; Not addressing they key questions.

Tolan PH, Henry D. Patterns of psychopathology among urban poor children: Comorbidity and aggression effects. J Consult Clin Psychol 1996;64(5):1094-9. Excluded; Outcome is not violence.

Tomori M. Personality characteristics of adolescents with alcoholic parents. Adolescence 1994;29(116):949-59. Excluded; Outcome is not violence.

Tones K. Health education: evidence of effectiveness. Arch Dis Child 1997;77(3):189-91. Excluded; Not a research study.

Tong DA. Beyond prevention: healing the "sociomas". Healthc Forum J 1996;39(3):39-40, 57. Excluded; Not a research study.

Tontodonato P, Crew BK. Dating violence, social learning theory, and gender: a multivariate analysis. Violence Vict 1992;7(1):3-14. Excluded; Age of study population greater than 17 years.

Toombs NJ, Benda B, Corwyn RF. Violent youth in boot camps for non-violent offenders. J Offender Rehabil 2000;31(3-4):113-33. Excluded; Outcome is not violence.

Totten M. Girlfriend abuse as a form of masculinity construction among violent, marginal male youth. Men Masc 2003;6(1):70-92. Excluded; Not a U.S. study.

Toupin J, Morissette L. Juvenile homicide: a case control study. Med Law 1990;9(3):986-94. Excluded; Not a U.S. study.

Tremblay RE, Schaal B. Physically aggressive boys from age 6 to 12 years. Their biopsychosocial status at puberty. Ann N Y Acad Sci 1996;794:192-207. Excluded; Not a U.S. study.

Tremblay RE, Schaal B, Boulerice B, et al. Testosterone, physical aggression, dominance, and physical development in early adolescence. Int J Behav Dev 1998;22(4):753-77. Excluded; Not a U.S. study.

Trickett PK, Noll JG, Reiffman A, et al. Variants of intrafamilial sexual abuse experience: implications for short- and long-term development. Dev Psychopathol 2001;13(4):1001-19. Excluded; Outcome is not violence.

Trulson C, Triplett R, Snell C. Social control in a school setting: Evaluating a school-based boot camp. Crime Delinq 2001;47(4):573-609. Excluded; Data not abstractable.

Truscott D. Intergenerational transmission of violent behavior in adolescent males. Aggress Behav 1992;18(5):327-35. Excluded; Not a U.S. study.

Truscott D. Adolescent offenders: comparison for sexual, violent, and property offences. Psychol Rep 1993;73(2):657-8. Excluded; Not addressing they key questions.

Tucker JB, Barone JE, Stewart J, et al. Violence prevention: reaching adolescents with the message. Pediatr Emerg Care 1999;15(6):436-9. Excluded; Outcome is not

violence.

Tuisku K, Virkkunen M, Holi M, et al. Antisocial violent offenders with attention deficit hyperactivity disorder demonstrate akathisia-like hyperactivity in three-channel actometry. J Neuropsychiatry Clin Neurosci 2003;15(2):194-9. Excluded; Outcome is not violence.

Tuisku K, Virkkunen M, Holi M, et al. Antisocial violent offenders with attention deficit hyperactivity disorder demonstrate akathisia-like hyperactivity in three-channel actometry. J Neuropsychiatry Clin Neurosci 2003;15(2):194-9. Excluded; Duplicated citation or findings.

Tuninger EE, Levander S, Bernce R, et al. Criminality and aggression among psychotic in-patients: frequency and clinical correlates. Acta Psychiatr Scand 2001;103(4):294-300. Excluded; Not a U.S. study.

Tunzi M. Isn't this statutory rape? Am Fam Physician 2002;65(9):1950, 3-4. Excluded; Not a research study.

Turnure C, Young P. Chemical abuse and family violence in Minnesota. Minn Med 1994;77(10):24-6. Excluded; Not a research study.

Twemlow SW. A crucible for murder: The social context of violent children and adolescents. Psychoanal Q 2003;72(3):659-98. Excluded; Not a research study.

Twemlow SW, Fonagy P, Sacco FC. An innovative psychodynamically influenced approach to reduce school violence. J Am Acad Child Adolesc Psychiatry 2001;40(3):377-9. Excluded; Not a research study.

Twemlow SW, Fonagy P, Sacco FC, et al. Premeditated mass shootings in schools: threat assessment. J Am Acad Child Adolesc Psychiatry 2002;41(4):475-7. Excluded; Not a research study.

Uberos DJ, Gomez A, Munoz A, et al. Television and childhood injuries: is there a connection? Arch Pediatr Adolesc Med 1998;152(7):712-4. Excluded; Not a research study.

Uehara ES, Chalmers D, Jenkins EJ, et al. African American youth encounters with violence: Results from the Community Mental Health Council Violence Screening Project. J Black Stud 1996;26(6):768-81. Excluded; Study design not used.

Ullman SE. A comparison of gang and individual rape incidents. Violence Vict 1999;14(2):123-33. Excluded; Age of study population greater than 17 years.

Ulman A, Straus MA. Violence by children against mothers in relation to violence between parents and corporal punishment by parents. J Comp Fam Stud 2003;34(1):41-60. Excluded; Data not abstractable.

Underwood RC, Patch PC. Siblicide: A descriptive analysis of sibling homicide. Homicide Stud 1999;3(4):333-48. Excluded; Not addressing they key questions.

Unger JB, Sussman S, Dent CW. Interpersonal conflict tactics and substance use among high-risk adolescents. Addictive Behaviors Addict Behav 2003;28(5):979-87. Excluded; Study design not used.

Unis AS, Cook EH, Vincent JG, et al. Platelet serotonin measures in adolescents with conduct disorder. Biol Psychiatry 1997;42(7):553-9. Excluded; Outcome is not violence.

Valdez A, Kaplan CD, Codina E. Psychopathy among Mexican American gang members: A comparative study. Int J Offender Ther Comp Criminol 2000;44(1):46-58. Excluded; Data not abstractable.

Valliant PM, Bergeron T. Personality and criminal profile of adolescent sexual offenders, general offenders in comparison to nonoffenders. Psychol Rep 1997;81(2):483-9. Excluded; Not a U.S. study.

Valois RF, McKeown RE, Garrison CZ, et al. Correlates of aggressive and violent behaviors among public high school adolescents. J Adolesc Health 1995;16(1):26-34. Excluded; Study design not used.

Valois RF, McKewon RE. Frequency and correlated of fighting and carrying weapons among public school adolescents. Am J Health Behav 1998;22(1):8-17. Excluded; Study design not used.

Valois RF, Oeltmann JE, Waller J, et al. Relationship between number of sexual intercourse partners and selected health risk behaviors among public high school adolescents. J Adolesc Health 1999;25(5):328-35. Excluded; Study design not used.

Valois RF, Vincent ML, McKeown RE, et al. Adolescent risk behaviors and the potential for violence: a look at what's coming to campus. J Am Coll Health 1993;41(4):141-7. Excluded; Study design not used.

Valois RF, Zullig KJ, Huebner ES, et al. Relationship between life satisfaction and violent behaviors among adolescents. Am J Health Behav 2001;25(4):353-66. Excluded; Study design not used.

van Dis J, Mahmoodian M, Goddik S, et al. A survey of the prevalence of domestic violence in rural and Urban South Dakota. S D J Med 2002;55(4):133-9. Excluded; Outcome is not violence.

van Goozen SHM, Matthys W, Cohen-Kettenis PT, et al. Plasma monoamine metabolites and aggression: Two studies of normal and oppositional defiant disorder children. Eur Neuropsychopharmacol 1999;9(1-2):141-7. Excluded; Not a U.S. study.

van Goozen SHM, van den Ban E, Matthys W, et al. Increased adrenal androgen functioning in children with

oppositional defiant disorder: A comparison with psychiatric and normal controls. J Am Acad Child Adolesc Psychiatry 2000;39(11):1446-51. Excluded; Not a U.S. study.

Vance JE, Bowen NK, Fernandez G, et al. Risk and protective factors as predictors of outcome in adolescents with psychiatric disorder and aggression. J Am Acad Child Adolesc Psychiatry 2002;41(1):36-43. Excluded; Outcome is not violence.

Vanderschmidt HF, Lang JM, Knight-Williams V, et al. Risks among inner-city young teens: the prevalence of sexual activity, violence, drugs, and smoking. J Adolesc Health 1993;14(4):282-8. Excluded; Data not abstractable.

Vartiainen H, Tiihonen J, Putkonen A, et al. Citalopram, a selective serotonin reuptake inhibitor, in the treatment of aggression in schizophrenia. Acta Psychiatr Scand 1995;91(5):348-51. Excluded; Age of study population greater than 17 years.

Velsor-Friedrich B. Family violence: a growing epidemic. J Pediatr Nurs 1994;9(4):272-4. Excluded; Not a research study.

Veneziano C, Veneziano L. A typology of family social environments for institutionalized juvenile delinquents: Implications for research and treatment. J Youth Adolesc 1992;21(5):593-607. Excluded; Outcome is not violence.

Vernberg EM, Jacobs AK, Hershberger SL. Peer victimization and attitudes about violence during early adolescence. J Clin Child Psychol 1999;28(3):386-95. Excluded; Outcome is not violence.

Vidyasagar P, Mishra H. Effect of modelling on aggression. Indian J Clin Psychol 1993;20(1):50-2. Excluded; Not a U.S. study.

Viemeroe V. Factors in childhood that predict later criminal behavior. Aggress Behav 1996;22(2):87-97. Excluded; Not a U.S. study.

Villani S. Violence in the media. J Am Acad Child Adolesc Psychiatry 1999;38(10):1208. Excluded; Not a research study.

Villani S, Sharfstein SS. Evaluating and treating violent adolescents in the managed care era. Am J Psychiatry 1999;156(3):458-64. Excluded; Not a research study.

Virkkunen M. Reactive hypoglycemic tendency among habitually violent offenders. Nutr Rev 1986;44 Suppl:94-103. Excluded; Not a research study.

Vissing YM, Straus MA, Gelles RJ, et al. Verbal aggression by parents and psychosocial problems of children. Child Abuse Negl 1991;15(3):223-38. Excluded; Data not abstractable.

Vitacco MJ, Rogers R. Predictors of adolescent psychopathy: the role of impulsivity, hyperactivity, and sensation seeking. J Am Acad Psychiatry Law 2001;29(4):374-82. Excluded; Outcome is not violence.

Vitaro F, Gendreau PL, Tremblay RE, et al. Reactive and proactive aggression differentially predict later conduct problems. J Child Psychol Psychiatry 1998;39(3):377-85. Excluded; Not a U.S. study.

Vitelli R. Comparison of early and late start models of delinquency in adult offenders. Int J Offender Ther Comp Criminol 1997;41(4):351-7. Excluded; Age of study population greater than 17 years.

Vivona JM, Ecker B, Halgin RP. Self- and other-directed aggression in child and adolescent psychiatric inpatients. J Am Acad Child Adolesc Psychiatry 1995;34:434-44. Excluded; Data not abstractable.

Volavka J, Laska E, Baker S, et al. History of violent behaviour and schizophrenia in different cultures. Analyses based on the WHO study on Determinants of Outcome of Severe Mental Disorders. Br J Psychiatry 1997;171:9-14. Excluded; Outcome is not violence.

Vowell PR, May DC. Another look at classic strain theory: poverty status, perceived blocked opportunity, and gang membership as predictors of adolescent violent behavior. Sociol Inq 2000;70(1):42-60. Excluded; Study design not used.

Vukelich MS. Stop the media violence. Minn Med 1995;78(6):16-8. Excluded; Not a research study.

Waite BM, Hillbrand M, Foster HG. Reduction of aggressive behavior after removal of music television. Hosp Community Psychiatry 1992;43(2):173-5. Excluded; Age of study population greater than 17 years.

Waldner-Haugrud LK, Gratch LV, Magruder B. Victimization and perpetration rates of violence in gay and lesbian relationships: gender issues explored. Violence Vict 1997;12(2):173-84. Excluded; Age of study population greater than 17 years.

Wallace JM, Forman TA. Religion's role in promoting health and reducing risk among American youth. Health Educ Behav 1998;25(6):721-41. Excluded; Outcome is not violence.

Walsh A. Genetic and environmental explanations of juvenile violence in advantaged and disadvantaged environments. Aggress Behav 1992;18(3):187-99. Excluded; Study design not used.

Walsh D. Interactive media violence and children. Minn Med 2000;83(9):42-4. Excluded; Not a research study.

Walsh MM, Pepler DJ, Levene KS. A Model Intervention for Girls with Disruptive Behaviour Disorders: The Earlscourt Girls Connection. Can J Couns 2002;36(4):297-311. Excluded; Not a U.S. study.

Walsh WJ, Isaacson HR, Rehman F, et al. Elevated blood copper/zinc ratios in assaultive young males. Physiol Behav 1997;62(2):327-9. Excluded; Data not abstractable.

Waschbusch DA, Pelham WEJ, Jennings JR, et al. Reactive aggression in boys with disruptive behavior disorders: Behavior, physiology, and affect. J Abnorm Child Psychol 2002;30(6):641-56. Excluded; Outcome is not violence.

Watts WD, Wright LS. The drug use-violent delinquency link among adolescent Mexican-Americans. NIDA Res Monogr 1990;103:136-59. Excluded; Data not abstractable.

Watts WD, Wright LS. The relationship of alcohol, tobacco, marijuana, and other illegal drug use to delinquency among Mexican-American, Black, and White adolescent males. Adolescence 1990;25(97):171-81. Excluded; Data not abstractable.

Watts WD, Wright LS. The relationships of alcohol, tobacco, marijuana, and other illegal drug use to delinquency among Mexican-American, black, and white adolescent males. Adolescence 1990;25(97):171-81. Excluded; Data not abstractable.

Way I, Chung S, Jonson-Reid M, et al. Maltreatment perpetrators: a 54-month analysis of recidivism. Child Abuse Negl 2001;25(8):1093-108. Excluded; Study does not focus on youth as perpetrators.

Weaver GM, Wootton RR. The use of the MMPI special scales in the assessment of delinquent personality. Adolescence 1992;27(107):545-54. Excluded; Outcome is not violence.

Weber DO. Healing a violent society. Healthc Forum J 1996;39(5):22-32. Excluded; Not a research study.

Webster DW, Gainer PS, Champion HR. Weapon carrying among inner-city junior high school students: defensive behavior vs aggressive delinquency. Am J Public Health 1993;83(11):1604-8. Excluded; Study design not used.

Weiner MD, Pentz MA, Turner GE, et al. From early to late adolescence: alcohol use and anger relationships. J Adolesc Health 2001;28(6):450-7. Excluded; Outcome is not violence.

Weishew NL, Peng SS. Variables predicting students' problem behaviors. J Educ Res 1993;87(1):5-17. Excluded; Study design not used.

Weiss B, Dodge KA, Bates JE, et al. Some consequences of early harsh discipline: child aggression and a maladaptive social information processing style. Child Dev 1992;63(6):1321-35. Excluded; Outcome is not violence.

Weisz JR, Martin SL, Walter BR, et al. Differential prediction of young adult arrests for property and personal crimes: findings of a cohort follow-up study of violent boys from North Carolina's Willie M Program. Journal of Child Psychology and Psychiatry, and Allied Disciplines 1991;32(5):783-92. Excluded; Age of study population greater than 17 years.

Weisz JR, Suwanlert S, Chaiyasit W, et al. Behavioral and emotional problems among Thai and American adolescents: parent reports for ages 12-16. J Abnorm Psychol 1993;102(3):395-403. Excluded; Outcome is not violence.

Weisz JR, Walter BR, Weiss B. Arrests among emotionally disturbed violent and assaultive individuals following minimal versus lengthy intervention through North Carolina's Willie M program. J Consult Clin Psychol 1990;58:720-8. Excluded; Age of study population greater than 17 years.

Wekerle C, Wolfe DA. The role of child maltreatment and attachment style in adolescent relationship violence. Dev Psychopathol 1998;10(3):571-86. Excluded; Not a U.S. study.

Wekerle C, Wolfe DA, Hawkins DL, et al. Childhood maltreatment, posttraumatic stress symptomatology, and adolescent dating violence: considering the value of adolescent perceptions of abuse and a trauma mediational model. Dev Psychopathol 2001;13(4):847-71. Excluded; Not a U.S. study.

Weller NF, Tortolero SR, Kelder SH, et al. Health risk behaviors of Texas students attending dropout prevention/recovery schools in 1997. J Sch Health 1999;69(1):22-8. Excluded; Not addressing they key questions.

Welsh J. Children and torture. Lancet 2000;356(9247):2093. Excluded; Not a research study.

Welte JW, Zhang L, Wieczorek WF. The effects of substance use on specific types of criminal offending in young men. J Res Crime Delinq 2001;38(4):416-38. Excluded; Data not abstractable.

West CM, Rose S. Dating aggression among low income African American youth: An examination of gender differences and antagonistic beliefs. Violence Against Women 2000;6(5):470-94. Excluded; Data not abstractable.

Westhoff WW, McDermott RJ, Harokopos V. Acquisition of high-risk behavior by African-American, Latino, and Caucasian middle-school students. Psychol Rep 1996;79(3, Pt 1):787-95. Excluded; Outcome is not violence.

Whipple EE, Webster-Stratton C. The role of parental stress in physically abusive families. Child Abuse Negl 1991;15(3):279-91. Excluded; Outcome is not violence.

White HR, Brick J, Hansell S. A longitudinal investigation of alcohol use and aggression in adolescence. J Stud Alcohol 1993;Suppl 11:62-77. Excluded; Data not abstractable.

White HR, Chen P-H, al e. Problem drinking and intimate partner violence. J Stud Alcohol 2002;63(2):205-14. Excluded; Study does not focus on youth as perpetrators.

White HR, Hansell S. The moderating effects of gender and hostility on the alcohol-aggression relationship. J Res Crime Delinq 1996;33(4):450-70. Excluded; Data not abstractable.

White HR, Hansell S. Acute and long-term effects of drug use on aggression from adolescence into adulthood. J Drug Issues 1998;28(4):837-58. Excluded; Study does not focus on youth as perpetrators.

White HR, Hansell S, Brick J. Alcohol use and aggression among youth. Alcohol Health Res World 1993;17(2):144-50. Excluded; Not addressing they key questions.

White HR, Loeber R, Stouthamer-Loeber M, et al. Developmental associations between substance use and violence. Dev Psychopathol 1999;11(4):785-803. Excluded; Data not abstractable.

White HR, Tice PC, Loeber R, et al. Illegal acts committed by adolescents under the influence of alcohol and drugs. J Res Crime Delinq 2002;39(2):131-52. Excluded; Study design not used.

Whitfield GW. Validating school social work: An evaluation of a cognitive-behavioral approach to reduce school violence. Res Soc Work Pract 1999;9(4):399-426. Excluded; Outcome is not violence.

Widom CS. The role of placement experiences in mediating the criminal consequences of early childhood victimization. Am J Orthopsychiatry 1991;61(2):195-209. Excluded; Age of study population greater than 17 years.

Widom CS. Motivation and mechanisms in the "cycle of violence". Nebr Symp Motiv 2000;46:1-37. Excluded; Not a research study.

Widom CS, Ames MA. Criminal consequences of childhood sexual victimization. Child Abuse Negl 1994;18(4):303-18. Excluded; Age of study population greater than 17 years.

Widom CS, Maxfield MG. A prospective examination of risk for violence among abused and neglected children. Ann N Y Acad Sci 1996;794:224-37. Excluded; Data not abstractable.

Widom CS, White HR. Problem behaviours in abused and neglected children grown up: Prevalence and co-occurrence of substance abuse, crime and violence. Crim Behav Ment Health 1997;7(4):287-310. Excluded; Age of study population greater than 17 years.

Wieckowski E, Hartsoe P, Mayer A, et al. Deviant sexual behavior in children and young adolescents: Frequency and patterns. Sex Abuse 1998;10(4):293-303. Excluded; Not addressing they key questions.

Wiist WH, Jackson RH, Jackson KW. Peer and community leader education to prevent youth violence. Am J Prev Med 1996;12(5 Suppl):56-64. Excluded; Study does not focus on youth as perpetrators.

Willard JC, Schoenborn CA. Relationship between cigarette smoking and other unhealthy behaviors among our nation's youth: United States, 1992. Adv Data 1995(263):1-11. Excluded; Not addressing they key questions.

Williams JH, Stiffman AR, O'Neal JL. Violence among urban African American youths: An analysis of environmental and behavioral risk factors. Soc Work Res 1998;22(1):3-13. Excluded; Study design not used.

Williams O. Spouse abuse: social learning, attribution and interventions. J Health Soc Policy 1989;1(2):91-107. Excluded; Age of study population greater than 17 years.

Winpisinger KA, Hopkins RS, Indian RW, et al. Risk factors for childhood homicides in Ohio: a birth certificate-based case-control study. Am J Public Health 1991;81(8):1052-4. Excluded; Study does not focus on youth as perpetrators.

Wintemute GJ, Wright MA, Parham CA, et al. Criminal activity and assault-type handguns: a study of young adults. Ann Emerg Med 1998;32(1):44-50. Excluded; Age of study population greater than 17 years.

Witkowski MJ, Homant RJ, Barnes E. Work, workplace deviance, and criminal offenders: An analysis of Project GANGMILL. J Gang Res 2002;10(1):1-10. Excluded; Outcome is not violence.

Wolfe DA, Feiring C. Dating violence through the lens of adolescent romantic relationships. Child Maltreat 2000;5(4):360-3. Excluded; Not a research study.

Wolfe DA, Wekerle C, Reitzel-Jaffe D, et al. Factors associated with abusive relationships among maltreated and nonmaltreated youth. Dev Psychopathol 1998;10(1):61-85. Excluded; Not a U.S. study.

Wolfe DA, Wekerle C, Scott K, et al. Dating violence prevention with at-risk youth: A controlled outcome evaluation. J Consult Clin Psychol 2003;71(2):279-91. Excluded; Not a U.S. study.

Wolfe DA, Wekerle C, Scott K, et al. Dating violence prevention with at-risk youth: a controlled outcome evaluation. J Consult Clin Psychol 2003;71(2):279-91. Excluded; Duplicated citation or findings.

Wolfe LR. "Girl stabs boy at school": girls and the cycle of violence. Womens Health Issues 1994;4(2):109-16. Excluded; Not a research study.

Wolfe TW, Shoemaker DJ. Actor, situation, and context: A framework for delinquency theory integration. Am J Crim

Justice 1999;24(1):117-38. Excluded; Not addressing they key questions.

Workman M, Beer J. Depression, suicide ideation, and aggression among high school students whose parents are divorced and use alcohol at home. Psychol Rep 1992;70(2):503-11. Excluded; Data not abstractable.

Worling JR. Sexual abuse histories of adolescent male sex offenders: differences on the basis of the age and gender of their victims. J Abnorm Psychol 1995;104(4):610-3. Excluded; Not a U.S. study.

Worling JR. Adolescent sibling-incest offenders: differences in family and individual functioning when compared to adolescent nonsibling sex offenders. Child Abuse Negl 1995;19(5):633-43. Excluded; Not a U.S. study.

Worling JR. Adolescent sex offenders against females: Differences based on the age of their victims. Int J Offender Ther Comp Criminol 1995;39(3):276-93. Excluded; Not addressing they key questions.

Worling JR. Sexual abuse histories of adolescent male sex offenders: differences on the basis of the age and gender of their victims. J Abnorm Psychol 1995;104:610-13. Excluded; Duplicated citation or findings.

Worling JR. Personality-based typology of adolescent male sexual offenders: differences in recidivism rates, victim-selection characteristics, and personal victimization histories. Sex Abuse 2001;13(3):149-66. Excluded; Not a U.S. study.

Worling JR, Curwen T. Adolescent sexual offender recidivism: success of specialized treatment and implications for risk prediction. Child Abuse Negl 2000;24(7):965-82. Excluded; Not a U.S. study.

Wright S, Klee H. Violent crime, aggression and amphetamine: What are the implications for drug treatment services? Drug Educ Prev Policy 2001;8(1):73-90. Excluded; Not a U.S. study.

Xie H, Cairns RB, Cairns BD. The development of social aggression and physical aggression: A narrative analysis of interpersonal conflicts. Aggress Behav 2002;28(5):341-55. Excluded; Study design not used.

Xie H, Farmer TW, Cairns BD. Different forms of aggression among inner-city African-American children: Gender, configurations and school social networks. J Sch Psychol 2003;41(5):355-75. Excluded; Study design not used.

Xie H, Swift DJ, Cairns B, et al. Aggressive behaviors in social interaction and developmental adaptation: A narrative analysis of interpersonal conflicts during early adolescence. Soc Dev 2002;11(2):205-24. Excluded; Duplicated citation or findings.

Yarvis RM. Patterns of substance abuse and intoxication among murderers. Bull Am Acad Psychiatry Law 1994;22(1):133-44. Excluded; Age of study population greater than 17 years.

Yates TM, Dodds MF, Sroufe LA, et al. Exposure to partner violence and child behavior problems: A prospective study controlling for child physical abuse and neglect, child cognitive ability, socioeconomic status, and life stress. Dev Psychopathol 2003;15(1):199-218. Excluded; Outcome is not violence.

Yexley M, Borowsky I, Ireland M. Correlation between different experiences of intrafamilial physical violence and violent adolescent behavior. J Interpers Violence 2002;17(7):707-20. Excluded; Study design not used.

Young TJ. Parricide rates and criminal street violence in the United States: is there a correlation? . Adolescence 1993;28(109):171-2. Excluded; Age of study population greater than 17 years.

Young TJ, French LA. Homicide rates among Native American children: the status integration hypothesis. Adolescence 1997;32(125):57-9. Excluded; Age of study population greater than 17 years.

Youngstrom E, Weist MD, Albus KE. Exploring violence exposure, stress, protective factors and behavioral problems among inner-city youth. Am J Community Psychol 2003;32(1-2):115-29. Excluded; Outcome is not violence.

Zagar R, Arbit J, Sylvies R, et al. Homicidal adolescents: a replication. Psychol Rep 1990;67(3 Pt 2):1235-42. Excluded; Study design not used.

Zgourides G, Monto M, Harris R. Correlates of adolescent male sexual offense: Prior adult sexual contact, sexual attitudes, and use of sexually explicit materials. Int J Offender Ther Comp Criminol 1997;41(3):272-83. Excluded; Study design not used.

Zhang L, Welte JW, Wieczorek WW, et al. The role of aggression-related alcohol expectancies in explaining the link between alcohol and violent behavior. Subst Use Misuse 2002;37(4):457-71. Excluded; Study design not used.

Zhang L, Wieczorek WF, Welte JW. The nexus between alcohol and violent crime. Alcohol Clin Exp Res 1997;21(7):1264-71. Excluded; Data not abstractable.

Zoloth-Dorfman L. Audience and authority: the story in front of the story. J Clin Ethics 1996;7(4):355-61. Excluded; Not a research study.

Table 1. Citation counts for 2003 youth violence searches

Database	Search	Number of citations
MEDLINE	Search #1: April - Systematic Reviews	1051
	Search #2: May - General Search	3921
	Search #3: June - Revision	982
	Search #4: July - Search for Direct, etc.	16
	MEDLINE Total:	**5970**
PsychINFO	Search #1: May - General Search	3488
	Search #2: June - Revision	479
	Search #3: July - Search for Direct, etc.	2
	PsycINFO Total:	**3969**
ERIC	Search #1: May - General Search	495
	Search #2: June - Revision	101
	Search #3: July - Search for Direct, etc.	0
	ERIC Total:	**596**
SocioAbstracts	Search #1: May - General Search	183
	Search #2: June - Revision	179
	Search #3: July - Search for Direct, etc.	0
	SocAbs Total:	**362**
	FINAL TOTAL:	**10,897***

***** After internal elimination of duplicates, the net count was 10,852.

Table 2. Sample size and power considerations for logistic regression model

Parameters in the Table:
1. Level of Significance at 0.05
2. Correlation of this covariate (R) with others in model at 0.3 and 0.5
3. Probability of violence at mean level of covariates at 0.15, 0.10, and 0.05.
4. Minimum detectable odds ratio at 1.5 and 2.0.

Probability at mean level of covariates	Sample size	Power to detect minimum odds ratio level			
		Odds ratio at 1.5		Odds ratio at 2.0	
		R=0.3	R=0.5	R=0.3	R=0.5
0.15 (for high-risk population)	200	57%	50%	92%	86%
	300	72%	65%	98%	96%
	400	83%	76%	100%	100%
	500	**90%**	**84%**	**100%**	**100%**
	600	94%	89%	100%	100%
	700	96%	93%	100%	100%
	800	98%	96%	100%	100%
	900	99%	97%	100%	100%
	1000	100%	98%	100%	100%
	1100	100%	99%	100%	100%
0.10	200	46%	40%	83%	76%
	300	60%	53%	95%	90%
	400	71%	64%	98%	96%
	500	80%	73%	100%	99%
	600	86%	79%	100%	100%
	700	90%	85%	100%	100%
	800	93%	89%	100%	100%
	900	96%	92%	100%	100%
	1000	97%	94%	100%	100%
	1100	98%	96%	100%	100%
0.05 (for general population)	200	30%	27%	62%	54%
	300	40%	35%	78%	71%
	400	49%	43%	88%	82%
	500	57%	50%	94%	89%
	600	64%	57%	97%	94%
	700	70%	63%	99%	96%
	800	76%	68%	99%	98%
	900	80%	73%	100%	99%
	1000	84%	77%	100%	99%
	1100	**87%**	**80%**	**100%**	**100%**

Table 3. Primary screening results before and after discrepancy resolution

(A) Initial searches in April through July 2003

	Before resolution		After resolution		% of resolution
Outcome	**#**	**%**	**#**	**%**	**resulted in retrieval**
Retrieve	1029	9.3	1567	14.4	32.3
Disagree	1664	15.4	0	0.0	
Reject	8159	75.3	9285	85.6	
Subtotal	10852	100.0	10852	100.0	

(B) Supplemental searches in November 2003

	Before resolution		After resolution		% of resolution
Outcome	**#**	**%**	**#**	**%**	**resulted in retrieval**
Retrieve	33	9.6	45	13.1	85.7
Disagree	14	4.1	0	0.0	
Reject	297	86.3	299	86.9	
Subtotal	344	100.0	344	100.0	

(C) Combined results of initial and supplemental searches

	Before resolution		After resolution		% of resolution
Outcome	**#**	**%**	**#**	**%**	**resulted in retrieval**
Retrieve	1062	9.5	1612	14.4	32.8
Disagree	1678	15.0	0	0.0	
Reject	8456	75.5	9584	85.6	
Total	11196	100.0	11196	100.0	

Table 4. Reasons for rejecting 9,584 titles/abstracts during primary review

Rejection reason[a]	Number	Percent
R1: Not a study [b]	3559	37.1
R2: Study outcome is not violence as defined	4725	49.3
R3: Not a human subjects study	15	0.2
R4: Not a US Study	248	2.6
R5: Age of population studied is over 17 years	514	5.4
R6: Study not focused on youth as perpetrators	503	5.2
R7: A duplicate citation	9	0.1
R8: Data not abstractable [c]	0	0.0
R9: Does not addresses our key question(s)	11	0.1
Total	9584	100.0

[a] The first reason of rejection between the two reviewers is reflected.

[b] Not a study included: case report, editorial, letter, clinical practice, overview, guidelines, consensus statements, methodology, opinion, commentary, description of a program, and review.

[c] This rejection reason was not used until the secondary screening of full-length articles.

Table 5: Reasons for rejecting 1,146 full-length articles during secondary review

Rejection reason [a]	Number	Percent
R1: Not a study [b]	243	21.2
R2: Study outcome is not violence as defined	291	25.4
R3: Not a human subjects study	1	0.1
R4: Not a US Study	193	16.8
R5: Age of population studied is over 17 years	144	12.6
R6: Study not focused on youth as perpetrators	115	10.0
R7: A duplicate citation	26	2.3
R8: Data not abstractable [c]	92	8.0
R9: Does not addresses our key question(s)	41	3.6
Total	1146	100.0

[a] The first reason of rejection between the two reviewers is reflected.

[b] Not a study included: case report, editorial, letter, clinical practice, overview, guidelines, consensus statements, methodology, opinion, commentary, description of a program, and review.

[c] Either the outcome of interest (i.e. violence) or the age group of interest is embedded in the findings and cannot be pulled out. The only exception is when the outcome of an article covers an age range larger than our scope, i.e. 12-17, but the mean age is between 12-17, it will not be rejected.

Table 6. Reasons for rejecting 201 full-length articles during data abstraction

Rejection reason [a]	Number	Percent
R1: Not a study [b]	7	3.5
R2: Study outcome is not violence as defined	23	11.4
R3: Not a human subjects study	0	0.0
R4: Not a US Study	1	0.5
R5: Age of population studied is over 17 years	4	2.0
R6: Study not focused on youth as perpetrators	17	8.5
R7: A duplicate citation	12	6.0
R8: Data not abstractable [c]	83	41.3
R9: Does not addresses our key question(s)	54	26.9
Total	201	100.0

[a] The first reason of rejection between the two reviewers is reflected.

[b] Not a study included: case report, editorial, letter, clinical practice, overview, guidelines, consensus statements, methodology, opinion, commentary, description of a program, and review.

[c] Either the outcome of interest (i.e. violence) or the age group of interest is embedded in the findings and cannot be pulled out. The only exception is when the outcome of an article covers an age range larger than our scope, i.e. 12-17, but the mean age is between 12-17, it will not be rejected.

Table 7. Description of original cohort studies

Cohort ID#	Study name	Study purpose, description of cohort, year, frequency of contact
1	**Lehigh Longitudinal Study**	The Lehigh Longitudinal Study began in the 1970's as a prospective study of children and families to examine the correlates and consequences of child maltreatment. Data were collected from multiple sources at three key developmental points for children (preschool/early childhood, middle childhood/school-age, and adolescence). Study participants were sampled from child welfare abuse and protective service programs, Head Start centers, and from child care programs in Pennsylvania. The sample included 457 children. An initial assessment of children and their families was completed in 1976-77, when children were of preschool age. A second assessment of the children and their families was completed in 1980-1982 when the children were in elementary school. A third and final assessment was completed in 1990-1992 when children were adolescents or young adults. That assessment included 416 (91%) of the original 457 children.
2	**Mother- Child Pair Study**	Between 1990 and 1991, 363 mother-child pairs recruited from a mid-sized city in the Southwestern US were interviewed to assess the impact of marital violence on children's mental health and development. Participants were recruited from both battered women shelters and the community at large. Subjects included mothers who reported that they had been "abused by a partner in the past year" (n=141) and a comparison group (n=146). Children were between the ages of 6-12 at enrollment. These families were followed up during 1996-1997 and 1998-1999. While the findings are based on a convenience sample, the investigators took steps to ensure that the sample was representative of a wide range of women in the community.
3	**Seattle Social Development Project**	The Seattle Social Development Project (SSDP) began in 1981 to test strategies for reducing childhood risk factors for school failure, drug abuse, and delinquency. First graders in five Seattle schools were assigned to intervention or control classrooms. Each year through the elementary grades, parents and teachers in intervention classrooms learned how to actively engage children in learning, strengthen bonding to family and school, and encourage children's positive behaviors. In 1985, when the original first graders entered the fifth grade, the panel was expanded to 808 students from 18 Seattle elementary schools. These participants and their parents have been interviewed regularly since 1985. http://depts.washington.edu/ssdp/
4	**National Youth Survey**	The National Youth Survey began in 1976. At that time 1,725 adolescents between the ages of 11 and 17 years old as well as one of their parents were interviewed. Participants were chosen by a scientific method designed to select individuals representative of the national population. 28 years later this study is ongoing. Now called the National Youth Survey - Family Study (participants who were once 11-17 are now 39-45), this study has followed these individuals throughout time to look at their changing attitudes, beliefs and behaviors about topics such as career goals, involvement with community and family, attitudes about violence, drugs, and social values. http://www.colorado.edu/ibs/NYSFS/index.html
5	**RAND Adolescent Panel Study**	The RAND Adolescent Panel Study was a longitudinal study of middle (junior) high school students from California and Oregon conducted to evaluate a drug prevention program developed for middle school children. Participants were initially surveyed as seventh graders in 1985 and then, again, five years later. Rigorous tracking enabled the project to retain nearly 70 percent of the seventh grade sample over this five-year period. http://www.rand.org/publications/RB/RB4547/

Table 7. Description of original cohort studies (continued)

Cohort ID#	Study name	Study purpose, description of cohort, year, frequency of contact
6	**National Longitudinal Study of Adolescent Health**	The National Longitudinal Study of Adolescent Health (ADD Health) is a nationally representative study that explores the causes of health-related behaviors of adolescents in grades 7 through 12 and their outcomes in young adulthood. Add Health seeks to examine how social contexts (families, friends, peers, schools, neighborhoods, and communities) influence adolescents' health and risk behaviors. Initiated in 1994 under a grant from the National Institute of Child Health and Human Development (NICHD) with co-funding from 17 other federal agencies, Add Health is the largest, most comprehensive survey of adolescents ever undertaken. Data at the individual, family, school, and community levels were collected in two waves between 1994 and 1996. Wave I included 90,118 in-School Interviews. Wave 2 included 14,738 adolescent In-Home Interviews. In 2001 and 2002, Add Health respondents, 18 to 26 years old, were re-interviewed in a third wave to investigate the influence that adolescence has on young adulthood. Wave 3 included 15,197 young adult In-Home Interviews and biomarker collection. http://www.cpc.unc.edu/addhealth
7	**Widom National Institute of Justice Study**	This study was designed to explore the relationship between child abuse and neglect and violent criminal behavior. This study examined the official criminal histories of a large number of people whose sexual victimization during childhood had been validated. These victims of sexual abuse were compared to cases of physical abuse and neglect and to a control group of individuals who were closely matched in age, race, sex and appropriate family socioeconomic status. The subjects were 908 individuals who had been subjected as children to abuse (physical or sexual) or neglect, and whose cases were processed through the courts between 1967 and 1971. All were 11 years of age or younger at the time of the incident(s). The research method used a "matched cohorts" design. Both groups were followed into adolescence and young adulthood to determine if they had engaged in delinquent behavior or had committed crimes as adults. At the time they were chosen for the study, none of them had as yet engaged in delinquent or criminal behavior. The major aim of this study was to determine whether sexual abuse during childhood puts victims at greater risk for criminal behavior later in life than do other types of maltreatment. http://www.ncjrs.org/pdffiles/abuse.pdf
8	**Safe Date Program**	This prospective cohort study was designed to examine predictors of adolescent dating violence from several domains guided by an ecological perspective. 8th and 9th grade students from 14 public schools in Johnston County North Carolina were stratified by grade and matched on school size. One member of each matched school pair was randomly assigned to treatment or control condition. At baseline, 1965 enrolled. Follow up data were collected one month after the program activities and one year after program activities. An additional 5 waves of data collection were gathered later. The study began in 1994.
9	**New York Dating Violence Prevention Program**	The prospective comparative cohort study was part of an intervention study in Suffolk County, NY examining dating aggression and whether or not psychological victimization at baseline predicted physical aggression (at baseline and follow-up). The sample included ethnically and racially diverse sample of male and female high school students enrolled in a mandatory health education class. The sample size was 206 (selected from sample of 2,320 students). Youth were recruited in the spring of 1995 and the study ended in the Fall of 1996.
10	Offspring of subjects from the Houston Independent School District Study	This prospective cohort study (on the offspring of a cohort of 7th graders from Houston Independent School Districts) was used to examine the relationship between substance use, weapon carrying, and violence. A total of 5887 youth ranging from age 12 – 20 were enrolled and followed for 3 years. At the 3-year follow up, 2,222 youth and young adults were interviewed.

Table 7. Description of original cohort studies (continued)

Cohort ID#	Study name	Study purpose, description of cohort, year, frequency of contact
11	**National Education Longitudinal Survey**	The National Longitudinal Education Survey of 1988 (NELS:88) is a large-scale longitudinal study of high school students conducted by the National Center for Education Statistics (NCES). Begun in 1988, it provides trend data about critical transitions experienced by 8th grade students as they progressed through high school, secondary school, and/or the work force. Data on student, parent, and teacher attitudes and behaviors, student academic performance, family, school and community background were collected. There were five rounds of data collection. Base Year (BY): 1988; 1st follow-up (FU1): 1990; 2nd follow-up (FU2): 1992; 3rd follow-up (FU3): 1994; 4th follow-up (FU4): 2000. In the base year, 26,432 students were selected for the study, and 24,599 participated. In the first follow-up, 19,363 were subsampled due to budgetary constraints. http://www.wws.princeton.edu/~kling/surveys/NELS88.htm
12	**Project Northland**	Project Northland is a community- wide alcohol use prevention research trial, sponsored by the National Institute on Alcohol Abuse and Alcoholism of the National Institutes of Health. Project Northland is the largest randomized community trial that has ever been conducted for the prevention of adolescent alcohol use, involving 24 school districts and 28 adjoining communities in northeastern Minnesota and the first prevention trial to systematically link and study behavioral curricula in schools, parental involvement programs, extracurricular peer leadership, and community-wide efforts for young adolescents in grades 6-8. Project Northland addresses both individual behavioral change and environmental change. Project Northland also strives to change how parents communicate with their children, how peers influence each other, and how communities respond to young adolescent alcohol use. Components include parent involvement and education programs, behavioral curricula, peer participation, and community activities. Students in the Class of 1998 from the 24 school districts were the focus of the evaluation of Project Northland. School districts and communities were randomized to intervention or reference condition in 1991. The first phase of Project Northland took place in the intervention schools and communities from 1991 to 1994. Reference schools and communities used their own programs before receiving the Project Northland programs in 1994. Project Northland involved about 2400 students in the Class of 1998 from 24 school districts in northeastern Minnesota during their 6th, 7th, and 8th grade years (1991-1994). The school districts were randomly assigned as intervention or control districts in 1991 before any surveys or programs had begun. Students and parents of the Class of 1998 were surveyed annually. Project Northland's intervention involved three years of behavioral curricula in the classrooms, parental involvement programs, extracurricular peer leadership, and community-wide task force activities. Participation in the Project Northland programs was very high in all districts and communities over the three years of the study. http://www.epi.umn.edu/projectnorthland/

Table 7. Description of original cohort studies (continued)

Cohort ID#	Study name	Study purpose, description of cohort, year, frequency of contact
13	**Collaborative Perinatal Project**	The National Collaborative Perinatal Project (NCPP), 1959-1974, was conducted by NIH's National Institute of Neurological Diseases and Stroke. NCPP data constitute an important resource for biomedical and behavioral research in many areas of obstetrics, perinatology, pediatrics, and developmental psychology. The data also provide a prospective base for examining neurological and neurosensory defects and the relationship of pregnancy and perinatal factors on the health of individual children. The major categories of data collected include obstetrical, pediatric, pathological, serological, socioeconomic and family, genetic history, psychological, speech, language, and hearing. The mother was examined during pregnancy, labor, and delivery. The children were given neonatal examinations and follow-up examinations at four, eight, and twelve months, and three, four, seven, and eight years. Supplemental information was gathered throughout the study, including family linkages between related women participating in the NCPP. There are 6,700 data items on the approximately 58,000 study pregnancies. Among the studies conducted on subsamples of this cohort, one evaluated the impact of pre/perinatal disturbances and disadvantaged familial environment in predicting criminal violent offending. This study used an original cohort of: 2,958 and a final study cohort of 987. http://www.archives.gov/research_room/center_for_electronic_records/national_institutes_of_health.html
14	**Durham Longitudinal Study**	This prospective, longitudinal study examined peer rejection and aggression in childhood as predictors of the severity and type of delinquency during adolescence. Three cohorts of predominantly low socioeconomic status, urban 3rd grade African American boys and girls were recruited in 1984, 1985 and 1986 for a total sample of 1,749 third graders. Youth reports of delinquency was gathered at grades 6, 8, and 10 and the most recent follow up was conducted at age 22.
15	**Pittsburgh Youth Study**	The Pittsburgh Youth Study began with a random sample of boys in the first, fourth, and seventh grades of the Pittsburgh, PA, public school system. Information from the initial screening was used to select the top 30 percent of boys with the most disruptive behavior. This group of boys, together with a random sample of the remaining 70 percent who showed less disruptive behavior, became the sample for the study. The sample contains approximately 500 boys at each grade level, for a total of 1,517 boys. Each student and a primary caregiver were interviewed at 6-month intervals for the first 5 years of the study; teacher ratings of the student were also obtained. The middle sample (fourth grade) was discontinued after seven assessments. The youngest sample (first grade) and oldest sample (seventh grade) are currently being interviewed at annual intervals, with totals of 16 and 14 assessments, respectively. The study has been highly successful in retaining participants, with a retention rate of at least 85 percent for each assessment. http://ojjdp.ncjrs.org/ccd/pittsburgh.html
16	**South Florida Longitudinal Study**	This prospective cohort study was an investigation of factors associated with health status in the Miami area in 1990. This substudy was designed to compare race/ethnic groups on levels of violence and associated risk factors and to challenge the hypothesis that blacks are more violent than whites within a similar socio-cultural context in an urban area. Eligible subjects included all 6th and 7th graders from 48 middle schools in Dade County. Subjects were limited to males except in four randomly selected schools. The sample was 6,760 at baseline. Subjects were interviewed 3 times over three years from 1990 – 1993.

Table 7. Description of original cohort studies (continued)

Cohort ID#	Study name	Study purpose, description of cohort, year, frequency of contact
17	**Denver Youth Study**	The Denver Youth Survey was a longitudinal study of urban youth projects supported by theOffice of Juvenile Justice and Delinquency Prevention (OJJDP) since 1986 through its Program of Research on the Causes and Correlates of Delinquency (Causes and Correlates). The Denver study followed 1,527 boys and girls from high-risk neighborhoods in Denver who were 7, 9, 11, 13, and 15 years old in 1987. The primary goal of the study was to identify social conditions, personal characteristics, and developmental patterns linked to sustained involvement in delinquency and drug use. The Denver study explored changes in the nature of delinquency and drug use from the 1970's to the 1990's. Researchers compared equivalent measures of self-reported delinquency and drug use from matched samples of the National Youth Survey* in 1979 and the Denver Youth Survey in 1991. http://www.casanet.org/library/delinquency/youth-svy.htm
18	**Rochester Youth Development Study**	The Rochester Youth Development Study sample consists of 1,000 students (729 boys and 271 girls) who were in the seventh and eighth grades of the Rochester NY, public schools during the spring semester of the 1988 school year. Males were oversampled because they are more likely than females to engage in serious delinquency and students from high-crime areas were oversampled based on the assumption that they are at greater risk for offending. This project is a 12- wave prospective panel study in which members of the sample and one of their parents were interviewed at 6-month intervals from 1988 to 1992 and at annual intervals from 1994 to 1996. At the end of wave 12, in spring 1997, 846 of the initial 1,000 subjects were re-interviewed (a retention rate of 85 percent); the retention rate for parents was 83 percent. http://ojjdp.ncjrs.org/ccd/rochester.html
19	**Buffalo Longitudinal Study of Young Men**	The Buffalo Longitudinal Survey of Young Men (BLSYM) was a five-year panel study of substance use and delinquency among 625 adolescent males. The initial group of young men was identified by telephone using a brief questionnaire. Face-to-face interviews were conducted by trained interviewers at the Research Institute on Addictions. The first wave of the BLSYM was completed in 1993. http://www.ria.buffalo.edu/summaries/rib/rib981.html
20	**Youth in Transition**	This dataset consists of a five-wave longitudinal study which collected individual interview and group-administered questionnaire data from a nationwide sample of young men, beginning in the fall of 1966 when they entered tenth grade, and continuing for nearly four years. The 2,213 panel members at the time of the initial survey were clustered in 87 schools. The schools and boys were selected through use of multi-stage probability sampling to provide an essentially bias-free representation of tenth-grade boys in public high schools throughout the United States. Subsequent data collections were carried out with 1,886 young men in the spring of 1968, the end of the eleventh grade for most, with 1,799 young men in the spring of 1969, just before most were graduated, and with 1,620 in June and July 1970. The initial data collection included tests of ability and academic skills, measures of family background characteristics, and a large number of "criterion" dimensions: affective states, self-concepts, values and attitudes, plans and behaviors. Most of the criterion dimensions were repeated in all four data collections. The data from this study are available to researchers. http://dpls.dacc.wisc.edu/newcatalog/study.asp?tid=5454&id=419

Table 7. Description of original cohort studies (continued)

Cohort ID#	Study name	Study purpose, description of cohort, year, frequency of contact
21	**Oregon Youth Study**	The Oregon Youth Study is a longitudinal study of at risk boys, their families, and their friends that utilized a passive longitudinal cohort sequential design. The study began in 1983-84 and is still on going. The sample was drawn from public schools located in the higher juvenile crime neighborhoods of a medium-sized metropolitan region in the Pacific Northwest. This study recruited at-risk boys 4th grade boys and examined the link between parental discipline, antisocial behavior, and deviancy. A total of 206 boys were enrolled in the project and interviewed during 5 waves beginning when the boys were 9 and 10 and ending at age 17 and 18. The sample was predominately white. The parents in the sample were predominately working class, with a significant number of families receiving some form of unemployment or welfare assistance.
22	**White Male Study**	This prospective cohort study was designed to assess the effects of pubertal changes in testosterone on sexual activity during adolescence. Several measures of aggression were also included in the study and used to analyze the influence of testosterone on aggressive behavior in adolescent males. The sample was 127 white males in 7th grade were recruited from an unspecified school district in a Southeastern State. Subjects completed 5 semiannual questionnaires in their home followed by a sixth questionnaire 1 year later. Blood and saliva samples were also collected semiannually. The study lasted approximately 3 years.
23	**Iowa Family Distress and Coping Study**	The Iowa Family Stress and Coping study, was designed to assess the influence of corporal punishment and witnessing parental marital violence, and the protective effects of involved supportive parenting, on the development of delinquent or antisocial behaviors and dating violence of adolescent boys. Eligible subjects were 7th grade boys with 2-parent families from private and public schools in 8 counties in North Central Iowa. Youth were followed annually for 5 years. The last two waves of data collection included questions on dating violence. The initial wave included 205 boys. 163 boys participated in all 5 waves of data collection.

Table 8. Characteristics of prospective cohort studies for Key Questions #1 and #2

Cohort ID#	Prospective cohort study	Article (First author, year of publication)	Information obtained from article					
			Gender	Race/ Ethnicity [a]	Age at enrollment in years	Years of follow-up	Sample size	Retention rate [b]
1	Lehigh Longitudinal Study 1976	Herrenkohl, 1997	M, F	WAA/L	1.5	16	317	69%
2	Mother-Child Pair Study	Becker, 2002	M, F	W/AA/API/L/N	6-12	6	M: 141 F: 146	83%
		McCloskey, 2003	M, F	W/AA/API/L/N	6-12	9	295	82%
		Herrera, 2003	F	WAA/API/L/N	6-12	7	141	79%
3	Seattle Social Development Project	Herrenkohl, 2000	M, F	W/AA/API/O	10	6	720	89%
		Huang, 2001	M, F	W/AA/API/O	10	8	807	94%
		Herrenkohl, 2001	M, F	W/AA/API/O	10	8	808	94%
		Herrenkohl, 2003	M, F	W/AA/O	10	8	154	94%
4	National Youth Survey 1976	Roitberg, 1995	M, F	M	11-17	5	1494	87%
5	Rand Adolescent Panel Study	Saner, 1996	M, F	W/AA/API/L/O	12	6	4586	70%
		Ellickson, 2001	M, F	W/AA/API/L/O	12	5	4327	66%
		Ellickson, 2003	M, F	W/AA/API/L/O	12	5	4265	67%
6	National Longitudinal Study of Adolescent Health (ADD Health)	Dornbusch, 1999	M, F	M	12-17	1	M: 5329 F: 3904	65%
		Borowsky, 2002	M, F	M	12-17	1	M: 6800 F: 4981	71%
7	Widom National Institute of Justice Study	Rivera, 1990	M, F	W/AA	0-11 [c]	20-26	908	79%
8	Safe Date Program	Foshee, 2001	M, F	W/O	13-14	1	M: 402 F: 529	90%
9	New York Dating Violence Prevention Program	O'Leary, 2003	M, F	W/AA/API/L/O	14-17	1	M: 86 F: 120	NG
10	Offspring of subjects from the Houston Independent School District Study	Kaplan, 2001	M, F	W/AA/API/L	12	3	2138	38%
11	National Education Longitudinal Survey	McNulty, 2003	M, F	W/AA/API/L/N/O	13	4	14358	66%
12	Project Northland	Komro, 1999	M, F	W/N/O	13-14	1	937	86%
13	Collaborative Perinatal Project	Piquero, 1999	M, F	AA	0	22	867	33%
14	Durham Longitudinal Study	Miller-Johnson, 1999	M, F	AA	8	7	M: 164 F: 163	73%

Table 8. Characteristics of prospective cohort studies for Key Questions #1 and #2 (continued)

Cohort ID#	Prospective cohort study	Article (First author, year of publication)	Information obtained from article					
			Gender	Race/ Ethnicity [a]	Age at enrollment in years	Years of follow-up	Sample size	Retention rate [b]
15	Pittsburgh Youth Study	Loeber, 1993	M	W/AA	13	5	435	86%
		Zhang, 1997	M	W/AA/O	6-12	4	1517	NG
		Loeber, 1999	M	W/AA	13	5	365	72%
		Beyers, 2001	M	W/AA	13	5	420	83%
		Stouthamer-Loeber, 2001	M	W/AA	13	5	506	NG
		Stouthamer-Loeber, 2002	M	W/AA	13	5	470	100%
16	South Florida Longitudinal Study	Kingery, 1996	M	W/AA/L/M/O	11-12	2-3	3228	59%
17	Denver Youth Survey	Loeber, 1999	M	W/AA/L/O	11-15	5	373	80%
18	Rochester Youth Development Study	Loeber, 1999	M	W/AA/L	11-12	4.5	562	77%
19	Buffalo Longitudinal Study of Young Men	Welte, 1998	M	W/AA/O	16-19	1.5	568	95%
20	Youth in Transition	Felson, 1992	M	NG	15	1.5	1886	85%
		Brezina, 1999	M	NG	15	1	1519	85%
21	Oregon Youth Study	Dishion, 1997	M	W	9-10	8	195	95%
22	White Male Study	Halpern, 1993	M	W	12-13	3	64-81	79%
23	Iowa Family Distress and Coping Study	Simons, 1998	M	W	13	5	113	79.5%

[a] AA=African-American; API=Asian or Pacific Islander; L=Latino; M=Multiple; N=Native American; O=Other; W=Caucasian.
[b] NG=Information not given.

Table 9. Cohort studies and articles by study population

Population type	Gender	Race/Ethnicity	Population group#	Cohort ID#	Articles ID#	Total sample size
General Population	Male & Female	Multiple	A-1	4, 5, 10, 11, 12	395, 1573, 6638, 7662, 9629, 10619, 11065	23,597
	Male	Multiple	A-2	5, 6, 8, 9, 20	37, 395, 634, 1573, 5303, 5704, 5894, 11087	11,284
		African-American	A-3	14	7114	164
		White	A-4	22, 23	6213, 7870	191
	Female	Multiple	A-5	5, 6, 8, 9	37, 395, 634, 1573, 5704, 9629, 11087	8,106
		African-American	A-6	14	7114	163
At-Risk Population [a]	Male & Female	Multiple	B-1	1, 2, 3, 7	1029, 2658, 2660, 6306, 7020, 8540, 10990	2,345 - 2,998
		African-American	B-2	13	7453	867
	Male	Multiple	B-3	2, 6, 15, 16, 17, 18, 19	37, 1529, 4495, 4815, 5149, 6595, 6855, 8011, 9447, 9560	7,081 - 8,107
		White	B-4	21	5689	195
	Female	Multiple	B-5	2, 6	37, 5149, 10991	1,520

[a] At-risk population included maltreated children, children of abused mothers, delinquent youth, youth considered high risk for aggression or violence, youth from high risk or high crime area, youth from high or low socioeconomic neighborhood, and youth who repeated a grade,

Table 10. Study outcome descriptor for various study populations and recruitment settings

(A) General population

A-1: Male and Female, Multiple Race/Ethnicity

Study outcome descriptor	Recruitment setting	Age at enrollment	Sample size	Cohort ID#	Articles ID#
Fighting	Children of subjects in earlier study recruited from junior high schools	12	2222	10	10619
Fighting	Middle and high schools	13	14358	11	11065
Persistent hitting	Middle schools	12	4586	5	395
Relational violence	Middle schools	12	4327	5	1573, 9629
Hitting or beating up someone	Middle and high school districts	13-14	937	12	6638
Felony assault [a]	Households	11-17	1494	4	7662

A-2: Male, Multiple Race/Ethnicity

Persistent hitting	Middle schools	12	2110	5	395, 1573
Physical aggression toward parent	High schools	15	1886	20	5303
Physical violence [b]	High schools	15	1886	20	5894
Dating violence perpetration	Public schools (8th or 9th grade)	13-14	402	8	634
Physical aggression (partner focused aggression)	High schools	14-17	86	9	11087
Interpersonal violence perpetration [c]	High schools	12-17	6800	6	37, 5704

A-3: Male, African-American

Felony assault	Elementary schools	8	164	14	7114
Minor assault	Elementary schools	8	164	14	7114
Robbery	Elementary schools	8	164	14	7114

A-4: Male, White

Fighting	A County school district	12-13	78	22	6213
Dating violence	Public or private schools (7th grade)	12-15	113	23	7870

Table 10. Study outcome descriptor for various study populations and recruitment settings (continued)

(A) General population (continued)

A-5: Female, Multiple Race/Ethnicity

Study outcome descriptor	Recruitment setting	Age at enrollment	Sample size	Cohort ID#	Articles ID#
Persistent hitting	Middle schools	12	2476	5	395
Relational violence	Middle schools	12	2329	5	1573, 9629
Dating violence perpetration	Public schools (8th or 9th grade)	13-14	529	8	634
Dating aggression	High schools	14-17	120	9	11087
Violent behavior [d]	High schools	12-17	4981	6	37, 5704
Felony assault	Elementary schools	8	163	14	7114
Minor assault	Elementary schools	8	163	14	7114
Robbery	Elementary schools	8	163	14	7114

A-6: Female, African-American

Felony assault	Elementary schools	8	164	14	7114
Minor assault	Elementary schools	8	164	14	7114
Robbery	Elementary schools	8	164	14	7114

(B) At-Risk Population

B-1: Male and Female, Multiple Race/Ethnicity

Study outcome descriptor	Type of at-risk population	Recruitment setting	Age at enrollment	Sample size	Cohort ID#	Articles ID#
Aggression to same sex peers	Abused mother	Community and battered women shelters	6-12	295	2	7020
Dating aggression [e]	Abused mother	Community and battered women shelters	6-12	292	2	7020
Violence against parents	Abused mother	Community and battered women shelters	6-12	267	2	7020
Violent behavior at age 18 [f]	High crime area	Elementary schools	10	807	3	8540
Violent behavior at age 18 [g]	High crime area	Elementary schools	10	760, 154	3	2660, 10990
Violent behavior at age 18 [h]	High crime area	Elementary schools	10	760	3	6306
Assaultive behaviors [i]	Maltreated	Child welfare agencies, Head Start programs, day care programs, and private nursery schools.	1.5	317	1	2658
Juvenile violent criminal behavior	Abused children	Records of the juvenile court and the adult criminal court	0-11	1575	7	1029

Table 10. Study outcome descriptor for various study populations and recruitment settings (continued)

(B) At-risk population (continued)

B-2: Male and Female, African-American

Violent offending	High risk area	Hospital	0	867	13	7453

B-3: Male, Multiple Race/Ethnicity

Study outcome descriptor	Type of at-risk population	Recruitment setting	Age at enrollment	Sample size	Cohort ID#	Articles ID#
Fighting	At risk boys	Public schools and households	12	500	15	4495, 6855, 9560
Fighting	High risk area	Public schools and households	11-15	373	17	6855
Fighting	High crime area	Public schools and households	12-13	562	18	6855
Gang fight	Inner city	Middle schools	11-12	3955	16	6595
Used force to get things	Inner city	Middle schools	11-12	3955	16	6595
Beat up someone for no reason	Inner city	Middle schools	11-12	3955	16	6595
Violence [j]	At risk boys	Public schools	12	500	15	4495, 6855, 8011, 9560
Violence [j]	High risk area	Public schools and households	11-15	373	17	6855
Violence [j]	High crime area	Public schools and households	12-13	562	18	6855
Fighting and violence [k]	At risk boys	Public schools and households	12	365	15	6855, 9560
Fighting and violence [k]	High crime area	Public schools and households	12-13	562	18	6855
Violent delinquency [l]	Abused mother	Community and battered women shelters	6-12	141	2	5149
Interpersonal violence perpetration [m]	Repeated a grade	High schools	12-17	1891	6	37
Violent offending [n]	Delinquent boys	A city and surrounding suburbs	16-19	596	19	4815
Serious violence [o]	At risk boys	Public schools	6, 9, 12	500	15	9447
Violent delinquency [p]	High SES area	Public schools	13	159	15	1529
Violent delinquency [p]	Low SES area	Public schools	13	261	15	1529
Violent delinquency [p]	At risk boys, high and low SES area	Public schools	13	420	15	1529

B-4: Male, White

Self-reported violence [r]	High crime area	Public schools	13	195	21	5689
Arrested Violence [r]	High crime area	Public schools	13	195	21	5689

Table 10. Study outcome descriptor for various study populations and recruitment settings (continued)

(B) At-risk population (continued)

B-5: Female, Multiple Race/Ethnicity

Study outcome descriptor	Type of at-risk population	Recruitment setting	Age at enrollment	Sample size	Cohort ID#	Articles ID#
Violent delinquency [l]	Abused mother	Community and battered women shelters	6-12	146	2	5149, 10991
Violence against parents [q]	Abused mother	Community and battered women shelters	6-12	141	2	10991
Interpersonal violence perpetration [m]	Repeated a grade	High schools	12-17	1374	6	37

[a] Included aggravated assault, gang fighting, sexual assault.
[b] Based on 8 items, 4 were provided in the article: threatened or hurt someone, hit parents or teachers, engaged in gang fights, or used weapons)
[c] Got into serious fight, participation in group fight, hurt someone badly enough to require medical care, fighting resulted in personal injury, threaten with weapon, pulled a weapon on someone, use weapon in a fight, shot or stabbed someone.
[d] Included: Got into serious fight, participation in group fight, hurt someone badly enough to require medical care, fighting resulted in personal injury, threaten with weapon, pulled a weapon on someone, use weapon in a fight, shot or stabbed someone.
[e] Definition different for boys and girls; see definition table for details.
[f] The 4 items are: picking a fight with someone; hitting someone with intent to hurt; beating someone so badly that required medical attention; and threatening someone with a gun.
[g] The 6 items are: hit a teacher, picked a fight, hit someone with intent to hurt, threatened someone with a weapon, used force or threats of force to get things from others, beat someone so badly that required medical attention. Three or more acts each required before a youth was identified as having committed a violent act.
[h] 7 items: same as c with "hit a parent" added to the list.
[i] 5 of 7 items provided in the article: involved in gang fight, hitting parents or others, hitting with idea to seriously injure or kill, having sexual relations with someone against his/her will, using force or strong-arm methods to get money or things from people.
[j] Referred to the "violence" step in the overt pathway that included attacking someone, strong-arming, and forcing sex.
[k] This included the fighting step and violence step of the overt pathway. Fighting included physical fighting and gang fighting.
[l] 5 items: threatened someone with a weapon, hurt someone badly enough that required medical attention, threatened to hurt people, got in many fights, physically attacked people.
[m] The 8 items included: got into serious fight, participation in group fight, hurt someone badly to require medical care, fighting resulted in injury requiring medical care, use or threatened use of a weapon, pulled a knife or gun on someone, use of weapon in fight, shot or stabbed someone.
[n] The 5 items included: robbery, rape, gang fights, simple and aggravated assault.
[o] The 2 categories are: severely attacking or hurting people with a weapon, strong-arming; and severely attacking or hurting people with a weapon, strong-arming, gang fighting, killing.
[p] The 5 items are: attacked another with a weapon or with intent to seriously hurt or kill; used a weapon, force, or strong-arm method to get something from someone; physically hurt or threatened to hurt someone to get them to have sex; had sex with someone against their will; and Used force or strong-arm methods to get something from another student.
[q] Included: thrown something in anger; hit or pushed parent; physically threatened parent.
[r] This article distinguished self-reported and arrested violence. Adolescent violence referred to self-reported violence in adolescence; Violent offense referred to police contacts for violent offense including arrest assault, menacing, robbery, rape.

Table 11. Summary of findings for total and six large population groups

The first number in parenthesis for each cell is the number of cohorts reported a statistically significant association (p<0.05) in the article.
The second number in parenthesis is the number of cohorts that reported no statistically significant association (p≥0.05) in the article.

Risk or protective factors	All study populations combined [a]	Study population groups with at least 2 cohort studies and adequate sample size (n=1100 for general and n=500 for at-risk populations)					
		General population			At-risk population		
		Male and Female	Male	Female	Male and Female	Male	Female
	23 cohorts 35 articles	5 cohorts 7 articles	5 cohorts 8 articles	4 cohorts 7 articles	4 cohorts 7 articles	7 cohorts 10 articles	2 cohorts 3 articles
Individual Factors - Biological, Physical and Cognitive							
Age	(2) (7) [b, c]	(0) (1)	(1) (1)	(1) (1)	(1) (2) [c]	(1) (1)	(0) (1)
Male gender	(8) (2)	(3) (1)			(4) (1)		
White	(2) (2)	(1) (1)	(1) (0)			(0) (1)	
African American	(5) (3)	(0) (1)	(1) (0)	(1) (0)	(1) (0)	(3) (2)	
Latino	(4) (3)	(0) (1)	(1) (0)	(0) (1)	(1) (0)	(3) (1)	
Asian Pacific Islander	(0) (2)	(0) (1)	(0) (1)	(0) (1)			
American Indian	(1) (0)	(1) (0)					
Cuban	(0) (1)					(0) (1)	
Haitian	(0) (1)					(0) (1)	
Carribean	(0) (1)					(0) (1)	
Nicaraguan	(1) (0)					(1) (0)	
Other ethnicity	(0) (2)	(0) (1)				(0) (1)	
Ethnicity, unspecified	(1) (1)		(1) (0)	(1) (0)		(0) (1)	
Small physical size	(0) (1)		(0) (1)				
Testosterone levels	(0) (1) [b]						
Pubertal development	(0) (1) [b]						
Visual-motor intelligence	(0) (1)					(0) (1)	
Verbal intelligence	(0) (1)					(0) (1)	
Problem communicating with others	(0) (1)		(0) (1)	(0) (1)			
Skills for interactions	(1) (0)				(1) (0)		
Pre/perinatal disturbance	(0) (1) [b]						

Table 11. Summary of findings for total and six population groups (continued)

Risk or Protective Factors	All study populations combined [a]	Study population groups with at least 2 cohort studies and adequate sample size (n=1100 for general and n=500 for at-risk populations)					
		General population			At-risk population		
		Male and Female	Male	Female	Male and Female	Male	Female
	23 cohorts 35 articles	5 cohorts 7 articles	5 cohorts 8 articles	4 cohorts 7 articles	4 cohorts 7 articles	7 cohorts 10 articles	2 cohorts 3 articles
Individual Factors -Emotional, Psychological and Attitudinal							
Depression	(2) (2)		(1) (1)	(0) (1)	(1) (1)		
Impulsive-attention deficit or hyperactivity	(1) (2) [c]				(1) (0)	(0) (2) [c]	(0) (1)
Anxiety (worrying about things)	(0) (1)		(0) (1)				
Tension (nervousness)	(1) (0)		(1) (0)				
Suicidal attempts	(1) (1)			(0) (1)		(0) (1)	(1) (0)
Mental health treatment	(1) (0)					(1) (0)	(1) (0)
Anger	(2) (1)		(2) (0)	(0) (1)			
Empathy	(1) (1)				(1) (1)		
Jealous and controlling aggression	(1) (0)		(1) (0)	(1) (0)			
Self-esteem	(0) (1)		(0) (1)	(0) (1)		(1) (0)	(1) (0)
Emotional well-being	(1) (0)					(1) (0)	(1) (0)
Positive attitude toward problem behavior	(1) (1)					(1) (1)	
Lack of guilt	(1) (1) [c]					(1) (1) [c]	
Perceived norms	(1) (1)		(1) (0)	(0) (1)			
Belief wrong to violate law	(0) (1)	(0) (1)					
Perceived risk of untimely death	(1) (1)					(1) (0)	(0) (1)
Somatic symptoms	(2) (1)		(1) (0)			(0) (1)	(1) (0)
Individual Factors - Behavioral							
Risk-taking behavior	(1) (0)				(1) (0)		
Antisocial behavior	(2) (2) [b]				(1) (1)		
Conduct disorder	(0) (1)					(0) (1)	(0) (1)
Disruptive behavior (composite of ADD, ODD, CD) [d]	(1) (0)				(1) (0)		
Runaway	(1) (0)						(1) (0)
Prosocial beliefs	(0) (1)				(0) (1)		

Table 11. Summary of findings for total and six population groups (continued)

Risk or Protective Factors	All study populations combined [a]	Study population groups with at least 2 cohort studies and adequate sample size (n=1100 for general and n=500 for at-risk populations)					
		General population			At-risk population		
		Male and Female	Male	Female	Male and Female	Male	Female
	23 cohorts 35 articles	5 cohorts 7 articles	5 cohorts 8 articles	4 cohorts 7 articles	4 cohorts 7 articles	7 cohorts 10 articles	2 cohorts 3 articles
Alcohol use	(3) (1)	(2) (1)	(1) (0)	(1) (0)		(1) (0)	(1) (0)
Alcohol/drug use	(3) (1)	(2) (0)	(0) (1)	(0) (1)		(1) (0)	
Cigarette use/smoking	(2) (1)	(1) (0)	(2) (0)	(1) (1)			
Had sexual intercourse	(1) (1)					(1) (1)	
General health	(1) (0)					(1) (0)	(1) (0)
Verbal aggression	(1) (0)		(1) (0)	(1) (0)			
Physical aggression	(2) (1) [b]		(1) (1)	(0) (1)		(1) (0)	
Aggression [e]	(1) (0)					(1) (0)	
Illicit drug use	(2) (3)	(1) (2)	(1) (1)	(0) (2)		(1) (0)	(0) (1)
Selling drugs	(2) (0)	(1) (0)	(1) (0)	(1) (0)	(1) (0)		
Weapon carrying	(3) (2) [c]	(1) (0)	(0) (1)	(0) (1)		(1) (1) [c]	(1) (0)
Non-violent delinquency	(2) (0)	(1) (0)	(2) (0)	(2) (0)			
Non-violent felony offense	(1) (0)	(1) (0)	(1) (0)	(1) (0)			
Violent and non-violent delinquency	(1) (0)		(1) (0)				
Fighting	(2) (1)	(1) (0)	(0) (1)	(0) (1)		(1) (0)	
Serious injury/harm to others	(1) (0)					(1) (0)	
Violent behavior	(2) (1)	(1) (0)	(1) (0)	(1) (0)		(1) (1)	(1) (0)
Violence at age 10	(1) (0)				(1) (0)		
Violence at age 13	(1) (0)				(1) (0)		
Individual Factors - Other involvements							
Religiosity [f]	(2) (1)	(0) (1)	(0) (1)	(1) (0)	(1) (0)		
Same sex attraction	(1) (1)					(1) (0)	(0) (1)
Accept prescribed social norms	(1) (1)		(1) (0)	(0) (1)			
Perceived negative sanctions	(0) (1)		(0) (1)	(0) (1)			
Gender stereotyping	(0) (1)		(0) (1)	(0) (1)			

Table 11. Summary of findings for total and six population groups (continued)

Risk or Protective Factors	All study populations combined [a]	Study population groups with at least 2 cohort studies and adequate sample size (n=1100 for general and n=500 for at-risk populations)					
		General population			At-risk population		
		Male and Female	Male	Female	Male and Female	Male	Female
	23 cohorts 35 articles	5 cohorts 7 articles	5 cohorts 8 articles	4 cohorts 7 articles	4 cohorts 7 articles	7 cohorts 10 articles	2 cohorts 3 articles
Pro-antisocial involvement	(1) (0)				(1) (0)		
Belief in moral order	(1) (0)				(1) (0)		
Individual Factors - Life Experiences							
Victim of abuse	(0) (1)				(0) (1)		
Occupational strain	(1) (2)	(1) (1)	(1) (0)	(0) (1)			
Victim of violence	(1) (0)					(1) (0)	(1) (0)
Death of parent(s)	(0) (1)	(0) (1)	(0) (1)	(0) (1)			
Perceived difficulty of college education	(0) (1)	(0) (1)					
Individual Factors - School Related							
School drop-out	(0) (1)	(0) (1)	(0) (1)	(0) (1)			
Truancy	(1) (0)					(1) (0)	(1) (0)
Poor academic performance	(3) (2) [c]	(1) (0)	(0) (1)	(1) (0)	(1) (0) [c]	(1) (1)	(1) (0)
Repeating a grade	(1) (0)		(1) (0)	(1) (0)			
Low school commitment	(1) (2) [c]	(0) (1)			(1) (0)	(0) (1) [c]	
School transitions	(1) (0)				(1) (0)		
Involvement in prosocial activity	(1) (1)				(1) (1)		
Bonding to school	(1) (0)				(1) (0)		
School functioning factor, unspecified	(1) (0)					(1) (0)	(1) (0)
Feel safe at school	(1) (1)					(0) (1)	(1) (0)
Home/Family Factors - Environment and Characteristics							
Large family size	(0) (1)	(0) (1)					
Low socioeconomic status or low family income	(0) (7) [c]	(0) (2)	(0) (2)	(0) (1)	(0) (3) [c]	(0) (1)	(0) (1)
Access to weapons	(1) (1) [b]				(1) (0)		
High mobility	(1) (1)	(0) (1)	(0) (1)	(0) (1)	(1) (0)		
Non-Intact family structure	(2) (1) [c]	(0) (1) [c]	(1) (2)	(2) (1)			

Table 11. Summary of findings for total and six population groups (continued)

Risk or Protective Factors	All study populations combined [a]	Study population groups with at least 2 cohort studies and adequate sample size (n=1100 for general and n=500 for at-risk populations)					
		General population			At-risk population		
		Male and Female	Male	Female	Male and Female	Male	Female
	23 cohorts 35 articles	5 cohorts 7 articles	5 cohorts 8 articles	4 cohorts 7 articles	4 cohorts 7 articles	7 cohorts 10 articles	2 cohorts 3 articles
Recent separation/divorce	(0) (1)	(0) (1)	(0) (1)	(0) (1)			
Remarriage	(0) (1)	(0) (1)	(0) (1)	(0) (1)			
Single parent	(0) (1)					(0) (1)	
Female head	(1) (1)		(1) (0)	(0) (1)			
Parent(s) age	(1) (0)		(1) (0)				
Unstable financial base	(1) (2)	(1) (1)	(0) (1)	(1) (0)			
Low parental education	(1) (3)	(1) (1)	(1) (2)	(0) (3)			
Social capital parent(s)	(1) (0)	(1) (0)					
Family criminal behavior	(1) (0)				(1) (0)		
Pro-violence attitude	(2) (2) [c]	(0) (1)	(1) (0)		(1) (1) [c]		
Suicidal behavior of family member	(1) (1)					(1) (0)	(0) (1)
Parent(s) drug use	(1) (1)	(1) (0)	(0) (1)	(1) (0)			
Parental violence	(1) (2)				(1) (2)	(0) (1)	(0) (1)
Sibling delinquency	(1) (0)				(1) (0)		
Poor family management	(1) (0)				(1) (0)		
Physical hitting between parents	(0) (1)		(0) (1)	(0) (1)			
Family conflict	(1) (0)				(1) (0)		
Family cohesion	(0) (1)				(0) (1)		
Family connectedness	(1) (2)	(0) (1)			(0) (1)	(1) (0)	(1) (0)
Home/Family Factors - Parent-Child Relationship							
Physical abuse	(3) (2) [b, c]		(1) (1)	(0) (1)		(0) (1)	(2) (1) [c]
Sexual abuse	(1) (2) [b, c]				(0) (1) [c]		(1) (1) [c]
Parental supervision or monitoring	(1) (2) [c]					(1) (1) [c]	(0) (1)
Rejection by parent	(1) (0)	(1) (0)	(1) (0)	(1) (0)			
Poor communication patterns	(2) (1)	(1) (0)				(1) (1)	

Table 11. Summary of findings for total and six population groups (continued)

Risk or Protective Factors	All study populations combined [a]	Study population groups with at least 2 cohort studies and adequate sample size (n=1100 for general and n=500 for at-risk populations)					
		General population			At-risk population		
		Male and Female	Male	Female	Male and Female	Male	Female
	23 cohorts 35 articles	5 cohorts 7 articles	5 cohorts 8 articles	4 cohorts 7 articles	4 cohorts 7 articles	7 cohorts 10 articles	2 cohorts 3 articles
Discipline not persistent	(0) (1)					(0) (1)	
Parental discipline in childhood	(0) (1) [b, c]						
Child lack involvement	(0) (1) [c]					(0) (1) [c]	
Positive interaction	(0) (1) [c]				(0) (1) [c]		
Negative interaction	(1) (0)				(1) (0)		
Parental attachment	(2) (0)		(1) (0)		(1) (0)		
Corporal punishment	(1) (0) [b]						
Prosocial activities	(1) (0) [c]				(1) (0) [c]		
Reward for prosocial involvement	(1) (0)				(1) (0)		
Parental school expectation	(1) (1)					(1) (0)	(0) (1)
Maltreatment composite index [g]	(1) (0)				(1) (0)		
Peers							
Deviant peers	(2) (1) [b]				(1) (1)		
Associate with gangs	(1) (0)				(1) (0)		
Delinquent or violent peers	(3) (2) [c]	(1) (0)	(1) (0)	(0) (1)	(1) (0)	(0) (1) [c]	
Little sense of peer connectedness	(0) (1)	(0) (1)	(0) (1)	(0) (1)			
Rejected by peer status group	(1) (2) [b]	(0) (1)					
Peer victimization	(1) (1)		(0) (1)	(1) (0)			
Peer(s) drug use	(1) (1)	(0) (1)	(0) (1)	(1) (0)			
Nonconventional peers	(0) (1)					(0) (1)	
Aggressive friends	(1) (0)		(1) (0)	(1) (0)			
Bad friends	(0) (1) [c]					(0) (1) [c]	
Suicidal behavior of friends	(1) (0)					(1) (0)	(1) (0)
School Factors							
Low test scores	(0) (1)				(0) (1)		

Table 11. Summary of findings for total and six population groups (continued)

Risk or Protective Factors	All study populations combined [a]	Study population groups with at least 2 cohort studies and adequate sample size (n=1100 for general and n=500 for at-risk populations)					
		General population			At-risk population		
		Male and Female	Male	Female	Male and Female	Male	Female
	23 cohorts 35 articles	5 cohorts 7 articles	5 cohorts 8 articles	4 cohorts 7 articles	4 cohorts 7 articles	7 cohorts 10 articles	2 cohorts 3 articles
Lack parental involvement	(0) (1)	(0) (1)					
Approve negative behaviors	(0) (1)	(0) (1)					
Community Factors							
Perceived caring by adults	(1) (1)					(1) (0)	(0) (1)
Feel safe in neighborhood	(1) (0)					(1) (0)	(1) (0)
Social deprivation	(0) (1)				(0) (1)		
Economic deprivation	(1) (0)				(1) (0)		
Community disorganization	(1) (0)				(1) (0)		
Low neighborhood attachment	(1) (1)				(1) (1)		
Urban residence	(0) (2)	(0) (2)					
Easy access to alcohol and drugs	(0) (1) [c]				(0) (1) [c]		
Owner occupied housing units	(0) (1)	(0) (1)					
High crime rate	(1) (0)					(1) (0)	
Law enforcement against crime	(0) (1)				(0) (1)		
Population between 15-24 years	(0) (1)	(0) (1)					
Multiple Factors							
More than 5 risk factors	(1) (0)				(1) (0)		
4-5 risk factors	(1) (0)				(1) (0)		
2-3 risk factors	(1) (0)				(1) (0)		
0-1 risk factors	(0) (1)				(0) (1)		
Familial environment + pre/perinatal disturbance	(1) (0) [b]						
Multiple factors in low SES neighborhood [h]	(1) (0)					(1) (0)	
High SES neighborhood+physical aggression	(1) (0)					(1) (0)	
Low SES neighborhood+one other risk factor [i]	(0) (1)					(0) (1)	
High SES neighborhood+one other risk factor [j]	(0) (1)					(0) (1)	

Table 11. Summary of findings for total and six population groups (continued)

Risk or Protective Factors	All study populations combined [a]	Study population groups with at least 2 cohort studies and adequate sample size (n=1100 for general and n=500 for at-risk populations)					
		General population			At-risk population		
		Male and Female	Male	Female	Male and Female	Male	Female
	23 cohorts 35 articles	5 cohorts 7 articles	5 cohorts 8 articles	4 cohorts 7 articles	4 cohorts 7 articles	7 cohorts 10 articles	2 cohorts 3 articles
3 protective factors vs less	(1) (0)					(1) (0)	(1) (0)
Poly drug use vs single drug use	(1) (0)		(1) (0)	(1) (0)			
Repeat physical aggression vs experimenter	(2) (0)					(2) (0)	

[a] The total number of cohorts or articles may not equal to the sum of cohorts or articles of the study populations because of the following rules used. We counted the same findings from different articles from the same cohort only once. However, findings for different outcomes were not considered the same. We counted the same findings from different types of analysis within an article once. When the result of a finding was reported both in a bivariate analysis and a multivariate analysis in which the effects of other covariates were adjusted, the result of the finding from the multivariate analysis was used.

[b] Some or all of the findings were based on single cohort study on study populations not included in this table.

[c] Some or all of the findings were analyzed by both the bivariate and multivariate analysis. The adjusted finding(s) from multivariate analysis is(are) reported here.

[d] ADD=attention deficit/hyperactivity disorder; ODD=oppositional defiant disorder; CD=conduct disorder.

[e] Included "annoying others" and "bullying".

[f] Included "religious service attendance" and "low religiosity".

[g] The maltreatment composite index was based on the Maltreatment Classification System consisted of, measured on a 5-point scale, the following: physical abuse, sexual abuse, failure to provide, lack of supervision, emotional maltreatment, moral-legal maltreatment, educational maltreatment and incorrigibility.

[h] Low SES neighborhood + lack of guilt +had sex + carried hidden weapon + poor communication.

[i] Low SES neighborhood + one or combination of the following: age, impulsive-hyperactive, low school motivation, pro problem behavior, not involved, poor supervision, peer delinquency, bad friends.

[j] High SES neighborhood + one or combination of the following: impulsive-hyperactive, pro problem behavior, lack of guilt, had sex, peer delinquency.

Table 12. Composite Findings for All study populations [a]
23 Cohort Studies, 35 Articles
Only factors with 2 or more cohorts are included
The first number in parenthesis for each cell is the number of cohorts reported a statistically significant association ($p<0.05$) in the article.
The second number in parenthesis is the number of cohorts that reported no statistically significant association ($p\geq0.05$) in the article.

Domain	Factors consistently reported as being associated with violence [b]	Factors consistently reported as being not associated with violence [b]	Mixed findings
Individual	(8) (2) Male gender (3) (1) Antisocial behavior (3) (1) Alcohol use (3) (1) Alcohol/drug use (2) (0) Selling drugs (2) (0) Non-violent delinquency (2) (0) Repeated physical aggression	(2) (7) Age (0) (2) Asian Pacific Islander (0) (2) Other ethnicity	(2) (2) White (5) (3) African-American (4) (3) Latino (1) (1) Ethnicity unspecified (2) (2) Depression (1) (2) Impulsive-attention deficit or hyperactivity (1) (1) Suicidal attempts (2) (1) Anger (1) (1) Empathy (1) (1) Positive attitude toward problem behavior (1) (1) Lack of guilt (1) (1) Perceived norms (1) (1) Perceived risk of untimely death (2) (1) Somatic symptoms (2) (1) Cigarette use/smoking (1) (1) Had sexual intercourse (2) (1) Physical aggression (2) (3) Illicit drug use (3) (2) Weapon carrying (2) (1) Fighting (2) (1) Violent behavior (2) (1) Religiosity (1) (1) Same sex attraction (1) (1) Accept prescribed social norms (1) (2) Occupational strain (3) (2) Poor academic performance (1) (2) Low school commitment (1) (1) Feel safe at school

Table 12. Composite findings for all study populations [a] (continued)

Domain	Factors consistently reported as being associated with violence [a]	Factors consistently reported as being not associated with violence [a]	Mixed Findings
Home/Family	(2) (0) Parental attachment	(0) (7) Low socioeconomic status or low family income (1) (3) Low parental education (1) (3) Parental violence	(1) (1) Access to weapons (1) (1) High mobility (2) (1) Non-intact family structure (1) (1) Female head (1) (2) Unstable financial base (2) (2) Pro-violence attitude (1) (1) Suicidal behavior of family member (1) (1) Parent(s) drug use (1) (2) Family connectedness (3) (2) Physical abuse (1) (2) Sexual abuse (1) (2) Parental supervision or monitoring (2) (1) Poor communication patterns (1) (1) Parental school expectation
Peer			(2) (1) Deviant peers (3) (2) Delinquent or violent peers (1) (2) Rejected by peer status group (1) (1) Peer victimization (1) (1) Peer(s) drug use
Community		(0) (2) Urban residence	(1) (1) Perceived caring by adults (1) (1) Low neighborhood attachment

[a] The findings in this table are presented without regard to the type of violent outcome, without regard to the age at enrollment in the cohort, without regard to the type of at-risk population, and without regard to the type of analysis. Thus, additional research is needed to assess whether these associations vary by these factors.
[b] Consistency here is defined as at least 75% of the cohort studies reporting a statistically significant association.

Table 13. Findings for general population

Only factors with 2 or more cohorts are included

The first number in parenthesis for each cell is the number of cohorts reported a statistically significant association ($p<0.05$) in the article.
The second number in parenthesis is the number of cohorts that reported no statistically significant association ($p\geq0.05$) in the article.

Study population	Domain	Factors consistently reported as being associated with violence [a]	Factors consistently reported as being not associated with violence [a]	Mixed findings
General Population Male and Female (5 cohort studies; 7 articles)	Individual	(3) (1) Male gender (2) (0) Alcohol/drug use		(1) (1) White (2) (1) Alcohol use (1) (2) Illicit drug use (1) (1) Occupational strain
	Home/Family		(0) (2) Low socioeconomic status or low family income	(1) (1) Unstable financial base (1) (1) Low parental education
	Community		(0) (2) Urban residence	
General Population Male (5 cohort studies; 8 articles)	Individual	(2) (0) Anger (2) (0) Cigarette use/smoking (2) (0) Non-violent delinquency		(1) (1) Age (1) (1) Depression (1) (1) Physical aggression (1) (1) Illicit drug use
	Home/Family		(0) (2) Low socioeconomic status or low family income	(1) (2) Non-intact family structure (1) (2) Low parental education (1) (1) Physical abuse
General Population Female (4 cohort studies; 7 articles)	Individual	(2) (0) Non-violent delinquency	(0) (2) Illicit drug use	(1) (1) Age (1) (1) Cigarette use/smoking
	Home/Family		(0) (3) Low parental education	(2) (1) Non-intact family structure

[a] Consistency here is defined as at least 75% of the cohort studies reporting a statistically significant association.

Table 14. Findings for the at-risk population

Only factors with 2 or more cohorts are included

The first number in parenthesis for each cell is the number of cohorts reported a statistically significant association ($p<0.05$) in the article.

The second number in parenthesis is the number of cohorts that reported no statistically significant association ($p\geq0.05$) in the article.

At-Risk population	Domain	Factors consistently reported as being associated with violence [a]	Factors consistently reported as being not associated with violence [b]	Mixed findings
At-Risk Population Male and Female (4 cohort studies; 7 articles)	Individual	(4) (1) Male gender		(1) (2) Age (1) (1) Depression (1) (1) Empathy (2) (2) Antisocial behavior (1) (1) Involvement in prosocial activity
	Home/Family		(0) (3) Low socioeconomic status or low family income	(1) (1) Pro-violence attitude (2) (1) Parental violence
	Peer			(1) (1) Deviant peers
	Community			(1) (1) Low neighborhood attachment
At-Risk Population Male (7 cohort studies; 10 articles)	Individual	(3) (1) Latino (2) (0) Repeated physical aggression	(0) (2) Impulsive-attention deficit/hyperactivity	(2) (1) Age (3) (2) African-American (1) (1) Positive attitude toward problem behavior (1) (1) Lack of guilt (1) (1) Had sexual intercourse (1) (1) Weapon carrying (1) (1) Violent behavior (1) (1) Poor academic performance
	Home/Family			(1) (1) Parental supervision or monitoring (1) (1) Poor communication patterns
At-Risk Population Female (2 cohort studies; 3 articles)	Home/Family			(2) (1) Physical abuse (1) (1) Sexual abuse

[a] Consistency here is defined as at least 75% of the cohort studies reporting a statistically significant association.

[b] Firm conclusions cannot be drawn for factors consistently reported as being not associated with violence because of low statistical power and inconsistency in the definition of risk factors.

Table 15. Quality of the prospective cohort studies for Key Questions #1 and #2

Cohort ID#	Prospective cohort name	Initial cohort size	Study quality criteria			Supplemental information			
			Retention rate >=80%?	Validated instrument?	Appropriate control of confounding factors? [a]	% (#) participated	% (#) retained	% (#) analyzed	% of initial cohort analyzed
1	Lehigh Longitudinal Study	457	No	Yes	Yes (M)	100% (457) [b]	51-69% (235-317)	100% [c] (235-317)	51-69%
2	Mother-Child Pair Study	363	Yes	Yes	Yes (P)	100% (363) [b]	82% (299)	96% (287)	79%
		363	Yes	Yes	Yes (M)	100% (363) [b]	82% (296)	90-100% (267-295)	74-81%
		179	No	Yes	Yes (M)	100% (179) [b]	79% (141)	100% (141) [c]	79%
3	Seattle Social Development Project	1053	Yes	Yes	Yes (M)	77% (808)	89% (720)	100% (720) [c]	68%
		1053	Yes	Yes [f]	Yes (P)	77% (808)	94% (757)	107% (807) [d]	77%
		1053	Yes	Yes [f]	Yes (M)	77% (808)	94% (757)	107% (808) [d]	77%
		200 [e]	Yes	Yes [f]	Yes (M)	77% (154)	94% (144) [e]	107% (154) [d]	77%
4	National Youth Survey	2363 [e]	Yes	Yes	Yes (M)	73% (1725)	87% (1494)	100% (1494) [c]	63%
5	Rand Adolescent Panel Study	6527 [f]	No	Yes	Yes (M)	100% (6527) [b]	70% (4586)	100% (4586) [d]	70%
		6527	No	Yes [f]	Yes (M)	100% (6527) [b]	66% (4327)	100% (4327) [d]	66%
		6527	No	Yes [f]	Yes (M)	97% (6338)	67% (4265)	100% (4265) [d]	65%
6	National Longitudinal Study of Adolescent Health (ADD Health)	27012 [f]	No	Yes [f]	Yes (M)	77% (20745) [f]	65% (13568)	68% (9293)	34%
		27012 [e]	No	Yes	Yes (M)	77% (20745)	71% (14738)	80% (11781) [d]	44%
7	Widom National Institute of Justice Study	1152 [g]	No	Yes	Yes (M)	100% (1152)	79% (908)	100% (908) [c]	79%
8	Safe Date Program	1390 [e]	Yes	Yes	Yes (M)	81% (1126) [e]	90% (1013)	92% (931)	67%
9	New York Dating Violence Prevention Program	206 [h]	Yes	Yes	Yes (M)	100% (206) [h]	100% (206) [h]	100% (206) [h]	NG [h]
10	Offspring of subjects from the Houston Independent School District Study	6359	No	Unsure	Yes (M)	93% (5887)	38% (2222)	96% (2138) [d]	34%
11	National Education Longitudinal Survey	25000 [e]	No	Unsure	Yes (M)	100% (25000) [b]	66% (16489)	87% (14358)	57%
12	Project Northland	1266	Yes	Unsure	Yes (M)	100% (1266) [b]	86%(1088)	86% (937)	74%
13	Collaborative Perinatal Project	2958	No	Unsure	Yes (M)	100% (2958)	33% (987)	88% (867)	29%
14	Durham Longitudinal Study	622 [i]	No	Yes	Yes (M)	100% (622) [b]	73% (454)	72% (327)	53%

Table 15. Quality of the prospective cohort studies for Key Questions #1 and #2 (continued)

Cohort ID#	Prospective cohort name	Initial cohort size	Study quality criteria			Supplemental information			
			Retention rate >=80%?	Validated instrument?	Appropriate control of confounding factors? [a]	% (#) participated	% (#) retained	% (#) analyzed	% of initial cohort analyzed
15	Pittsburgh Youth Study [g]	597 [f]	Yes	Yes [f]	Yes (P)	85% (506)	86% (435)	100% (435) [c]	73%
		1517 [h]	Yes	Yes	Yes (P)	100% (1517) [h]	100% (1517) [h]	100% (1517) [h]	NG [h]
		597 [e]	No	Yes	Yes (P)	85% (506)	72% (365)	100% (365) [c]	61%
		603 [e]	Yes	Yes	Yes (M)	84% (506)	83% (420)	100% (420) [c]	70%
		603 [e]	Yes	Yes [f]	Yes (P)	84% (506) [f]	100% (506) [h]	100% (506) [h]	NG [h]
		588 [e]	Yes	Yes [f]	No	86% (506)	100% (506)	93% (470)	80%
16	South Florida Longitudinal Study	9763	No	Yes	No [k]	69% (6760)	59% (3955)	82% (3228)	33%
17	Denver Youth Survey [j]	1527	Yes	Yes	Yes (P)	30% (464)	80% (373)	100% (373) [c]	24%
18	Rochester Youth Development Study [j]	729 [b]	No	Yes	Yes (P)	100% (729) [b]	77% (562)	100% (562) [c]	77%
19	Buffalo Longitudinal Study of Young Men	933 [e]	Yes	Yes	Yes (M)	67% (625)	95% (596)	95% (568)	61%
20	Youth in Transition	2213 [f]	Yes	Unsure	Yes (M)	100% (2213) [b]	85% (1886)	100% (1886) [c]	85%
		2213	Yes	Unsure	Yes (P)	100% (2213) [b]	85% (1886)	81% (1519)	69%
21	Oregon Youth Study	277	Yes	Yes	Yes (M)	74% (206)	95% (195)	100% (195) [c]	70%
22	White Male Study	254 [e]	No	Yes	No	50% (127)	79% (100)	64-81% (64-81)	25-32%
23	Iowa Family Distress and Coping Study	263 [e]	No	Yes	Yes (P)	78% (205)	79.5% (163)	69% (113)	43%

[a] M=Multivariate analysis or modeling; P=Path analysis or structural equation modeling.
[b] Initial cohort size or participation rate not given. Thus initial cohort size was assumed to be the same as the number of participants.
[c] Sample size in analysis assumed the same as sample size retained.
[d] Missing data estimation techniques or sample weights were used to minimize attrition bias.
[e] Estimated from information given in article.
[f] Information obtained from another article that published finding from the same cohort study.
[g] Information obtained from an additional reference (Widom, 1989) provided by one of the TEG members.
[h] This article did not provide number or percent for participation, retention, or analysis.
[i] Stratified random sample from 1749 students.
[j] The numbers provided here were based primarily on article (Loeber, Wei, 1999) where all three cohort studies were described. Only the number of subjects at the beginning of the studies and the number of participants with complete data were provided. The numbers used in the analysis in the Tables did not match the numbers of subjects with complete data.
[k] The findings used in this assessment had not been adjusted although multivariate techniques have been used to study other outcomes.

Table 16. Assessment of the strength of evidence for Key Questions #1 and #2
(A) Factors consistently reported as being associated with violence

Study Population		Factor Domain	Factors consistently reported as being associated with violence [a]	All studies	Only studies with adequate sample size	Only studies with good study quality
Type	Gender			23 cohort studies, 35 articles [b]	13 cohort studies, 20 articles [b]	9 cohort studies, 16 articles [b]
All	Both	Individual	+ + + Male gender	(8) (2)	(5) (0)	(3) (1)
			o + o African-American	(5) (3)	(3) (1)	(2) (2)
			+ o o Antisocial behavior	(3) (1)	(1) (1)	(2) (2)
			+ o o Alcohol use	(3) (1)	(2) (1)	(0) (0)
			+ + o Alcohol/drug use	(3) (1)	(2) (0)	(1) (1)
			+ + o Selling drugs	(2) (0)	(2) (0)	(1) (0)
			o + o Weapon carrying	(3) (2)	(2) (0)	(1) (2)
			o + o Violent behavior	(2) (1)	(2) (0)	(1) (1)
			+ o o Non-violent delinquency	(2) (0)	(1) (0)	(1) (0)
			o + o Poor academic performance	(3) (2)	(3) (1)	(1) (1)
			+ o o Repeated physical aggression	(2) (0)	(1) (0)	(1) (0)
		Home/Family	+ + o Parental attachment	(2) (0)	(2) (0)	(1) (0)
		Peer	o + o Delinquent or violent peers	(3) (2)	(2) (0)	(3) (2)
General population	Both	Individual	+ + o Male gender	(3) (1)	(2) (0)	(1) (0)
			+ o + Alcohol/drug use	(2) (0)	(1) (0)	(0) (0)
	Male	Individual	+ o o Anger	(2) (0)	(1) (0)	(1) (0)
			+ + o Cigarette use/smoking	(2) (0)	(2) (0)	(0) (0)
			+ o o Non-violent delinquency	(2) (0)	(1) (0)	(0) (0)
	Female	Individual	+ o o Non-violent delinquency	2) (0)	(1) (0)	(0) (0)
At-risk population	Both	Individual	+ + o Male gender	(4) (1)	(2) (0)	(2) (1)
	Male	Individual	o + o African-American	(3) (2)	(2) (0)	(2) (2)
			+ + o Latino	(3) (1)	(3) (0)	(1) (2)
			+ + o Repeated physical aggression	(2) (0)	(2) (0)	(1) (0)
	Female	Individual	+ o o Non-violent delinquency	(2) (0)	(1) (0)	(0) (0)

[a] '+' denotes consistent association; 'o' denotes no consistent association; a string of '+' and 'o' denotes findings reported in the three groups of studies, the first being all studies, the second being only studies with adequate sample size; and the third being only studies with good study quality.
[b] The first number in parenthesis is the number of cohorts that reported a statistically significant association ($p<0.05$) in the article. The second number in parenthesis is the number of cohorts that reported no statistically significant association ($p\geq0.05$) in the article.

Table 16. Assessment of the strength of evidence for Key Questions #1 and #2 (continued)
(B) Factors consistently reported as being NOT associated with violence

Study population		Factor Domain	Factors consistently reported as being NOT associated with violence [a] 23 cohort studies, 35 articles [b]	All studies	Only studies with adequate sample size	Only studies with good study quality
Type	Gender			13 cohort studies, 20 articles [b]	9 cohort studies, 16 articles [b]	Only studies with good study quality [b]
All	Both	Individual	+ + o Age	(2) (7)	(1) (3)	(2) (4)
			+ o o Asian Pacific Islander	(0) (2)	(2) (2)	(0) (0)
			+ + o Other ethnicity	(0) (2)	(0) (2)	(0) (1)
		Home/Family	+ + + Low socioeconomic status	(0) (7)	(0) (4)	(0) (3)
			+ o o Low parental education	(1) (3)	(1) (2)	(0) (1)
			+ o o Parental violence	(1) (3)	(0) (1)	(1) (2)
			o o + Family connectedness	(1) (2)	(0) (2)	(0) (1)
		Community	+ + o Urban residence	(0) (2)	(0) (2)	(0) (1)
General population	Both	Home/Family	+ + o Low socioeconomic status	(0) (2)	(0) (2)	(0) (1)
		Community	+ + o Urban residence	(0) (2)	(0) (2)	(0) (1)
	Male	Home/Family	+ + o Low socioeconomic status	(0) (2)	(0) (2)	(0) (0)
			o + o Low parental education	(1) (2)	(0) (2)	(0) (1)
	Female	Individual	+ + o Illicit drug use	(0) (2)	(0) (2)	(0) (0)
		Home/Family	+ + o Low parental education	(0) (3)	(0) (2)	(0) (1)
At-risk population	Both	Home/Family	+ o o Low socioeconomic status	(0) (3)	(0) (0)	(0) (0)
	Male	Individual	+ o + Impulsive-attention deficit	(0) (2)	(0) (0)	(0) (2)

[a] '+' denotes consistent association; 'o' denotes no consistent association; a string of '+' and 'o' denotes findings reported in the three groups of studies, the first being all studies considered, the second being only studies with adequate sample size considered; and the third being only studies with good study quality.
[b] The first number in parenthesis is the number of cohorts reported a statistically significant association ($p<0.05$) in the article. The second number in parenthesis is the number of cohorts that reported no statistically significant association ($p\geq0.05$) in the article.

Table 17. Intervention articles by type and study design

Intervention level [a]	Study design	Number of article [b]	Number of intervention
Primary	Total	16	15
(Interventions that are universal, intended to prevent the onset of violence and related risk factors)	Randomized controlled trial	6	5
	Non-randomized controlled trial	5	5
	Prospective comparative cohort	0	0
	Cross-sectional comparative cohort	2	2
	Single cohort pre and post design	1	1
	Incomplete randomized controlled trial	1	1
	Partially randomized with cross-over design	1	1
Secondary	Total	11	10
(Interventions that are implemented on a selected scale for children/youth at enhanced risk for youth violence, prevent onset and reduce the risk of violence)	Randomized controlled trial	7	6
	Non-randomized controlled trial	2	2
	Prospective comparative cohort	0	0
	Cross-sectional comparative cohort	0	0
	Single cohort pre and post trial	1	1
	Non-randomized pre and post trial	1	1
Tertiary	Total	7	7
(Interventions that are targeted to youth who have already demonstrated violent or seriously delinquent behavior)	Randomized controlled trial	2	2
	Non-randomized controlled trial	2	2
	Prospective comparative cohort	0	0
	Cross-sectional comparative cohort	0	0
	Single cohort pre and post design	1	1
	Retrospective single group time series	1	1
	Pre and post trial with comparison group	1	1
Total		34	32

[a] Source: Definitions from the Surgeon General's Report on Youth Violence.
[b] Two articles involved both primary and secondary interventions. Thus the total number of articles is 34.

Table 18. Intervention studies categorized by level and study design

Level	Study type	Unit of randomization	Intervention	Article ID#
Primary	Randomized controlled trial (RCT)	School	Safe Dates Program	2260, 2261
		School	Drug Abuse Resistance Education (DARE and DARE PLUS)	9
		School	Student for Peace (Multi-component violence-prevention program)	739
		Team of students	Students Management Anger and Resolution Together (SMART Talk)	5246
		Homeroom	Responding in Peaceful and Positive Ways - 7th grade (RIPP-7)	5871
	Non-randomized controlled trial (NRCT)		Improving Social Awareness-Social Problem Solving Project (ISA-SPS)	5796
			Teacher training, parent education, and social competence training	117
			Chicago Child-Parent Center (CPC) Program	3965
			Peaceful Conflict and Violence Prevention Curriculum (13 modules)	1579
			Reach for Health Community Youth Service program	3680
	Cross-sectional study		Georgia's legislative waiver in deterring juvenile crime	7615
			School-based metal detector program	4048
	Single cohort pre and post design		Violence prevention program and conflict resolution curriculum	393
	Incomplete randomized controlled trial		All Stars character education and problem behavior prevention program	2588
	Partially randomized with cross-over		A traditional martial arts training program (Koga Ha Kosho Shorei Ryu Kempo)	4962
Secondary	Randomized controlled trial (RCT)	School	Safe Dates Program	2260, 2261
		School	Project Towards No Drug Abuse (TND)	4315
		Family	Moving to Opportunity (MTO) demonstration project	10598
		Youth bureau	Early community-based intervention for prevention of substance abuse and delinquent behavior	6221
		Subject	Triple modality social learning program	5995
		Subject	Childhaven's therapeutic child-care program (formerly Seattle Day Nursery)	7158
	Non-randomized controlled trial		Positive Adolescents Choices Training (PACT)	2563
			5 weeks treatment of SSRI (selective serotonin reuptake inhibitors)	1308
	Single cohort pre and post design		Conflict resolution model of family-systems intervention for individual parent-child dyads	5758
	Non-randomized pre-and post- trial		Alternative to Suspension for Violent Behavior (ASVB)	5301
Tertiary	Randomized controlled trial (RCT)	Subject	Turning Point: Rethinking Violence (TPRV)	40
		Subject	Multi-systemic therapy (MST)	2644
	Non-randomized controlled trial		Project Back-on-Track (an after school diversion program)	692
			A multimodal treatment approach with two orientations	10786
	Single cohort pre and post design		Outpatient Behavioral Management of Aggressiveness in Adolescents	7973
	Pre and post trial with comparison group		Multi-systemic Therapy (MST) vs. Individual therapy	1729
	Retrospective single group time series		Stout Cottage Serious Sex Offenders Program (SSOP)	6187

Table 19. Program characteristics and findings for primary interventions evaluated with randomized controlled trials

(A) Primary intervention reporting effectiveness, randomized controlled trial

Program name and setting	Study population	Description of program	Findings
RIPP- 7th grade (RIPP-7) (#5871) • School setting	7th graders M 47% F 53% AA 97% O 3%	• 12 weekly session skills building program, • focused on conflict resolution, • implemented by trained preventionists, • use of experiential activities.	Violent behavior per 100 students at post-test and 1-year follow-up, Adjusted rate: Treated (n=239) / Control (n=237); Rate ratio control/treated; p • Post-test: 2.9 / 3.7 / 1.3 (0.4, 4.0) / ns • **1-year: 11.2 / 23.1 / 2.1 (1.1, 3.7) / <0.05**

(B) Primary intervention not reporting effectiveness, randomized controlled trial

Program name and setting	Study population	Description of program	Findings
Safe Dates Program (#2260 & #2261) • School setting • community setting	8th and 9th graders reported not a victim or perpetrator of dating violence M 49% F 51% W 77% AA 19% O 4%	This program consists of school and community activities. Key components: • 10 45- minute sessions conducted by teachers focused on changing norms associated with partner violence, decreasing gender stereotyping, and improving conflict management skills, • a theater production performed by peers, • a poster contest for dating violence prevention • 20 workshops for community service providers. Control group had the theater and community activities.	Mean score, treated (n=7 schools) vs control (n=7 schools) • Sexual violence perpetration at 1 month: 0.01 vs 0.04 , p=ns • Violence in current relationship at 1 month: 0.01 vs 0.03, p=ns Mean score, treated (n=7 schools) vs control (n=7 schools) • Sexual violence perpetration at 1 year: 0.05 vs 0.07 , p=ns • Violence in current relationship at 1 year: 0.05 vs 0.08, p=ns (No measures of variation reported)
DARE (#0009) • School setting	7th and 8th graders M 52% F 48% W 67% AA 8% API 13% L 4% O 9%	DARE • 10 week skill-building curriculum taught by police officers DARE PLUS • 10 week skill-building curriculum taught by police officers • 4-week peer- led parent involvement program • Youth- led extracurricular activities • Neighborhood action teams to address neighborhood and school-wide issues.	Growth rate±SE of self-reported violent behavior derive from 18-month follow-up. Male, treated (DARE: n=1269; DARE plus: n=1381) vs control (n=1093): • DARE: vs control: 0.57±0.09 vs 0.54±0.09 , p=0.41 • DARE plus vs control: 0.35±0.08 vs 0.54±0.09, p=0.06 Female, treated (DARE: n=1249; DARE plus: n=1254) vs control (n=1015): • DARE vs control: 0.26±0.07 vs 0.30±0.07, p=0.34 • DARE plus vs control: 0.23±0.07 vs 0.30±0.07, p=0.24

Table 19. Program characteristics and findings for primary interventions evaluated with randomized controlled trials (continued)

(B) Primary intervention not reporting effectiveness, randomized controlled trial (continued)

Program name and setting	Study population	Description of program	Findings
SMART Talk (#5246) • School setting	6th - 8th graders M 46% F 54% W 84% AA 9% O 7%	• computer based multimedia program used independently by students during a single semester • three major components include anger management, perspective talking, and dispute resolution. • Free access to program during semester	Mean±SD aggressive score over past 30 days measured on 4 aggressive behaviors at 4 months after implementation of intervention. Male, treated (n=145) vs control (n=90): 16.1±6.2 vs 16.9±6.2, p=ns Female, treated (n=176) vs control (n=105): 14.0±5.2 vs 13.9±5.6, p=ns
Student for Peace (#0739) • School setting • Home setting	6th graders followed through 7th and 8th grades M 50% F 50% W 8% AA 17% API 4% L 68% O 3%	• Formation of a School Health Promotion Council • Training of peer mediators and peer helpers • Training of teachers in conflict resolution, • A 3-semester violence-prevention curriculum • Monthly newsletters for parents.	Adjusted difference between treated (n=929) and control (n=1161) at 1-year follow-up and between treated (n=788) and control (n=975) at 2-year follow-up on frequency (sample sizes not broken down by gender): Male, 1-year follow-up, difference (95% CI): • Fighting: -1.2 (-8.5, 6.2) ns • Fighting with injuries: -2.7 (-7.0, 1.5) ns • Threaten to hurt: -8.8 (-18.9, 1.3) ns Male, 2-year follow-up, difference (95% CI): • Fighting: -6.3 (-14.1, 1.6) ns • Fighting with injuries: -6.7 (-11.3, 2.1) ns • Threaten to hurt: -0.3 (-10.9, 10.4) ns Female, 1-year follow-up, difference (95% CI): • Fighting: -2.1 (-8.5, 4.6) ns • Fighting with injuries: 0.9 (-3.6, 5.3) ns • Threaten to hurt: 1.9 (-5.5, 9.3) ns Female, 2-year follow-up, difference (95% CI): • Fighting: 0.1 (-6.9, 7.1) ns • Fighting with injuries: -0.7 (-5.3, 3.9) ns • Threaten to hurt: -0.6 (-7.2, 8.3) ns

Notes: AA African American, API Asian Pacific Islander, CI Confidence Interval, DARE Drug Abuse Resistance Education, F female, L Latino/Latina, M Male, O Other, RIPP Responding in Peaceful and Positive Ways, SMART Students Management Anger and Resolution Together, W White

Table 20. Program characteristics and findings for primary interventions evaluated with other study designs

(A) Primary intervention reporting effectiveness, other study design

Program name and setting	Study design	Study population	Description of program	Findings
Seattle Social Development Project Intervention (#0117) • School setting	Non-randomized controlled trial	Full: 1 - 6 grades Late: 5 - 6 grades M 51% F 49% W 45% O 55%	• 5 day teacher training on proactive classroom management, interactive teaching, and cooperative learning • 4 hours of student training (grade 6) to recognize and resist social influences to engage in problem behaviors • voluntary parent training classes in child behavior management skills	Reduction in lifetime violent behavior 6 year after intervention at age 18 years. *Early (n=149) vs Control (n=206):* *Difference (95% CI):* **-11.4 (-21.3 to -0.4), p=0.04** *Late (n=243) vs Control (n=206):* *Difference (95% CI):* -3.3 (-12.0 to 6.3), p=0.54
Chicago Child-Parent Center Program (CPC) (#3965) Settings: • Preschools • Kindergarten • 1st, 2nd, 3rd graders • Neighborhood centers	Non-randomized controlled trial	Preschool and kindergarten inner city children Gender: not specified AA 93% L 7%	Multi-component on education and family support. • structured learning activities • multifaceted parent program • outreach activities • ongoing staff development • health and nutrition services • comprehensive school-age service • year round • full day or part day	Adjusted mean arrests for violent offenses between ages 10 and 18 years (adjusted for gender, race, risk index, early/late program, and site) • **Preschool children**, treated (n=837) vs control (n=444) *Mean arrest:* **0.22 vs 0.35, p=0.02** • School-age children, treated (n=729) vs control (n=552) *Mean arrest:* 0.28 vs 0.25, p=0.64 (No measures of variation reported)
Reach for Health Community Youth Service (CYS) Program (#3680) Setting: • School • Community site	Non-randomized controlled trial	7th and 8th graders in inner cities M 46% F 54% AA 80% L 15% O 5%	Curriculum Only: 35-session curriculum over 6 months focused on drug and alcohol use, violence and sex delivered by trained teachers, including 10-session focusing on violence prevention. Curriculum + CYS: Curriculum described above plus CYS program where students spend approx 3 hours a week at a community site.	Regression coefficient (SD) for violent behavior in past three months measured at 6-month follow-up (gender, race, grade, and social desirability are covariates.) *Both 7th and 8th graders (n=914)*: Curriculum + CYS: -0.037 (0.028), p=ns Curriculum Only: -0.016 (0.068), p=ns *7th graders (n=469)*: Curriculum + CYS: 0.102 (0.079), p=ns Curriculum Only: 0.010 (0.083), p=ns *8th graders (445)*: **Curriculum + CYS: -0.206 (0.096), p<0.05** Curriculum Only: -0.036 (0.113), p=ns

Table 20. Program characteristics and findings for primary interventions evaluated with other study designs (continued)

(A) Primary intervention reporting effectiveness, Other study design (continued)

Program name and setting	Study design	Study population	Description of program	Findings
Violence Prevention Curriculum for Adolescents and Conflict Resolution Curriculum for Youth Providers (#0393) • School setting	Single group pre and post design	6th-8th graders M 48% F 52% W 10% AA 89% O 1%	Two curricula 1) violence prevention curriculum: • 10 50-minute sessions in a classroom • focused on violence and violence prevention. 2) conflict resolution curriculum: • 10 50-minute sessions in a classroom • focused on conflict resolution.	Frequency of fighting, and frequency of injury in previous 30 days measured at 1 week pre and 1 week post intervention *Mean±SD for Violence Prevention (n=146), after vs before* **Violence scale: 0.39**±1.28 **vs 0.82**±1.79 **p=.004** **Frequency of fighting: 0.51**±1.26 **vs 1.37**±1.75 **p=.001** Fighting resulted in injury: 0.20±0.78 vs 0.15±0.48 p=.105 *Mean*±SD *for Conflict Resolution (n=63), after vs before* **Violence scale: 0.51**±1.38 **vs 0.73**±1.65 **p=.004** **Frequency of fighting: 1.03**±1.51 **vs 1.74**±1.99 **p=.001** Fighting resulted in injury: 0.28±0.63 vs 0.59±1.08 p=.105

(B) Primary intervention not reporting effectiveness, other study design

Improving Social Awareness-Social Problem Solving Project (ISA-SPS) (#5796) • School setting	Non-randomized controlled trial	4th and 5th graders Gender and race/ethnicity not specified	• social decision-making, problem-solving and social awareness skills program • 2 year program with 3 phases: readiness, instructional and application	Mean score measured 6 years after intervention at 9th-11th grades (n=unknown) *Male, mean score treated vs control:* • striking/threatening students .69 vs .59 • attack with intent to injure .37 vs .46 • striking/attacking parents .15 vs .23 *Female, mean score treated vs control:* • striking/threatening students .77 vs .76 • attack with intent to injure .68 vs .79 • striking/attacking parents .04 vs .05 (No measures of variation reported)
			Notes: 1) Although the experimental group was divided into high fidelity and low fidelity. No differences between them were found. Thus we report here the findings of the combined experimental group. 2) No sample sizes and no standard errors were provided. Significance of differences could not be determined. 3) For males, the discriminant analysis findings could not be used because it included both violent and non-violent outcomes. 4) For females, the discriminant function that significantly differentiated the experimental and control students did not include any of the three violent outcomes indicating their insignificant contributions.	

Table 20. Program characteristics and findings for primary interventions evaluated with other study designs (continued)

(B) Primary intervention not reporting effectiveness, other study design (continued)

Program name and setting	Study design	Study population	Description of program	Findings
Peaceful Conflict and Violence Prevention Curriculum (#1579) • School setting - health education classes	Non-randomized controlled trial	Middle school students living in or around public housing M 49% F 51% AA 89% O 11%	• Skill-building curriculum based on Social Cognitive Theory • 13-week session, one hour per week	Use of violence in previous 30 days, assessed on a 5-item scale ranged from 0 to 20, at 2-week pre and 2-week post intervention. *Mean±SD violence score, treated (n=233) vs control (n=330)* • Pre-test 1.4±2.9 vs 1.1±2.0, p=0.31 • 2-week post-test 1.12.2± vs 1.2±2.4, p=0.63 *Mean±SD score for fighting requiring medical attention, treated n=233 vs control n=330):* • Pre-test 0.28±0.81 vs 0.14±0.50, p=0.01 • 2-week post-test 0.17±0.57 vs 0.17±0.56, p=0.97
School-based hand-held metal detector program (#4048) • School setting	Cross-sectional study	9th - 12th graders Gender and Ethnicity not specified	• school-based metal detector program • one school year • weekly visit by a team of security officers • students scanned at random	Percent (95% CI) students involved in a physical fight at least once during school-year after intervention *Treated (n=243) vs control (n=1156):* Anywhere 26.2 (14.4, 38.0) vs 24.4 (21.5, 27.3) p=ns To/From school 9.4 (6.4, 12.3) vs 9.1 (5.6, 12.6) p=ns Inside school 7.5 (0.4, 14.5) vs 7.8 (4.9, 10.7) p=ns
Juvenile Justice Reform Act 1994 of Georgia - legislative waiver in deterring juvenile crime (#7615) • State of Georgia	Cross-sectional study at 2 time points, one before and one after	Adolescent population in the State of Georgia No breakdown by age, gender or race	Study the effects of new law on serious juvenile crime. Georgia's Juvenile Justice Reform Act mandated that adolescents 13-17 arrested for murder, voluntary manslaughter, rape, aggravated sexual battery, aggravated child molestation; aggravated sodomy, or firearm robbery, be tried as adult.	Mean arrest rate for aggravated assault, robbery, sex offense, rape, murder (unit not provided) *Mean arrest rate, after vs before(n not given)* Aggravated assault 1726 vs 1833, p=ns Armed robbery 857 vs 749, p=ns Sex offense 426 vs 394, p=ns Rape 118 vs 121, p=ns Murder 83 vs 82, p=ns Total 3211 vs 3179, p=ns (No measures of variation reported)

Table 20. Program characteristics and findings for primary interventions evaluated with other study designs (continued)

(B) Primary intervention not reporting effectiveness, other study design (continued)

Program name and setting	Study design	Study population	Description of program	Findings
All Stars Character Education and Problem Behavior Prevention Program (#2588) • School setting	Incomplete randomized controlled trial	6th or 7th graders M 45% F 55% W 69% AA 25% L 6%	Character education and problem behavior prevention program facilitated by trained adult interventionists and teachers in classrooms. • Program includes whole classroom sessions, small-group sessions outside of class, and one- on-one sessions between instructor and student. • Homework is used to increase interaction between students and parents. • Study examines difference in impact by type of instructor • 8-month duration	Mean of 10 items on violence towards other persons at post-test and at 1-year follow-up. (Treated n=629; Control n=739; not broken down by race/ethnicity) *African-American, Specialist vsTeacher vs Control* Pre-test 1.41 vs 1.35 vs 1.35, p=ns Post-test 1.38 vs 1.32 vs 1.40, p=ns 1-year follow-up 1.54 vs 1.27 vs 1.59, p=ns *Latino, Specialist vs Teacher vs Control* Pre-test 1.28 vs 1.24 vs 1.19, p=ns Post-test 1.34 vs 1.22 vs 1.18, p=ns 1-year followo-up 2.07 vs 1.22 vs 1.34, p=ns *White, Specialist vs Teacher vs Control* Pre-test 1.26 vs 1.28 vs 1.25, p=ns Post-test 1.31 vs 1.27 vs 1.27, p=ns 1-year follow-up 1.40 vs 1.42 vs 1.37, p=ns (No measures of variation reported)
A traditional martial arts training program (Koga Ha Kosho Shorei Ryu Kempo) (#4962) • School setting	Partially randomized controlled trial with cross-over	6th and 7th graders M 100% Race/Ethnicity not specified	• a traditional martial arts training program • course was taught by a martial arts master • 30 sessions • 3 times per week • 45 minutes each	9-item violence score, rated by teacher, at 4-month follow-up *Mean±SD violent score, treated (n=31) vs control (n=17):* 3.20±1.46 vs 3.34±1.05, p=ns

Table 21. Program characteristics and findings for secondary interventions evaluated by randomized controlled trials

(A) Secondary intervention reporting effectiveness, randomized controlled trial

Program name and setting	Study population	Description of program	Findings
Moving to Opportunity (MTO) demonstration - A Housing Mobility Experiment with 2 programs (#10598) • Community setting	Teens in high-poverty neighborhoods who are "at risk" for criminal involvement M 47% F 53% AA 97% O 3%	• Housing mobility experiment to study the effects of relocating families from high to low poverty neighborhoods on juvenile crime. • MTO group: experimental families with section 8 housing vouchers that can only be redeemed for housing in census tracts with 1990 poverty rates less than 10% and received housing-search assistance and life-skills counseling. • Section 8 group: families with section 8 housing vouchers which provide subsidies to lease private-market housing. • Control group: families on MTO waiting list	Incidence and prevalence of regression-adjusted violent-crime arrest rates per quarter over an average of 3.7 years post-program (assault, robbery, attempted murder) *Incidence per 100 teens* **MTO(n=148) Control(n=96) Diff (SE)** **2.5 5.7 -3.2 (1.5) p<0.01** **Section 8(n=92) Control (n=96) Diff (SE)** **1.9 4.3 -2.4 (1.2) p<0.01** *Prevalence during post-program period in %* **MTO (n=148) Control (n=96) Diff (SE)** **2.4 5.0 -2.6 (1.4) p<0.05** **Section 8 (n=92) Control (n=96) Diff (SE)** **1.9 3.9 -2.0 (1.1) p<0.05**
Early community-based intervention for the prevention of substance abuse and other delinquent behavior (#6221) • Community-based "youth bureaus" clinic	Inner-city youth at high risk of adopting a deviant lifestyle M 59% F 41% W 3% AA 97%	Early intervention and risk reduction program: • individual counseling • group mentoring (no group counseling) sessions available 4-5 days a week including structured skill building activities, educational and recreational field trips, and holiday celebrations • informal parent discussions and parent child social events • 4-5 days per week after school and weekends over about 1 year or more	6-month self-report physical violence behavior (physical assault, mugging, robbery with weapon, arson, gang fight, shooting at someone) at 1-year follow-up (Treated: n=235; Control: n=193) Poisson regression results for violent activity during the preceding 6 months at 1-year follow-up revealed **significant treatment effects at p=0.0026**. (No descriptive statistics for this indicator reported)
Childhaven's therapeutic child-care program (formerly Seattle Day Nursery) (#7158) • Child care center	Abused, neglected, and at risk infants and toddlers (ages 1 month through 5 years of age) and their parents Gender and race: not reported	Therapeutic childcare program for abused, neglected, and at risk infants and children. Parent program elements include: • voluntary parent education • counseling • support groups • linkage to professional services • average length of participation is 23 months (62% parents had major participation; 25% parents had no participation)	1. Violent crimes (assault) from juvenile court and school files during 12 years of follow-up 2. Incidence of "fighting" from school files during 12 years of follow-up *Violent crimes, treated (n=21) vs control (n=14)* % reported yes 4% vs 24%, p<0.08 **Mean violent arrests 0.04 vs 0.30, p<0.05** *Incidence of fighting, treated (n=21) vs control (n=14)* **% reported yes 12% vs 36%, p<0.05** Mean times fighting 0.2 vs 0.8, p=ns (No measures of variation reported)

Table 21. Program characteristics and findings for secondary interventions evaluated by randomized controlled trials (continued)

(B) Secondary intervention not reporting effectiveness, randomized controlled trial

Program name and setting	Study population	Description of program	Findings
Safe Dates Program (#2260, #2261) Setting • School • community	8th and 9th graders who were perpetrators of violence M 49% F 51% W 77% AA 19% O 4%	This program consists of school and community activities. Key components: • 10 45- minute sessions conducted by teachers focused on changing norms associated with partner violence, decreasing gender stereotyping, and improving conflict management skills, • a theater production performed by peers, • a poster contest for dating violence prevention, and • 20 workshops for community service providers. Control group had the theater and community activities.	*Mean score at 1 month, treated (n=7 schools) vs control (n=7 schools)* • Sexual violence perpetration: 0.07 vs 0.18 , p=ns • Violence in current relationship: 0.17 vs 0.16, p=ns *Mean score at 1 year, treated (n=7 schools) vs control (n=7 schools)* • Sexual violence perpetration: 0.15 vs 0.12 , p=ns • Violence in current relationship: 0.15 vs 0.12, p=ns (No measures of variation reported)
Project Towards No Drug Abuse (TND) (#4315) • School setting	Youth in continuation high schools M 55% F 45% W 34% AA 9% API 4% L 49% O 4%	• 9 session curriculum delivered in 3 weeks by trained health educators. • Each session lasted about 40 minutes. • Curriculum designed to provide motivation, listening skills, information about chemical dependency, coping skills, peer norms, and decision making for students in continuation schools	Perpetration of violence in past 12 months (slapped, punched, kicked, or beat up someone; threatened with a weapon; injured someone with weapon). *Percent reporting any perpetration, Treated (n=14 schools) vs control (n=7 schools)* Male 60% vs 68%, p=ns Female 56% vs 55%, p=ns *Adjusted odds ratio* for control to treatment (95% CI), adjusted for baseline violence, survey procedure, and race/ethnicity: Male 1.23 (0.79, 1.90) Female 0.90 (0.56, 1.45)

Table 21. Program characteristics and findings for secondary interventions evaluated by randomized controlled trials (continued)

(B) Secondary intervention not reporting effectiveness, randomized controlled trial (continued)

Program name and setting	Study population	Description of program	Findings
Triple-modality classroom program: (#5995) • Residential treatment facility setting	Court referred adolescent males in a residential treatment facility. M 100% W 17% AA 69% API 3% O 9%	• Botvin life skills training • Prothrow-Stith anti-violence program • Values clarification • 55 classroom sessions (average 34 attended)	Violent behavior measured at 15 months follow-up based on a formula that assigned various weights to 8 of the 20 illegal offenses in the "Legal" problem section of the Adolescent Drug Abuse Diagnosis. (Treated: n=110; Control: n=91) Multiple regression analysis (Dependent variable: degree of violent offenses; covariates: age, years of education, race, occupation of head of household growing up with biological parents, been physically abused, and problem behavior and attitude) concluded: *Triple-modality classroom program **did not show a significant advantage** for reducing the degree of illegal or violent behavior.* (No descriptive statistics reported)

Table 22. Program characteristics and findings for <u>secondary</u> interventions evaluated with <u>other study designs</u>

(A) Secondary intervention reporting effectiveness, other study design

Program name and setting	Study design	Study population	Description of program	Findings
Positive Adolescents Choices Training (PACT) (#2563) • School setting	Non-Randomized Controlled Trial	Selected high risk African American middle school students Gender not specified AA 100%	Health promotion /risk reduction program targeted specifically to African American adolescents blending cognitive methods and skill building to address interpersonal violence. • Small group training by interventionists at school sites • Students received 37-38 50-minute sessions during the school year.	Suspension attributed to violence (time period not specified). *Percent suspension attributed to violence, Intervention (n=15) vs Partially Trained (n=6) vs Control (n=13):* Before 13% vs 33% vs 23%, p=0.57 **After 0% vs 16% vs 54%, p=0.003** *Treated (n=15) vs Control (n=13):* Before 13% vs 23%, p=0.64 **After 0% vs 54%, p=0.001**

(B) Secondary intervention not reporting effectiveness, other study design

Program name and setting	Study design	Study population	Description of program	Findings
Selective serotonin reuptake inhibitors (SSRIs) treatment ((#1308) Setting • Psychiatric hospital	Non-Randomized Controlled Trial	Psychiatrically hospitalized adolescents (not selected for aggressiveness Treated group: M 58% F 42% Ethnicity not given	To determine if a class of drugs, selective serotonin reuptake inhibitors (SSRIs), reduces aggressive behavior in adolescents • Experimental group: patients with a minimum trial of 5 weeks with SSRIs initiated and completed during hospitalization • Control group: patients hospitalized for at least 4 weeks and did not receive an SSRI trial during hospitalization. •Starting dose: 15±5mg • dose raised 5mg every 4 days up to 25±10mg.	Mean±SD number of physical aggression episodes toward other people per week based on a modified Overt Aggression Scale *Mean*±SD*/week, On SSRI vs Off SSRI vs Control* Disruptive 0.49±0.38 vs 0.32±0.45 vs 0.64±0.71, p=ns (n=8 vs n=7 vs n=19) Affective 0.18±0.39 vs 0.23±0.43 vs 0.19±0.41, p=ns (n=9 vs n=5 vs n=15) Psychotic 2.21±2.54 vs 3.08±0.00 vs 1.49±2.33, p=ns (n=2 vs n=1, vs n=5) Mean±SD number of aggressive events between the first and last 2 weeks of the 5-week trial *Mean*±SD *per week (n=13),* On vs Off SSRIs: All subjects 0.69±1.09 vs 0.50±0.88, p=ns

Table 22. Program characteristics and findings for secondary interventions evaluated with other designs (continued)

(B)Secondary intervention not reporting effectiveness, other study design (continued)

Program name and setting	Study design	Study population	Description of program	Findings
Conflict resolution model of family-systems intervention for individual parent-child (#5758) Setting: • Community agency	Single group pre and post design	Junior high students with behavioral problems from recently dissolved families referred by teachers for special education M 87% F 13% W 53% AA 20% L 27%	Conflict resolution model of family systems intervention with parent (or guardian)/ child dyads. Services provided by agency counselor. • Dyads met weekly for 90 minutes with a counselor • Dyads continued to meet for an average of 3 months	Frequency of physical aggression acts (measured by subscale of the Conflict Tactics scale) at 6-month follow-up (n=15). *Mean*±SD *at 6-month follow-up, after vs before* 1.33±0.90 vs 1.73±0.88, p=ns
Alternative to Suspension for Violent Behavior (ASVB) (#5301) Setting: • Community agency	Non-Randomized Controlled study with pre and post intervention comparison	High school students who have been suspended for physical violence and their families M 82% F 18% W 74% AA 10% API 2% L 12% O 2%	• teaching social problem-solving and thinking skills • family intervention • anger management • 4 90-minute sessions	Rate of resuspension for fighting physical violence per year (measured by Physical Violence Index) *Percent re-suspended for fighting physical violence, treated (n=42) vs control (n=123):* 7% vs 11%, p=ns

Table 23. Program characteristics and findings for tertiary interventions evaluated with randomized controlled trials

(A) Tertiary intervention reporting effectiveness, randomized controlled trial

Program name and setting	Study population	Description of program	Findings
Turning Point: Rethinking Violence (TPRV) (#0040) Setting: • Health care center	First time male violent crime offender, ages 13-18 years, and their parents M 100% W 34% AA 63% O 3%	A collaborative program designed to expose, educate, and remediate first time violent offenders and their parents regarding the consequences of violence. The 4 key components are: • trauma experience where participants visit a trauma center, a hospital morgue, and an autopsy room. • victim impact panel to expose participants to the aftermath of violence on the family and friends of the victim • 6 weeks group therapy focusing on conflict resolution and anger management • referrals for follow up mental health and health care services • Total face to face contact is approximately 14 hours	Conviction for violent offense within one year after first violent conviction and completion of court sanctions *Violence conviction rate per year, treated (n=38) vs control (n=38):* **0.05 vs 0.33, p<0.05** **(No measures of variation reported)**
Multi-systemic therapy (MST) (#2644) • Community setting (home, school, neighborhood)	Juvenile offenders meeting DSM III R criteria for substance abuse or dependence and their families M 76% F 24% W 40% AA 60%	Multi-systemic Therapy focuses on individual, family, peer, school, and social network issues that contribute to identified problems. Treatment was characterized by: • low case loads per clinician allowing for intensive services to each family (average of 46 hours of service and 130 days of treatment) • delivery of services in community settings (home, school, neighborhood) • time- limited treatment (4-6 months) • 24/ 7 availability of therapists • provision of comprehensive services	4-year aggressive crimes score (major assaults, minor assaults, and strong-armed robbery) (covariates: age and marijuana use at baseline) *4-year conviction rate*±SD*, treated(n=43) vs control(n=37):* **0.61**±0.90 **vs 1.36**±2.21**,** **unadjusted p<0.05** **adjusted p<0.05**

Table 24. Program characteristics and findings for tertiary interventions evaluated with other study designs

(A) Tertiary intervention reporting effectiveness, other study design

Program name and setting	Study Design	Study Population	Description of Program	Findings
Multi-modal treatment approach that utilized behavioral, cognitive-behavioral, and psychological skills training methods (#10786) Setting: • Treatment facility	Non-Randomized Controlled Trial Comparison of 2 programs	Incarcerated male juvenile offenders M 100% AA 34% L 21% W 42% O 3%	A comparison of two programs. Group A was an earlier program and Group B was a later program that had been improved over time. Group A characteristics: • on a behavioral point level system: • allowed staff to use their discretion for assigning consequences for minor rule violations. • individual counseling done by master's level clinicians • group counseling assigned to those who seemed most motivated for treatment and did not pose serious behavioral problems. • participation mandatory but residents often gained release from school for medical or behavioral reasons. Group B characteristics: • treatment has been changed: • behavioral contracts • a gradual reintegration over a period of days or weeks into all aspects of the program • individual and group counseling continued to be offered by Master's level clinicians with assistance by direct care staff.	1-year mean of violent incidents (assaults) *Mean per year, Group B (n=36) vs Group A (n=41)* **Violent incidents 1.5 vs 7.1, p<0.05** **Assault on residents 0.0 vs 1.8, p<0.05** **Assault on staff 0.0 vs 1.8, p<0.05** **Restraint for violence 0.5 vs 3.8, p<0.05** **Isolation for violence 0.8 vs 72.1, p<0.05** **(No measures of variation reported)**

Table 24. Program characteristics and findings for tertiary interventions evaluated with other study designs (continued)

(A) Tertiary intervention reporting effectiveness, other study design (continued)

Program name and setting	Study Design	Study Population	Description of Program	Findings
Outpatient Behavioral Management of Aggressiveness in Adolescents - 3 programs combined (#7973) Setting: • Home • Psych health clinic	Single group time series	Adolescents with oppositional-defiant disorder and aggressive behaviors M 81% F 19% Race/ethnicity not given	Cognitive/behavioral services provided by a private psychologist included: • parent training in the Real Economy System for Teens (REST) program • parent implementation of the REST program in the home • weekly individual cognitive therapy with the adolescent • weekly brief consultation and coaching with parents • implementation of response cost program by parents to provide consequences for aggressive behavior • REST and response cost programs continue after aggression stops and therapy is discontinued	Actual violent contact with either hands or feet or using or throwing an object at parents, siblings, or any other person in home or other settings. Each subject studied for 1 year. Total study period was 5 years. *Mean rate of aggressive acts for 20 weeks program duration (n=16)*: Week Mean rate Week Mean rate 1* 4 11** 5 2* 3 12** 3 3* 2 13*** 2 4* 4 14*** 2 5** 3 15*** 3 6** 4 16*** 1 7** 3 17*** 1 8** 3 18*** 0 9** 4 19*** 0 10** 3 20*** 0 * Baseline period; ** Cognitive + REST period; ***Cognitive + REST + response cost period. **Assuming one act per person, Chi-square for trend gives p=0.0014. Significance observed during the third period.** (No measures of variation reported)
Multi-systemic Therapy (MST) - part of Missouri Delinquency Project (#1729) Setting: • Home • Community	Pre- and Post design with comparison group	Juvenile offenders at high risk for committing additional serious crimes M 68% F 32% W 70% AA 30%	Compared multi-systemic therapy (MST) to Individual Therapy (IT): • present-focused, action oriented • directly address intrapersonal and systemic factors • individualized and highly flexible • mean of 24 hours of treatment	Findings from hierarchical multiple regression analysis, controlled for number of arrests for violent crimes prior treatment, on the number of arrests for violent crimes during 4-year follow-up [MST: 77 completers, 15 dropouts; IT: 63 completers, 21 dropouts]: *Completers and dropouts* F(2, 173) =11.74, p<0.0008 *Completers only* F(2, 137)=8.66, p<0.003 MST found equally effective with youths of different gender and ethnic background. (No measures of variation reported)

Table 24. Program characteristics and findings for tertiary interventions evaluated with other study designs (continued)

(B) Tertiary intervention not reporting effectiveness

Program name and setting	Study Design	Study Population	Description of Program	Findings
Project Back-on-Track - An after school diversion program (#0692) Setting • Child and adolescent psychiatry outpatient clinics	Non-Randomized Controlled Trial	Youths referred for violent offenses and met criteria for conduct disorder and their parents M 37% F 63% W 33% AA 63% L 3%	Multifaceted approach designed to target factors contributing to delinquent behavior and included child-specific interventions, parent specific interventions, and combined parent/child interventions. • Youth participants met 2 hours per day after school, 4 days per week, for 4 weeks (total of 32 hours) • Parents/guardians required to attend 15 hours of interventions • Treatment included group and family therapies, parent groups, educational sessions, community service projects, and empathy building exercises.	Number of violent crimes committed at 12-month follow-up (assault, aggravated assault, attempted aggravated assault) *Number of violent crimes committed, treated (n=30) vs control (n=30):* 2 vs 6, p=ns (No measures of variation reported)

(C) Tertiary intervention with inconclusive finding

Program name and setting	Study Design	Study Population	Description of Program	Findings
Stout Cottage Serious Sex Offenders Program (SSOP) (#6187) Setting: • Secure residential facility for offenders	Retrospective single group pre and post study	Convicted adolescent male rapists. All had a conduct disorder of an aggressive type M 100% Race/Ethnicity not given	• group therapy process • issues relate to delinquent and sex offenders • both confrontational and supportive techniques • 8 months process • 3 one-hour sessions per week	Recidivism rate of sexual assaults and criminal activities during 2-year post discharge from program (n=50). *Convicted additional sexual assault*: 5/50 10% *Convicted another crime* 14/50 28% "The 10% and 28% can be considered as failure rates of the program."

Table 25. Summary of findings [a] for Key Questions #3, #4 and #5

Level of intervention	Randomized controlled trial (RCT)	Design other than RCT	Total [b]
Primary	Reporting effectiveness 1 (25%) Not reporting effectiveness 4	Reporting effectiveness 4 (40%) Not reporting effectiveness 6	Reporting effectiveness 5 (33%) Not reporting effectiveness 10
Secondary	Reporting effectiveness 3 (50%) Not reporting effectiveness 3	Reporting effectiveness 1 (25%) Not reporting effectiveness 3	Reporting effectiveness e 4 (40%) Not reporting effectiveness 6
Tertiary	Reporting effectiveness 2 (100%) Not reporting effectiveness 0	Reporting effectiveness 3 (75%) Not reporting effectiveness 1	Reporting effectiveness 5 (83%) Not reporting effectiveness 1
All levels	Reporting effectiveness 6 (46%) Not reporting effectiveness 7	Reporting effectiveness 8 (44%) Not reporting effectiveness 10	Reporting effectiveness 14 (45%) Not reporting effectiveness 17

[a] A finding was considered effective when one or more violent outcome indicators in the study reported $p<0.05$. Number (percent) of studies are reported here by finding, level and study design.
[b] Excluded one study that reported inconclusive findings.

Table 26. Summary of program effectiveness by gender and predominant race/ethnicity in study population

(A) Effectiveness of intervention by gender of study population

Level of intervention	Effectiveness of program	Male and female	Male	Total
Primary Intervention	Reporting effectiveness	4 (40%)	0 (0%)	4 (36%)
	Not reporting effective	6 (60%)	1 (100%)	7 (64%)
	Subtotal [a]	10	1	11
Secondary Intervention	Reporting effectiveness	2 (29%)	0 (0%)	2 (25%)
	Not reporting effective	5 (71%)	1 (100%)	6 (75%)
	Subtotal [a]	7	1	8
Tertiary Intervention	Reporting effectiveness	3 (75%)	2 (100%)	5 (83%)
	Not reporting effective	1 (25%)	0 (0%)	1 (17%)
	Subtotal [a]	4	2	6
All levels	Reporting effectiveness	9 (43%)	2 (50%)	11 (44%)
	Not reporting effective	12 (57%)	2 (50%)	14 (56%)
	Total [a]	21	4	25

(B Effectiveness of intervention by predominant race/ethnic group [b]

Level of intervention	Effectiveness of program	White	African-American	Latino	Total
Primary Intervention	Reporting effectiveness	1 (20%)	4 (80%)	0 (0%)	5 (45%)
	Not reporting effective	4 (80%)	1 (20%)	1 (100%)	6 (55%)
	Subtotal [a]	5	5	1	11
Secondary Intervention	Reporting effectiveness	0 (0%)	3 (75%)	0 (0%)	3 (38%)
	Not reporting effective	3 (100%)	1 (25%)	1 (100%)	5 (62%)
	Subtotal [a]	3	4	1	8
Tertiary Intervention	Reporting effectiveness	2 (100%)	2 (67%)	0 (------)	4 (80%)
	Not reporting effective	0 (0%)	1 (33%)	0 (------)	1 (20%)
	Subtotal [a]	2	3	0 (------)	5
All levels	Reporting effectiveness	3 (30%)	9 (75%)	0 (0%)	12 (50%)
	Not reporting effective	7 (70%)	3 (25%)	2 (100%)	12 (50%)
	Total [a]	10	12	2	24

[a] Excluded studies that did not report gender distribution. Primary group had 4 unknowns, secondary group had 2 unknowns and tertiary group had 1 unknown, a total of 7 unknowns. The study that reported inconclusive findings was excluded.

[b] The race/ethnicity group that had the highest percentage in the study population (or mode).

.

Table 27. Summary of effectiveness of interventions by selected program characteristics

(A) Effectiveness of intervention by setting

Level of intervention	Effectiveness of program	School	Community	Home	Other	School & Community	Home & Community	Home & Facility	Total
Primary Intervention	Reporting effectiveness	3 (30%)			0 (0%)	2 (67%)	0 (0%)		5 (33%)
	Not reporting effectiveness	7 (70%)			1 [b] (100%)	1 (33%)	1 (100%)		10 (67%)
	Subtotal	10			1	3	1		15
Secondary Intervention	Reporting effectiveness	1 (50%)	3 (60%)		0 (0%)	0 (0%)			4 (40%)
	Not reporting effectiveness	1 (50%)	2 (40%)		2 [c] (100%)	1 (100%)			6 (60%)
	Subtotal	2	5		2	1			10
Tertiary Intervention	Reporting effectiveness			1 (100%)	2 [d] (67%)		1 (100%)	1 (100%)	5 (83%)
	Not reporting effectiveness			0 (0%)	1 [e] (33%)		0 (0%)	0 (0%)	1 (17%)
	Subtotal [a]			1	3		1	1	6
All levels	Reporting effectiveness	4 (33%)	3 (60%)	1 (100%)	2 (33%)	2 (50%)	1 (50%)	1 (100%)	14 (45%)
	Not reporting effectiveness	8 (67%)	2 (40%)	0 (0%)	4 (67%)	2 (50%)	1 (50%)	0 (0%)	17 (55%)
	Total [a]	12	5	1	6	4	2	1	31

(B) Effectiveness of intervention by single or multiple component program

Level of intervention	Effectiveness of program	Single	Multiple	Total
Primary Intervention	Reporting effectiveness	2 (25%)	3 (43%)	5 (33%)
	Not reporting effectiveness	6 (75%)	4 (57%)	10 (67%)
	Subtotal	8	7	15
Secondary Intervention	Reporting effectiveness	1 (20%)	3 (60%)	4 (40%)
	Not reporting effectiveness	4 (80%)	2 (40%)	6 (60%)
	Subtotal	5	5	10
Tertiary Intervention	Reporting effectiveness	2 (100%)	3 (75%)	5 (83%)
	Not reporting effectiveness	0 (0%)	1 (25%)	1 (17%)
	Subtotal [a]	2	4	6
All levels	Reporting effectiveness	5 (33%)	9 (56%)	14 (45%)
	Not reporting effectiveness	10 (67%)	7 (44%)	17 (55%)
	Total [a]	15	16	31

Table 27. Summary of effectiveness of interventions by selected program characteristics (continued)

(C) Effectiveness by duration of program

Level of intervention	Effectiveness of program	<3 months	3-<6 months	6-<12 months	≥12 months	Total
Primary Intervention	Reporting effectiveness	3 (50%)	0 (0%)	1 (50%)	1 (20%)	5 (33%)
	Not reporting effectiveness	3 (50%)	2 (100%)	1 (50%)	4 (80%)	10 (67%)
	Subtotal	6	2	2	5	15
Secondary Intervention	Reporting effectiveness	0 (0%)	0 (0%)		4 (100%)	4 (44%)
	Not reporting effectiveness	4 (100%)	1 (100%)		0 (0%)	5 (56%)
	Subtotal [f]	4	1		4	9
Tertiary Intervention	Reporting effectiveness	2 (100%)	2 (100%)	0 (0%)	1 (100%)	5 (83%)
	Not reporting effectiveness	0 (0%)	0 (0%)	1 (100%)	0 (0%)	1 (17%)
	Subtotal [a]	1	2	1	1	6
All levels	Reporting effectiveness	5 (42%)	2 (40%)	1 (33%)	6 (60%)	14 (47%)
	Not reporting effectiveness	7 (58%)	3 (60%)	2 (67%)	4 (40%)	16 (53%)
	Total [a, f]	12	5	3	10	30

(D) Effectiveness by School Level of Implementation

Level of intervention	Effectiveness of program	Preschool	Elementary school	Middle school	High school	Middle & High schools	Total
Primary Intervention	Reporting effectiveness	1 [g] (100%)	1 (50%)	3 (30%)	0 (0%)	0 (0%)	5 (33%)
	Not reporting effectiveness	0 (0%)	1 (50%)	7 [h] (70%)	1 (100%)	1 (100%)	10 (67%)
	Subtotal	1	2	10	1	1	15
Secondary Intervention	Reporting effectiveness	1 (100%)		1 (33%)	0 (0%)	2 [j] (67%)	4 (40%)
	Not reporting effectiveness	0 (0%)		2 [i] (67%)	3 (100%)	1 (33%)	6 (60%)
	Subtotal	1		3	3	3	10
Tertiary Intervention	Reporting effectiveness				2 (100%)	3 (75%)	5 (83%)
	Not reporting effectiveness				0 (0%)	1 [j] (25%)	1 (17%)
	Subtotal				2	4	6
All levels	Reporting effectiveness	2 (100%)	1 (50%)	4 (31%)	2 (33%)	5 (62%)	14 (45%)
	Not reporting effectiveness	0 (0%)	1 (50%)	9 (69%)	4 (67%)	3 (38%)	17 (55%)
	Total	2	2	13	6	8	31

[a] The study that reported inconclusive findings was excluded.
[b] State.
[c] One residential treatment facility and one psychiatric hospital.
[d] One health care center and one treatment facility.
[e] Psychiatric outpatient clinics.
[f] One study that did not report on duration excluded.
[g] One included kindergarten
[h] Two included 6th grade and one included 9th grade.
[i] One included 9th grade
[j] One included 9 year olds.

Table 28. OMAR study quality criteria applied to randomized controlled trials

Level	Intervention	Article ID#	Unit of randomization	OMAR Study Quality Criteria [a]					
				Adequate randomi-zation [b]	Blinded enrollment and outcome [c]	Validated instrument	Follow-up >=80% [c]	Intent-to-treat analysis [c]	Controlled for confounders [c]
Primary	Safe Dates Program	2260 & 2261	School	yes	no	yes	yes	no	yes
	Drug Abuse Resistance Education (DARE, DARE PLUS)	9	School	yes	no	yes	yes	yes	yes
	Student for Peace (Multi-component violence-prevention program)	739	School	no [d]	no	yes	no	no	yes
	Students Management Anger and Resolution Together (SMART Talk)	5246	Team of students	no [d]	no	yes	yes	no	yes
	Responding in Peaceful and Positive Ways - 7th grade (RIPP-7)	5871	Homeroom	no [d]	no	yes	no	yes	yes
Secondary	Safe Dates Program	2260 & 2261	School	yes	no	yes	yes	no	yes
	Project Towards No Drug Abuse (TND)	4315	School	no [d]	no	Not reported	no	no	yes
	Moving to Opportunity (MTO) demonstration project.	10598	Family	no [d]	no	yes	Not reported	yes	yes
	Early community-based intervention for prevention of substance abuse and delinquent behavior	6221	Youth bureau	no [d]	no	no	Not reported	no	yes
	Triple modality social learning program	5995	Subject	no [d]	no	Not reported	yes	no	yes
	Childhaven's therapeutic child-care program (formerly Seattle Day Nursery)	7158	Subject	no	yes	yes	no	no	no
Tertiary	Turning Point: Rethinking Violence (TPRV)	40	Subject	yes	yes	Not reported	yes	yes[e]	yes[f]
	Multi-systemic therapy (MST)	2644	Subject	no [d]	no	yes	no	no	yes

Table 28. OMAR study quality criteria applied to randomized controlled trials (continued)

[a] Criteria number 7 addressed whether all important outcomes were considered. Since we selected only articles with violence outcome, this criterion was common to all studies.
[b] If baseline characteristics were compared and found no differences, we considered "yes" for this criterion. If baseline characteristics were compared and found differences, we considered "no" for this criterion.
[c] Considered fatal flaws according to OMAR guideline.
[d] Significant baseline factors found between the two groups were adjusted in analysis.
[e] When all subjects were used in the analysis, intent-to-treat analysis was not necessary and a 'yes' was given to this criterion.
[f] Factors controlled by design.

Figure 1. Causal pathways for violent behavioral outcomes during adolescence

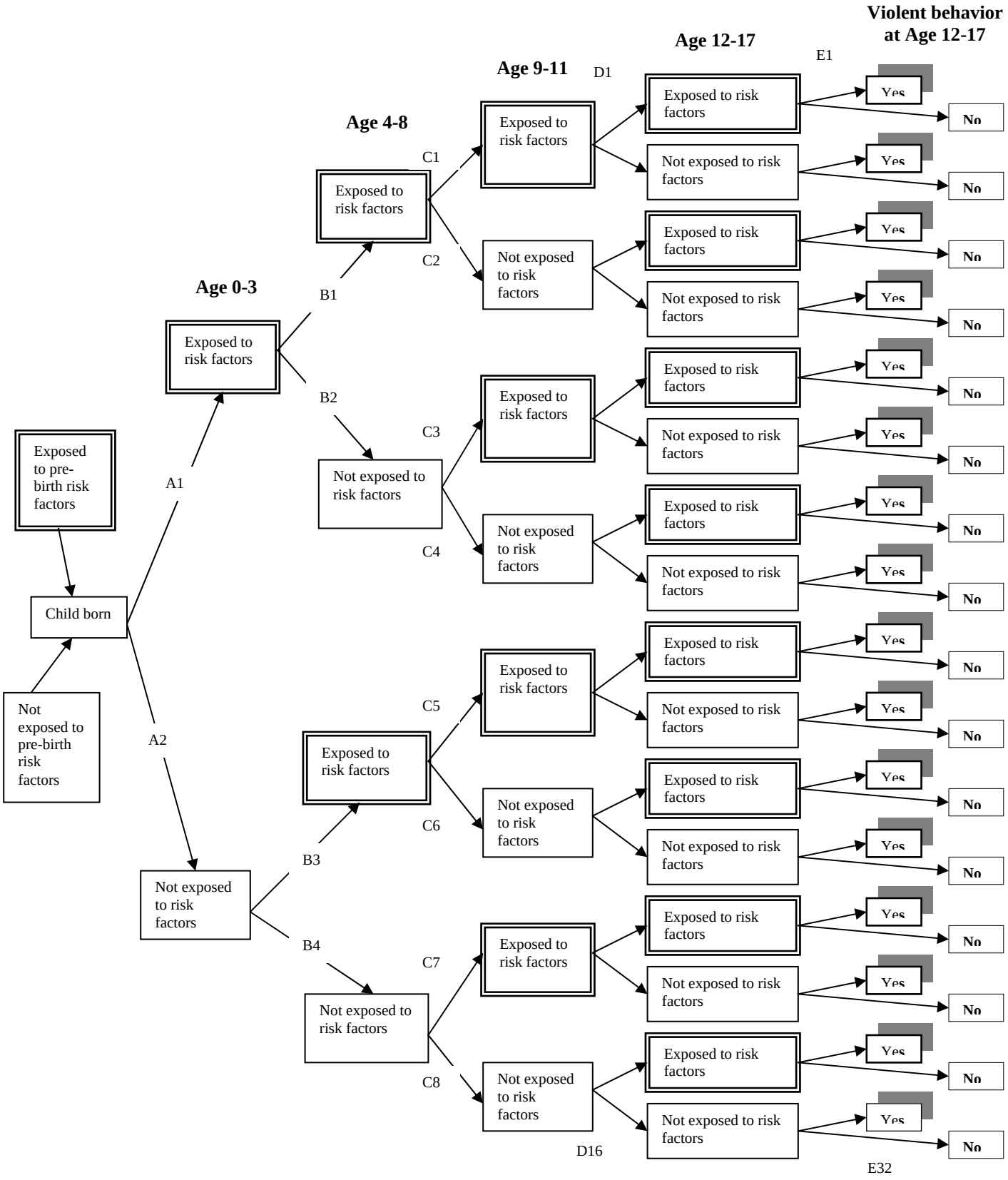


Figure 2. Conceptual framework for risk and protective factors by age of exposure

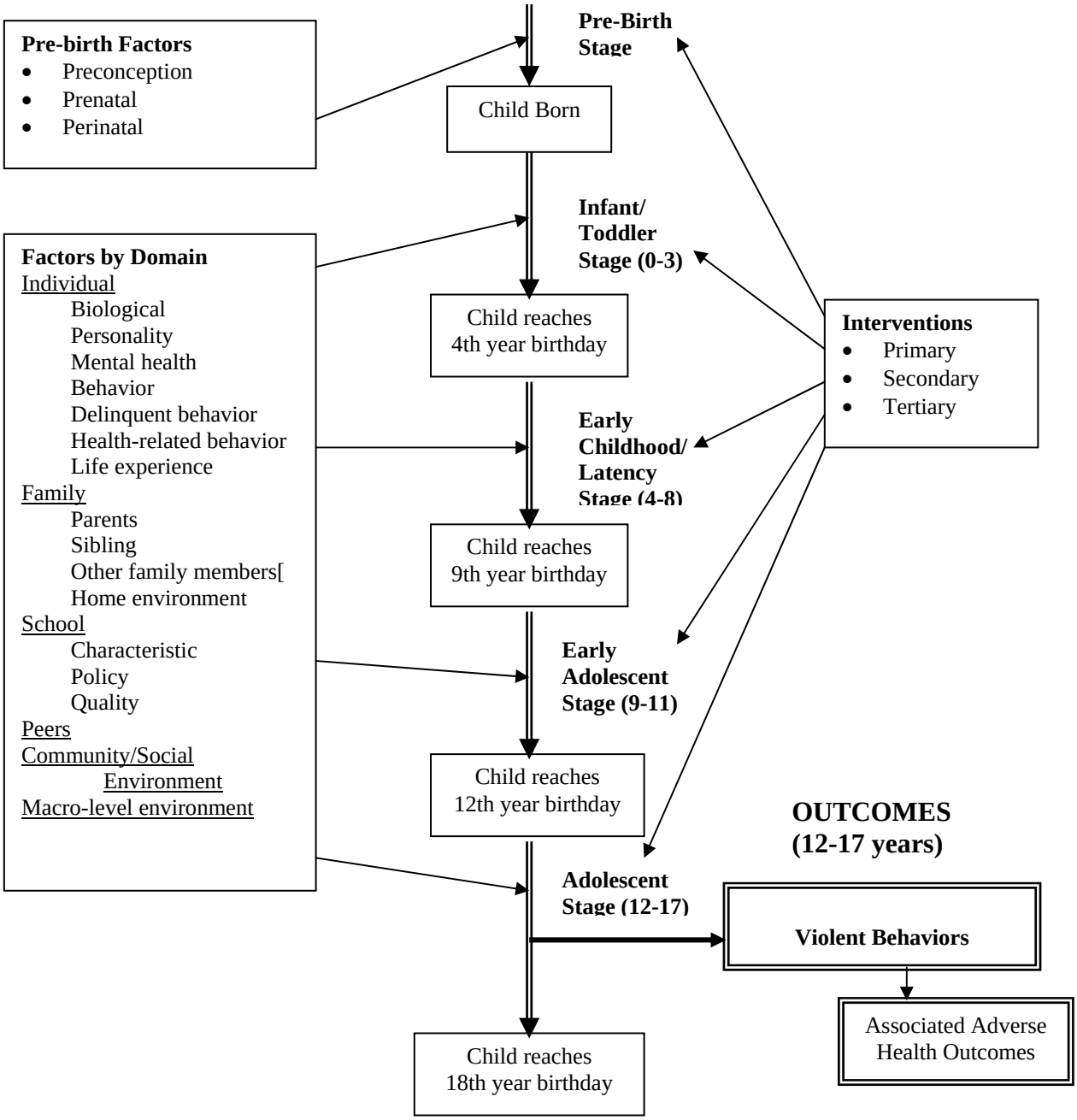
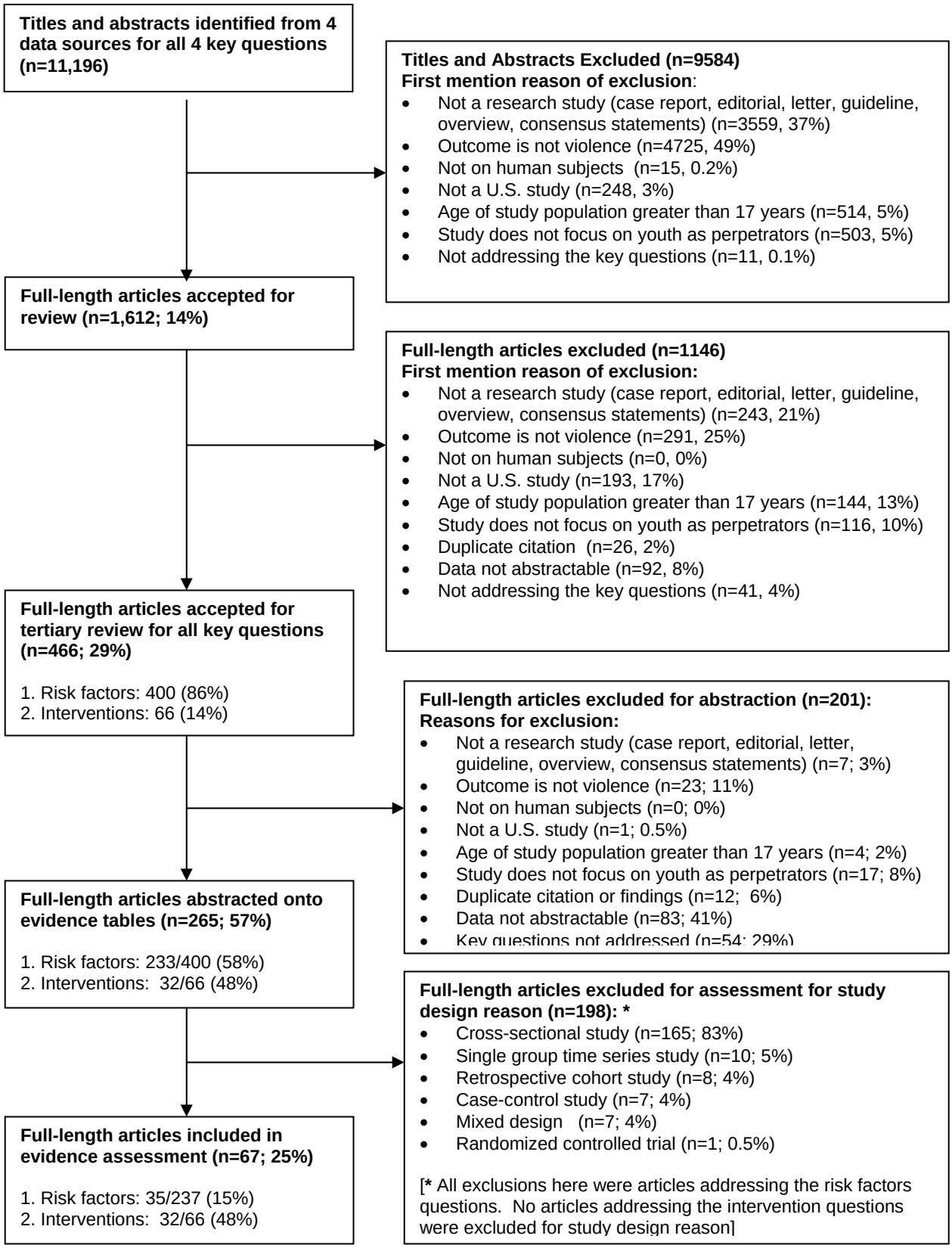


Figure 3. Process of screening and reviewing



Appendix A-1

DIALOG Strategy for MEDLINE #1

1. EX SD054

2. S DANGEROUS BEHAVIOR/DE OR VIOLENCE/DE OR DOMESTIC VIOLENCE!/DE OR TORTURE/DE OR RAPE/DE OR HOMICIDE!/DE

3. S DC=C21.866? AND CRIME!/DE [wounds and injuries]

4. S VIOLENCE/TI OR VIOLENT/TI OR RAPE/TI OR RAPED/TI OR RAPING/TI OR VIOLENT(W)CRIME? OR DANGEROUS(W)BEHAVIOR?

5. S CHILD/DE,TI OR CHILD, PRESCHOOL/DE OR CHILDREN/TI OR ADOLESCEN?/DE,TI OR YOUTH/TI OR TEEN/TI OR TEENS/TI OR TEENAGER?/TI

6. S YOUTH(W)VIOLENCE OR ADOLESCEN?(W)VIOLENCE OR TEEN(W)VIOLENCE OR TEENAGER?(W)VIOLENCE OR CHILD(W)VIOLENCE OR STUDENT(W)VIOLENCE OR SCHOOL(W)VIOLENCE

7. S AFRICA!/DE OR ANTARCTIC REGIONS/DE OR ARCTIC REGIONS/DE OR ASIA!/DE OR ATLANTIC ISLANDS!/DE OR AUSTRALIA!/DE

8. S EUROPE!/DE OR INDIAN OCEAN ISLANDS!/DE OR PACIFIC ISLANDS!/DE OR USSR!/DE OR CARIBBEAN REGION!/DE OR CENTRAL AMERICA!/DE OR LATIN AMERICA/DE

9. S SOUTH AMERICA!/DE OR CANADA!/DE OR MEXICO/DE OR GREENLAND/DE OR LONDON/DE OR PARIS/DE OR BERLIN/DE OR ROME/DE OR TOKYO/DE OR MOSCOW/DE

10. S PUERTO RICO/DE OR UNITED STATES!/DE

11. S PRACTICE GUIDELINES/DE OR GUIDELINES/DE OR DT=PRACTICE GUIDELINE OR DT=GUIDELINE OR DT=LETTER OR DT=EDITORIAL OR DT=NEWS

12. C 2 OR 3 OR 4

13. C 12 AND 5

14. C 13 OR 6

15. C 7 OR 8 OR 9

16. C 14 NOT 15

17. C 14 AND 10

18. C 16 OR 17

19. C 18 NOT 11

20. c 19 AND 1

21. S WAR!/DE OR PRISONS!/DE OR PRISONERS/DE

22. C 20 NOT 21

23. S22/HUMAN

24. S S23/ENG

Appendix A-1 (continued)

DIALOG Systematic Reviews, etc., Search Strategy for MEDLINE #1A

EXS SD054

1. S META(W)ANALYSIS OR METAANALY? OR EVIDENCE(W)BASED

2. S RANDOMI?ED(N3)(TRIAL?? OR CONTROLLED OR STUDY OR STUDIES OR DOUBLE)

3. S (CONTROLLED OR INTERVENTIONAL OR DRUG OR THERAPEUTIC OR CLINICAL OR PLACEBO)(W3)TRIAL??

4. S BLIND?(W)(TRIAL?? OR STUDY OR STUDIES)

5. S DOUBLE(W)BLIND? AND (TRIAL?? OR STUDY OR STUDIES)

6. S SINGLE(W)BLIND? AND (TRIAL?? OR STUDY OR STUDIES)

7. S (SINGLE?? OR DOUBLE?? OR TRIPLE?? OR TREBLE?)/TI,AB,DE,ID AND (BLIND?? OR MASK?)/TI,AB,DE,ID

8. S CASE(W)CONTROL?(W)(STUDY OR STUDIES)

9. S COHORT(N3)(STUDY OR STUDIES OR STUDIED)

10. S RCT/TI,AB AND TRIAL??/TI,AB,DE

11. S RCTS(N4)(ANALYSIS OR ANALYZ? OR REVIEW? OR EXAMIN? OR EVALUAT?)

12. S TRIAL??(N4)(ANALYSIS OR ANALYZ? OR REVIEW? OR EXAMIN? OR EVALUAT?)

13. S STUDIES(N4)(ANALYSIS OR ANALYZ? OR REVIEW? OR EXAMIN? OR EVALUAT?)

14. S MEDLINE(N4)(ANALYSIS OR ANALYZ? OR REVIEW? OR EXAMIN? OR EVALUAT?)

15. S LITERATURE(N4)(ANALYSIS OR ANALYZ? OR REVIEW? OR EXAMIN? OR EVALUAT?)

16. S CRITICAL?(N4)(ANALYSIS OR ANALYZ? OR REVIEW? OR EXAMIN? OR EVALUAT?)

17. S EVIDENCE(N4)(ANALYSIS OR ANALYZ? OR REVIEW? OR EXAMIN? OR EVALUAT?)

18. S SYSTEMATIC?(N2)(REVIEW? OR OVERVIEW?? OR SURVEY OR SURVEYS OR STUDY OR STUDIES OR LITERATURE)

19. S (COCHRANE??(W)(DATABASE OR STUDY OR STUDIES OR REVIEW??))/TI,AB,DE

20. S QUANTITATIV?(W2)REVIEW(W5)EVIDENCE

21. S CONSENSUS(W)DEVELOPMENT OR PRACTICE(W)GUIDELINE? OR REVIEW??/TI,DE,ID

22. C 1 OR 2 OR 3 OR 4 OR 5 OR 6 OR 7 OR 8 OR 9 OR 10 OR 11 OR 12 OR 13 OR 14 OR 15 OR 16 OR 17 OR 18 OR 19 OR 20 OR 21

Appendix A-2

DIALOG Strategy for MEDLINE #2

1. S CHILD/DE,TI OR CHILD, PRESCHOOL/DE OR CHILDREN/TI OR ADOLESCEN?/DE,TI OR TEEN/TI OR TEENS/TI OR TEENAGER?/TI

2. S DANGEROUS BEHAVIOR/DE OR VIOLENCE/DE OR TORTURE/DE OR RAPE/DE OR HOMICIDE!/DE OR DOMESTIC VIOLENCE/DE

3. S DC=C21.866? AND CRIME!/DE [WOUNDS AND INJURIES]

4. S (DATE OR DATING OR COURTSHIP OR PARTNER OR SPOUSE OR SPOUSAL)(N3)VIOLENCE OR DATE(W)RAPE

5. S PHYSICAL?(W)(VIOLENCE OR ASSAULT? OR ATTACK?? OR AGGRESSION OR AGGRESSIVE)

6. S (GANG OR GANGS OR GUN OR GUNS OR FIREARM?? OR WEAPON?)(N3)VIOLENCE

7. S (GANG OR GANGS OR GUN OR GUNS OR FIREARM?? OR WEAPON?)(N3)VIOLENT

8. S (SCHOOL? OR CLASSROOM?? OR STUDENT?? OR COLLEGE?? OR UNIVERSITY OR UNIVERSITIES OR INTERPERSONAL)(N3)VIOLENCE

9. S (SCHOOL? OR CLASSROOM?? OR STUDENT?? OR COLLEGE?? OR UNIVERSITY OR UNIVERSITIES OR INTERPERSONAL)(N3)VIOLENT

10. S (YOUTH OR YOUTHS OR ADOLESCEN? OR TEEN OR TEENS OR TEENAGER? OR CHILD OR CHILDREN OR JUVENILE??)(N3)VIOLENCE

11. S (YOUTH OR YOUTHS OR ADOLESCEN? OR TEEN OR TEENS OR TEENAGER? OR CHILD OR CHILDREN OR JUVENILE??)(N3)VIOLENT

12. S VIOLENT(W)(CRIME OR CRIMES OR CRIMINAL? OR DEATH OR DEATHS OR INTERACTION?) OR ARMED(W)ROBBER? OR ANIMAL??(N2)CRUEL?

13. S DRUG(W)RELATED(W)VIOLENCE OR VIOLENCE(W)RELATED OR SADISM OR SADOMASOCHIS? OR SADISTIC

14. S (DESTRUCTIVE OR PHYSICAL OR ABUSIVE OR ATTACK? OR CRUEL OR VIOLENT)(N3)BEHAVIOR??

15. C 2 OR 3 OR 4 OR 5 OR 6 OR 7 OR 8 OR 9 OR 10 OR 11 OR 12 OR 13 OR 14

16. S CHILD ABUSE/DE OR CHILD ABUSE, SEXUAL/DE OR ELDER ABUSE/DE OR SPOUSE ABUSE/DE OR BATTERED WOMEN/DE OR BATTERED CHILD SYNDROME/DE

17. S SEX OFFENSES/DE OR INCEST/DE OR AGGRESSION/DE OR SUBSTANCE-RELATED DISORDERS!/DE OR MUNCHAUSEN SYNDROME BY PROXY/DE OR CIVIL DISORDERS!/DE

18. S KNIFE OR KNIVES OR KNIFING OR STAB OR STABBING OR STABBED OR TORTURE OR TORTURING OR TORTURED

19. S GUNSHOT? OR GUN OR GUNS OR RIFLE OR RIFLES OR FIREARM? OR WEAPON? OR SHOOTING?

20. S MURDER? OR HOMICID? OR FEMICID? OR FILICID? OR MUTILATION?? OR MUTILATE?? OR RAPE OR RAPED OR RAPING OR RAPES OR RAPIST?

21. S INJUR? OR ASSAULT? OR BATTER OR BATTERY OR BATTERING OR BATTERED OR ARSON OR FIRE(N2)(SET OR SETTING) OR FIRESETT?

Appendix A-2 (continued)

22. S BULLY OR BULLIES OR BULLIED OR BULLYING OR BRUTAL? OR BLUDGEON? OR VIOLENT OR VIOLENCE OR BURN OR BURNS OR BURNING OR STALKING OR STALKER?

23. C 18 OR 19 OR 20 OR 21 OR 22

24. C 16 OR 17

25. C 23 AND 24

26. C (1 AND 15) OR (1 AND 25)

27. S AFRICA!/DE OR ANTARCTIC REGIONS/DE OR ARCTIC REGIONS/DE OR ASIA!/DE OR ATLANTIC ISLANDS!/DE OR AUSTRALIA!/DE

28. S EUROPE!/DE OR INDIAN OCEAN ISLANDS!/DE OR PACIFIC ISLANDS!/DE OR USSR!/DE OR CARIBBEAN REGION!/DE OR CENTRAL AMERICA!/DE OR LATIN AMERICA/DE

29. S SOUTH AMERICA!/DE OR CANADA!/DE OR MEXICO/DE OR GREENLAND/DE OR LONDON/DE OR PARIS/DE OR BERLIN/DE OR ROME/DE OR TOKYO/DE OR MOSCOW/DE

30. S PRACTICE GUIDELINES/DE OR GUIDELINES/DE OR DT=PRACTICE GUIDELINE OR DT=GUIDELINE OR DT=LETTER OR DT=EDITORIAL OR DT=NEWS

31. S DT=INTERVIEW OR DT=LEGAL CASES OR DT=CONSENSUS DEVELOPMENT CONFERENCE OR DT=CONGRESSES OR DT=LECTURES

32. S DT=PATIENT EDUCATION HANDOUT OR DT=LEGISLATION OR DT= REVIEW OR CASE REPORT/DE

33. S WAR!/DE OR PRISONS!/DE OR PRISONERS/DE OR DETENTION(W)CENTER? OR IMPRISONMENT OR INCARCERAT? OR REFORMATORY OR REFORMATORIES OR JAILS

34. S COMBAT OR VIETNAM OR MILITARY OR ARMED(W)(FORCES OR SERVICES)

35. S PROSTITUTION/DE OR SUICIDE!/DE OR SELF-INJURIOUS BEHAVIOR/DE OR MASOCHISM/DE

36. C 27 OR 28 OR 29

37. C 26 NOT 36

38. S PUERTO RICO/DE OR UNITED STATES!/DE

39. C 26 AND 38

40. C 37 OR 39

41. C 30 OR 31 OR 32 OR 33 OR 34 OR 35

42. C 40 NOT 41

43. S S42/HUMAN

44. S S43/ENG

Appendix A-3

DIALOG Strategy for MEDLINE #3

1. S ADOLESCEN?/DE,TI,AB OR TEEN/TI,AB OR TEENS/TI,AB OR TEENAGER?/TI,AB

2. S JUVENILE/TI,AB OR JUVENILES/TI,AB OR YOUTH/TI,AB OR YOUTHS/TI,AB

3. C 1 OR 2

4. S VIOLENCE OR VIOLENT

5. C 3 AND 4

6. S (SCHOOL? OR CLASSROOM?? OR STUDENT??) AND (VIOLENCE OR VIOLENT)

7. S DANGEROUS BEHAVIOR/DE OR VIOLENCE/DE OR RAPE/DE OR HOMICIDE!/DE OR DOMESTIC VIOLENCE/DE

8. S (DATE OR DATING OR COURTSHIP OR INTERPERSONAL)(N5)VIOLENCE OR DATE(W)RAPE

9. S (DATE OR DATING OR COURTSHIP OR INTERPERSONAL)(N5)VIOLENT

10. S PHYSICAL?(W)(ASSAULT? OR ATTACK?? OR AGGRESSION OR AGGRESSIVE) OR ARMED(W)ROBBER?

11. S KNIFING/TI,AB OR STAB/TI,AB OR STABBING/TI,AB OR STABBED/TI,AB OR GUNSHOT?/TI,AB OR SHOOTING?/TI,AB OR BRUTAL?/TI,AB OR BLUDGEON?/TI,AB

12. S MURDER?/TI,AB OR HOMICID?/TI,AB OR FEMICID?/TI,AB OR FILICID?/TI,AB OR RAPE/TI,AB OR RAPED/TI,AB

13. S RAPING/TI,AB OR RAPES/TI,AB OR RAPIST?/TI,AB OR ASSAULT??/TI,AB OR BULLY/TI,AB OR BULLIES/TI,AB OR BULLIED/TI,AB OR BULLYING/TI,AB

14. C 6 OR 7 OR 8 OR 9 OR 10 OR 11 OR 12 OR 13

15. C 3 AND 14

16. C 5 OR 15

17. S AFRICA!/DE OR ANTARCTIC REGIONS/DE OR ARCTIC REGIONS/DE OR ASIA!/DE OR ATLANTIC ISLANDS!/DE OR AUSTRALIA!/DE

18. S EUROPE!/DE OR INDIAN OCEAN ISLANDS!/DE OR PACIFIC ISLANDS!/DE OR USSR!/DE OR CARIBBEAN REGION!/DE OR CENTRAL AMERICA!/DE OR LATIN AMERICA/DE

19. S SOUTH AMERICA!/DE OR CANADA!/DE OR MEXICO/DE OR GREENLAND/DE OR LONDON/DE OR PARIS/DE OR BERLIN/DE OR ROME/DE OR TOKYO/DE OR MOSCOW/DE

20. S PRACTICE GUIDELINES/DE OR GUIDELINES/DE OR DT=PRACTICE GUIDELINE OR DT=GUIDELINE OR DT=LETTER OR DT=EDITORIAL OR DT=NEWS

21. S DT=INTERVIEW OR DT=LEGAL CASES OR DT=CONSENSUS DEVELOPMENT CONFERENCE? OR DT=CONGRESSES OR DT=LECTURES

22. S DT=PATIENT EDUCATION HANDOUT OR DT=LEGISLATION OR DT= REVIEW OR CASE(W)REPORT?

23. S WAR!/DE OR COMBAT OR VIETNAM OR MILITARY OR ARMED(W)(FORCES OR SERVICES)

Appendix A-3 (continued)

24. S PTSD/TI,AB OR POST(W)TRAUMATIC(W)STRESS OR POSTTRAUMATIC(W)STRESS OR STRESS DISORDERS, POST-TRAUMATIC/DE

25. S PROSTITUTION/DE OR SUICIDE!/DE OR SELF-INJURIOUS BEHAVIOR/DE OR MASOCHISM/DE OR BATTERED CHILD SYNDROME/DE OR SHAKEN(W)(BABY OR INFANT)

26. C 17 OR 18 OR 19

27. C 16 NOT 26

28. S PUERTO RICO/DE OR UNITED STATES!/DE

29. C 16 AND 28

30. C 27 OR 29

31. C 20 OR 21 OR 22 OR 23 OR 24 OR 25

32. C 30 NOT 31

33. S S32/HUMAN

34. S S33/ENG

Appendix A-4

DIALOG Strategy for MEDLINE #4

1. s adolescen?/de,ti,ab or teen/ti,ab or teens/ti,ab or teenager?/ti,ab or juvenile/ti,ab or juveniles/ti,ab or youth/ti,ab or youths/ti,ab

2. s (direct(w)aggression) OR (overt(w)aggression)

3. c 1 AND 2

4. s war!/de OR combat OR vietnam OR military OR armed(W)(forces OR services)

5. s ptsd/ti,ab or post(w)traumatic(w)stress OR posttraumatic(W)stress OR stress disorders, post-traumatic/de

6. s prostitution/de OR suicide!/de OR self-injurious behavior/de OR masochism/de OR battered child syndrome/de OR shaken(W)(baby OR infant)

7. c 4 OR 5 OR 6

8. c 3 NOT 7

9. s s8/HUMAN

10. s s9/ENG

11. t 10/4/1-1000

Appendix A-5

DIALOG Strategy for PsycINFO #1

1. s child/ti or childhood/ti or ag=100 or children/ti or ag=160 or ag=180 or adolescen?/ti or ag=200 or teen/ti or teens/ti or teenager?/ti

2. s aggressive behavior/de or violence/de or torture/de or rape/de or homicide/de OR family violence/de

3. s crime/de AND (wounds/de OR injuries/de)

4. s (date OR dating OR courtship OR partner OR spouse OR spousal)(n3)violence OR date(w)rape

5. s physical?(w)(violence OR assault? OR attack?? OR aggression OR aggressive)

6. s (gang OR gangs OR gun OR guns OR firearm?? OR weapon?)(n3)violence

7. s (gang OR gangs OR gun OR guns OR firearm?? OR weapon?)(n3)violent

8. S (school? OR classroom?? OR student?? OR college?? OR university OR universities OR interpersonal)(n3)violence

9. S (school? OR classroom?? OR student?? OR college?? OR university OR universities OR interpersonal)(n3)violent

10. s (youth OR youths OR adolescen? OR teen OR teens OR teenager? OR child OR children OR juvenile??)(n3)violence

11. s (youth OR youths OR adolescen? OR teen OR teens OR teenager? OR child OR children OR juvenile??)(n3)violent

12. s violent(w)(crime OR crimes OR criminal? OR death OR deaths OR interaction?) OR armed(w)robber? OR animal??(n2)cruel?

13. s drug(w)related(w)violence OR violence(w)related OR sadism OR sadomasochis? OR sadistic

14. s (destructive OR physical OR abusive OR attack? OR cruel OR violent)(n3)behavior??

15. c 2 OR 3 OR 4 OR 5 OR 6 OR 7 OR 8 OR 9 OR 10 OR 11 OR 12 OR 13 OR 14

16. s child abuse/de OR elder abuse/de OR partner abuse/de OR battered females/de OR battered child syndrome/de OR battered child/de

17. s sex offenses/de OR incest/de OR aggressive behavior/de OR drug abuse/de OR riots/de OR civil(w)disorder?

18. s knife OR knives OR knifing OR stab OR stabbing OR stabbed OR torture OR torturing OR tortured

19. s gunshot? OR gun OR guns OR rifle OR rifles OR firearm? OR weapon? OR shooting?

20. s murder? OR homicid? OR femicid? OR filicid? OR mutilation?? OR mutilate?? OR rape OR raped OR raping OR rapes OR rapist?

21. s injur? OR assault? OR batter OR battery OR battering OR battered OR arson OR fire(n2)(set OR setting) OR firesett?

22. s bully OR bullies OR bullied OR bullying OR brutal? OR bludgeon? OR violent OR violence OR burn OR burns OR burning OR stalking OR stalker?

23. c 18 OR 19 OR 20 OR 21 OR 22

24. c 16 OR 17

Appendix A-5 (continued)

25. c 23 AND 24

26. c (1 AND 15) OR (1 AND 25)

27. s war/de OR prisons/de or prisoners/de OR correctional institutions/de OR detention(w)center? OR imprisonment OR incarcerat? OR reformatory OR reformatories OR jails

28. s combat OR Vietnam OR military OR armed(w)(forces OR services)

29. s prostitution/de OR suicide/de OR self destructive behavior/de OR masochism/de

30. c 27 OR 28 OR 29

31. c 26 NOT 30

32. s s31/ENG

33. s dt=journal article

34. c 32 AND 33

35. s s34/1990:2003

36. t 35/7,id,de,la,sh,ag,dt,kc,su,gn/all tag

Appendix A-6

DIALOG Strategy for PsycINFO #2

1. s ag=adolescent OR adolescen?/ti,ab OR teen/ti,ab OR teens/ti,ab OR teenager?/ti,ab OR juvenile/ti,ab OR juveniles/ti,ab OR youth/ti,ab OR youths/ti,ab

2. s violence OR violent

3. c 1 AND 2

4. s (school? OR classroom?? OR student??) AND (violence OR violent)

5. s violence/de OR rape/de OR homicide/de OR family violence/de

6. s (date OR dating OR courtship OR interpersonal)(n5)(violence OR violent) OR date(W)rape

7. s physical?(W)(assault? OR attack?? OR aggression OR aggressive) OR armed(W)robber?

8. s knifing OR stab OR stabbing OR stabbed OR gunshot? OR shooting? OR brutal? OR bludgeon?

9. s murder? OR homicid? OR femicid? OR filicid? OR rape OR raped OR raping OR rapes OR rapist?

10. s bully OR bullies OR bullied OR bullying OR assault?

11. c 4 OR 5 OR 6 OR 7 OR 8 OR 9 OR 10

12. c 1 AND 11

13. c 3 OR 12

14. s war/de OR combat OR vietnam OR military OR armed(W)(forces OR services)

15. s posttraumatic stress disorder/de OR posttraumatic(W)stress OR post(W)traumatic(W)stress OR ptsd

16. s prostitution/de OR suicide/de OR self destructive behavior/de OR masochism/de OR battered child syndrome/de OR shaken(W)(baby OR infant)

17. c 14 OR 15 OR 16

18. c 13 NOT 17

19. s s18/ENG

20. s dt=journal article

21. c 19 AND 20

22. s s21/1990:2003

23. t 22/7,id,de,la,sh,ag,dt,kc,su,gn/all tag

Appendix A-7

DIALOG Strategy for PsycINFO #3

1. s ag=adolescence OR adolescen?/ti,ab OR teen/ti,ab OR teens/ti,ab OR teenager?/ti,ab OR juvenile/ti,ab OR juveniles/ti,ab OR youth/ti,ab OR youths/ti,ab

2. s (direct(w)aggression) OR (overt(w)aggression)

3. c 1 AND 2

4. s war/de OR combat OR vietnam OR military OR armed(W)(forces OR services)

5. s posttraumatic stress disorder/de OR posttraumatic(W)stress OR post(W)traumatic(W)stress OR ptsd

6. s prostitution/de OR suicide/de OR self destructive behavior/de OR masochism/de OR battered child syndrome/de OR shaken(W)(baby OR infant)

7. c 4 OR 5 OR 6

8. c 3 NOT 7

9. s s8/ENG

10. s dt=journal article

11. c 9 AND 10

12. s s11/1990:2003

13. t 12/7,id,de,la,sh,ag,dt,kc,su,gn/all tag

Appendix A-8

DIALOG Strategy for SocAbs #1

1. s children/de,ti OR child/ti or adolescen?/de,ti or teen/ti or teens/ti or teenager?/ti

2. s violence/de or torture/de or rape/de or homicide/de OR family violence/de

3. s crime/de AND injuries/de

4. s (date OR dating OR courtship OR partner OR spouse)(n3)violence OR date(w)rape

5. s physical?(w)(violence OR assault? OR attack?? OR aggression OR aggressive)

6. s (gang OR gangs OR gun OR guns OR firearm?? OR weapon?)(n3)violence

7. s (gang OR gangs OR gun OR guns OR firearm?? OR weapon?)(n3)violent

8. S (school? OR classroom?? OR student?? OR college?? OR university OR universities OR interpersonal)(n3)violence

9. S (school? OR classroom?? OR student?? OR college?? OR university OR universities OR interpersonal)(n3)violent

10. s (youth OR youths OR adolescen? OR teen OR teens OR teenager? OR child OR children OR juvenile??)(n3)violence

11. s (youth OR youths OR adolescen? OR teen OR teens OR teenager? OR child OR children OR juvenile??)(n3)violent

12. s violent(w)(crime OR crimes OR criminal? OR death OR deaths OR interaction?) OR armed(w)robber? OR animal??(n2)cruel?

13. s drug(w)related(w)violence OR violence(w)related OR sadism OR sadomasochis? OR sadistic

14. s (destructive OR physical OR abusive OR attack? OR cruel OR violent)(n3)behavior??

15. c 2 OR 3 OR 4 OR 5 OR 6 OR 7 OR 8 OR 9 OR 10 OR 11 OR 12 OR 13 OR 14

16. s child abuse/de OR child sexual abuse/de OR elder abuse/de OR spouse abuse/de OR battered women/de

17. s sex offenders/de OR incest/de OR aggression/de OR substance abuse/de OR civil disorders/de OR riots/de

18. s knife OR knives OR knifing OR stab OR stabbing OR stabbed OR torture OR torturing OR tortured

19. s gunshot? OR gun OR guns OR rifle OR rifles OR firearm? OR weapon? OR shooting?

20. s murder? OR homicid? OR femicid? OR filicid? OR mutilation?? OR mutilate?? OR rape OR raped OR raping OR rapes OR rapist?

21. s injur? OR assault? OR batter OR battery OR battering OR battered OR arson OR fire(n2)(set OR setting) OR firesett?

22. s bully OR bullies OR bullied OR bullying OR brutal? OR bludgeon? OR violent OR violence OR burn OR burns OR burning OR stalking OR stalker?

23. c 18 OR 19 OR 20 OR 21 OR 22

24. c 16 OR 17

Appendix A-8 (continued)

25. c 23 AND 24

26. c (1 AND 15) OR (1 AND 25)

27. s war/de OR vietnam war/de OR prisons/de or prisoners/de OR detention(w)center? OR imprisonment OR incarcerat? OR reformatory OR reformatories OR jails

28. s combat OR Vietnam OR military OR armed(w)(forces OR services)

29. s prostitution/de OR suicide/de OR self destructive behavior/de OR masochism

30. c 27 OR 28 OR 29

31. c 26 NOT 30

32. s s31/ENG

33. s DT=FEATURE ARTICLE

34. c 32 AND 33

35. s s34/1990:2003

36. t 35/7,de,la,dt,gn/all tag

Appendix A-9

DIALOG Strategy for SocAbs #2

1. s adolescen?/de,ti,ab or teen/ti,ab or teens/ti,ab or teenager?/ti,ab
2. s violence or violent
3. c 1 AND 2
4. s (school? OR classroom?? OR student??) AND (violence or violent)
5. s violence/de or rape/de or homicide/de OR family violence/de
6. s (date OR dating OR courtship OR interpersonal)(n5)(violence OR violent) OR date(W)rape
7. s physical?(W)(assault? OR attack?? OR aggression OR aggressive) OR armed(W)robber?
8. s gunshot? OR shooting? OR knifing OR stab OR stabbing OR stabbed OR brutal? OR bludgeon?
9. s murder? OR homicid? OR femicid? OR filicid? OR rape OR raped OR raping OR rapes OR rapist?
10. s bully OR bullies OR bullied OR bullying OR assault?
11. c 4 OR 5 OR 6 OR 7 OR 8 OR 9 OR 10
12. c 1 AND 11
13. c 3 OR 12
14. s war/de OR combat OR vietnam war/de OR Vietnam OR military OR armed(W)(forces OR services)
15. s posttraumatic stress disorder/de OR posttraumatic(W)stress OR post(w)traumatic(w)stress OR ptsd
16. s prostitution/de OR suicide/de OR self destructive behavior/de OR masochism OR battered(W)child(W)syndrome OR shaken(W)(baby OR infant)
17. c 14 OR 15 OR 16
18. c 13 NOT 17
19. s s18/ENG
20. s DT=FEATURE ARTICLE
21. c 19 AND 20
22. s s21/1990:2003
23. t 22/7,de,la,dt,gn/all tag

Appendix B-1

Form 1: Title and Abstract Screening Form

1. **Reviewer ID (initials): ___ ___**

2. **Review Date: ___ ___/___ ___/___ ___**

3. **Record #: ___ ___ ___ ___**

4. **Search Rejection Criteria**

   GO IN ORDER FROM R1 TO R6, **STOP AT FIRST "NO"**

R1: Not a case report/editorial/letter/clinical practice/overview/…… Practice guidelines/consensus statements/methodology/opinion/ Commentary/description/review	Yes	No	Unsure
R2: Study outcome is violence……	Yes	No	Unsure
R3: A human subjects study……	Yes	No	Unsure
R4: A US Study ……	Yes	No	Unsure
R5: Age of population studied is 17 or under……..……	Yes	No	Unsure
R6: Study focuses primarily on youth as perpetrators…..……..	Yes	No	Unsure

5. **Key Questions Addressed**

Risk Factors for youth violence (Questions 1 and 2)…….	Yes	No	Unsure
Intervention/Prevention of Violence (Questions 3, 4, and 5)…….	Yes	No	Unsure

6. **Review Outcome** **Pull**……. Yes No Unsure

---

7. **Is it a review article of youth violence?**…… Yes No Unsure

---

Definition of Violence

A threatened or actual physical force or power initiated by an individual that results in, or has a high likelihood of resulting in, physical or psychological injury or death.

Appendix B-2

Form 2: Secondary Screening Form for Full-length articles

1. **Reviewer Initials: ____ ____**

2. **Record #: ____ ____ ____ ____**

3. **Reason(s) of Rejection:**

GO IN ORDER FROM R1 TO R9, STOP AT FIRST "NO"

R1: Not a case report/editorial/letter/clinical practice/overview/…… Practice guidelines/consensus statements/methodology/opinion/ Commentary/description/review	Yes	No	Unsure
R2: Study outcome is violence……	Yes	No	Unsure
R3: A human subjects study……	Yes	No	Unsure
R4: A US Study ……	Yes	No	Unsure
R5: Age of population studied is 17 or under……..……	Yes	No	Unsure
R6: Study focuses primarily on youth as perpetrators…..……..	Yes	No	Unsure
R7: Not a duplicate citation	Yes	No	Unsure
R8: Data abstractable	Yes	No	Unsure
R9: Addresses the key question(s)	Yes	No	Unsure

4. **Key question(s) addressed are:**

Q1, Q2: Risk Factors Associated with Violent behavior ____

Q3,Q4,Q5: Interventions ____

5. **Study Design (According to Figure 1 in Grading Scientific Evidence)**

Randomized/Nonrandomized control trial (group or individual)……..	1
Prospective Comparative Cohort Study……..……	2
Retrospective Comparative Cohort Study……..……	3
Other Cohort Design with Concurrent Comparison Group……	4
Case Control Study……..……..	5
Single Group Study (Before-After, Time series).. ……..	6
Cross-Sectional Study……..	7
Noncomparative Study……..	8
Unsure……..	9

Appendix B-3

Form 3: Study Quality Review Form

1. Reviewer Initial: ___ ___
2. Record Number ___ ___ ___ ___
3. Study Design: (from Form 2) ___

4.	QUALITY OF RANDOMIZED CONTROLLED TRIALS (types 1)	yes	unsure	no	
1.	Was randomization method adequate to assemble comparable group?	1	0.5	0	
2.	Was blinding or concealment method used in treatment allocation?	1	0.5	0	
3.	Was blinding or concealment method used in outcome assessment?	1	0.5	0	
4.	Were primary and secondary outcomes reliable and valid?	1	0.5	0	
5.	Was the comparability of groups maintained throughout the study (>=80%)?	1	0.5	0	
6.	Was intent-to-treat analysis or similar analytical method used?		1	0.5	0
7.	Were all important outcomes studied?	1	0.5	0	
8.	Were all potential confounders accounted or controlled for?	1	0.5	0	

Individual Study Rating System:

Good: At least partially fulfills (adequate or uncertain) all of the above criteria (i.e. no "0"s).
Comparable groups are assembled initially through adequately concealed randomization and maintained throughout the study (follow-up at least 80 percent). Intention to treat analysis is used.

Fair: At least partially fulfills (adequate or uncertain most criteria). Studies will be graded "fair" if any or all of the following problems occur, without the fatal flaws noted in the "poor" category below: Generally comparable groups are assembled initially but some question remains whether some (although not major) differences occurred with follow-up; and generally applied equally; some but not all important outcomes are considered; and some but not all potential confounders are accounted for. Intention to treat analysis is done for RCTs.

Poor: Fails to partially fulfill most criteria or any of the following fatal flaws exists:
Groups assembled initially are not close to being comparable or maintained throughout the study; failure to mask outcome assessment; and key confounders are given little or no attention. Intention to treat analysis is lacking.

Appendix B-3 (continued)

Form 3: Study Quality Review Form

1. Reviewer Initial: ___ ___
2. Record Number ___ ___ ___ ___
3. Study Design: (from Form 2) ___

5.	QUALITY OF OBSERVATIONAL STUDIES (types 2, 3, 4, 5, 7, and 8)	yes	unsure	no	n/a
1.	Were the groups at baseline comparable?	1	0.5	0	-9
2.	Were concurrent controls used?	1	0.5	0	-9
3.	Was follow-up rate at each assessment >=80%?	1	0.5	0	-9
4.	Were instruments used to assess exposure or outcome valid and reliable?	1	0.5	0	-9
5.	Were measurements applied equally to all groups?	1	0.5	0	-9
6.	Were all important outcomes considered?	1	0.5	0	-9
7.	Were all potential confounders appropriately controlled for in study or analysis?	1	0.5	0	-9

Individual Study Rating System:

Good: Meets all criteria: Comparable groups are assembled initially and maintained throughout the study (follow-up at least 80 percent); reliable and valid measurement instruments are used and applied equally to the groups; all important outcomes are considered; and appropriate attention to confounders in analysis.

Fair: Studies will be graded "fair" if any or all of the following problems occur, without the fatal flaws noted in the "poor" category below: Generally comparable groups are assembled initially but some question remains whether some (although not major) differences occurred with follow-up; measurement instruments are acceptable (although not the best) and generally applied equally; some but not all important outcomes are considered; and some but not all potential confounders are accounted for.

Poor: Studies will be graded "poor" if any of the following fatal flaws exists: Groups assembled initially are not close to being comparable or maintained throughout the study; unreliable or invalid measurement instruments are used to assess exposure or outcomes or not applied at all equally among groups, and key confounders are given little or no attention. Lack of a control group or single group study.

References

Procedures for EPC Reports for ODS and OMAR, August 2003

West S, King V, Carey TS, et al. Systems to Rate the Strength of Scientific Evidence. Evidence Report/Technology Assessment No. 47 (Prepared by the Research Triangle Institute-University of North Carolina Evidence-based Practice Center under Contract No. 290-97-0011). AHRQ Publication No. 02-E016. Rockville, MD: Agency for Healthcare Research and Quality. April 2002.

Fletcher, RH, Fletcher SW, Wagner EH. Clinical Epidemiology—the essentials. Baltimore: Williams & Wilkins, 1982.

Jadad AR, Moore AR, Carroll D, et al. Assessing the quality of reports of randomized clinical trials: is blinding necessary? Controlled Clinical Trials 1996;17:1-12.

Appendix B-4
Evidence Table 1: Risk Factors Contributing to Violent Behavior and Adverse Health Outcome

Record # **Author** **Year, Jnl**	**Study Quality** **Group(s) Demographics** **Sample Size**	**Study Characteristic** **Risk Factors Studied** **Inclusion/Exclusion Criteria**	**Outcome (Violence) Definition and characterization.**	**Findings** **Implications**
	Study Design: Study Quality Score: Element score: Domain score: Sample size: Description of cohort(s) by age, gender, & race/ethnicity Age Gender Race	Study Period (begin, end): Place (city, state): Study Setting: Study Population: Inclusion criteria: Exclusion criteria: Main independent factor(s): Instrument used to measure factors: Covariates	**Outcome (violence):** Outcome measure Definition Instrument used to measure outcome Type Circumstance/Situational Context Proactive/Reactive Weapon used Victim-offender relationship **Adverse Health Outcome:** Type Definition **Are mechanisms of violence theorized?** Yes No If yes, state the theory:	**Violence Outcome** **[Give a brief statement of the primary objective of the study, then concisely and systematically record the findings.]** **SAMPLE FORMAT** # (%) with violence outcome Risk Factor Grp 1 Grp 2 Effect size **Associated Adverse Health Outcome** **SAMPLE FORMAT** # (%) with outcome Risk Factor Grp 1 Grp 2 Effect size

Appendix B-5

Evidence Table 2: Effectiveness of Prevention Interventions to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	**Study Quality Group(s) and Sample Size**	**Time/Place Inclusion/Exclusion Criteria Outcome Definition**	**Prevention Intervention: Definition and Characteristic**	**Findings**
	Study Design: Individual study quality score Sample size (initial and actual): Overall Intervention Group (Grp 1) Control Group (Grp 2) Age, gender & race groups: All Grp1 Grp2 Age Gender Race	Time (begin, end): Place (city, state): Study Population: Inclusion criteria: Exclusion criteria: Moderating/mediating factors **Outcome 1: violence** Measure Definition How measured Type Circumstance Proactive/reactive Weapon used Victim-offender relationship **Outcome 2: Effectiveness** Definition of outcome measure(s) **Outcome 3: Adverse Health** Definition of outcome measure(s) **Outcome 4: Safety** Definition of outcome measure(s)	**Description of Program** Name of program Level Kind of program Mechanism of delivery Target population Setting where intervention took place Setting where subjects were recruited Person delivering program Time period/duration/frequency Notes if any	**[Give a brief statement of the primary objective of the study, then concisely and systematically record relevant findings.]** **SAMPLE FORMAT** **# (%) with outcome** Outcome 1 Treated Control Outcome 2 Treated Control Outcome 3 Treated Control Outcome 4 Treated Control

Appendix C1: Evidence Table 01: Risk Factors Contributing to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) Demographics Sample Size	Study Characteristic Risk Factors Studied Inclusion/Exclusion Criteria	Outcome (Violence) Definition and characterization.	Findings Implications
5149 Becker 2002 Am J Ortho-psychiatry	Study Design: Prospective cohort study Study Quality Score: Poor (retention rate 79%) Sample size: Original sample at Time 1: n=363 Total sample at Time 2: n=287 (79% of original) Index group: n=141 Comparison group: n=146 Description of cohort(s) by age, gender, & race/ethnicity Age: Time 1: Median = 9.3 yrs Range = 6-12 yrs Time 2: Range = 12-18 yrs Gender: Male: n=141 (49%) Female: n=146 (51%) Race: Anglo-European 53% Hispanic 35% African American 6% Native American, Asian, or Pacific Islander 6%	Study Period (begin, end): Time 1: 1990 – 1991 Time 2: 1996 – 1997 Place (city, state): Unspecified Study Setting: **Time 1**: Research laboratories or shelters **Time 2**: Research laboratories, shelters, or telephone Study Population: **Index group**: Mother-child pairs who had been "abused by a partner in the past year" **Comparison group**: Mother-child pairs who responded to an invitation to participate in a "University study of the family" Inclusion criteria: Family must have one child between ages 6-12 living with the mother during the past year Exclusion criteria: Children with: • Various developmental disabilities • Serious birth complications • Prematurity • Long-term chronic illnesses Main independent factor(s): • Marital violence (mother's reporting on Conflict Tactics Scale (CTS; Straus, 1979) • Paternal abuse (mother and child reporting) • ADHD and Conduct Disorder (CD) (Mother reporting on Child Assessment Schedule (CAS) Covariates: • Age • Gender	**Outcome (violence):** Outcome measure Adolescent violent behavior measured at Time 2 Definition • Threatened someone with a weapon • Hurt someone badly enough that they needed bandages/doctor • Threatened to hurt people • Got in many fights • Physically attacked people Type: Physical aggression Instrument: Self-reporting to 5 questions. Circumstance/Situational Context; Proactive/Reactive; Weapon used; Victim-offender relationship: Unspecified **Adverse Health Outcome:** None reported **Are mechanisms of violence theorized?** Yes If yes, state the theory: "Cycle of violence" – exposure to family conflict at an early age, particularly child abuse or coercive parenting, underlie childhood conduct problems and adolescent delinquency	**Violence Outcome** To measure the direct effects of family violence and attention problems in childhood on violent behaviors at adolescence. Time 1 predictors of violent behaviors among adolescent **boys** at Time 2: Risk Factor / Path Coefficient / p-value Marital Violence ----- NS Paternal Abuse ----- NS Attention Problems ----- NS Conduct Problems ----- NS Age 0.20 >0.05 Violence-Nonviolence** Correlation at time 2 0.58 >0.05 (Goodness-of-fit test, $\chi^2(2, N=141) = 1.51$; comparative fit index = 1.00) Time 1 predictors of violent behaviors among adolescent **girls** at Time 2: Risk Factor / Path Coefficient / p-value Marital Violence ----- NS Paternal Abuse 0.33 >0.05 Attention Problems ----- NS Conduct Problems ----- NS Age ----- NS Violence-Nonviolence** Correlation at time 2 0.54 >0.05 (Goodness-of-fit test, $\chi^2(2, N=145) = 3.31$; comparative fit index = 0.99) **nonviolent delinquency includes "snuck into house/building to steal something", "hurt someone else's property", "exchange money/drugs/food for sex", "taken something worth less than $50", "taken something worth more than $50", "stolen a car", "set fire to property", "sold drugs to strangers", and "sold drugs to friends"

Appendix C1: Evidence Table 02: Risk Factors Contributing to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	**Study Quality Group(s) Demographics Sample Size**	**Study Characteristic Risk Factors Studied Inclusion/Exclusion Criteria**	**Outcome (Violence) Definition and characterization.**	**Findings Implications**
1529 Beyers 2001 J Abnormal Child Psycho-logy	Study Design: Prospective cohort study (Pittsburgh Youth Study) - Oldest of 3 cohorts over 6.5 years, from age 13-19.5) [First 5 follow-up conducted every 6 months and subsequent 4 every 12 months.] Study Quality Score: Good Sample size: Orignial: 506 Analysis: 420 (83%) Description of cohort(s) by age, gender, & race/ethnicity Age 13-19.5 y, 13 years old at time of initial assessment Gender: all males Race African American 57%	Study Period (begin, end): Baseline: 1987 and 1988 Follow-up through 1993-1995. Place (city, state): Pittsburgh Study Setting: Advantage and disadvantaged neighborhoods Study Population: Students with highest risk score based on # of antisocial or delinquent act from random samples of students provided by Education Board who participated in initial screening Inclusion criteria: • Participated in at least 6 of 8 assessments subsequent to first follow-up assessment • Lived at address that permitted determination of neighborhood membership at first assessment Exclusion criteria: Engaged in repeated violence before second follow-up assessment Main independent factor(s): Neighborhood SES Other risk factors A total of 19 predictors in four domains: Demographic, individual, family and peer. [See Findings column for list]: Instruments: Several sources: Neighborhood SES based on 1990 U.S. Census; Achenbach Child Behavior Checklis; Self-Reported Delinquency Scale, and Denver High Risk Delinquency Survey.	**Outcome (violence):** Outcome measure Repeated violent delinquency Definition *Violent delinquency*: 1) attacked another with a weapon or with the intent to seriously hurt or kill; 2) used a weapon, force or strong arm method to get something from someone; 3) physically hurt or threatened to hurt someone to get them to have sex and 4) had sex with someone against their will. Must be endorsed by youth or by teacher regarding youth. *Repeated violence*: if one of these items was endorsed on two or more interviewing phases. Instruments: SRD (Elliott) and TRF (Archenbach) Type: see definition Circumstance/Situational Context: see definition Proactive/Reactive Not explicitly stated, but proactive by implication Weapon used: Not specified Victim-offender relationship Not stated. **Adverse Health Outcome:** Not studied **Are mechanisms of violence theorized?** Yes. The Bioecological model (Bronfenbrenner et al)	**Violence Outcome** **What are the predictors of repeated violence among male adolescents living in advantaged neighborhoods?** Prevalence in %: Total Sample 31.1 / 14.1 / 7.3; High SES 20.8 / 9.8 / 2.9; Low SES 37.2 / 16.8 / 9.9 Violent delinquency Repeated violent delinquency Official serious delinquency Unadjusted Odds Ratio (95% CI) High SES (159) / Low SES (261) *Demographic* Older Age: 0.97 (0.46,2.06) / 1.88 (1.24,2.84) Race/Ethnicity: 2.14 (0.69,6.63) / 1.92 (0.74,5.04) Single parent status: 1.00 (0.35,2.89) / 1.41 (0.71,2.84) Family SES: 0.94 (0.90,0.97) / 0.74 (0.72,0.76) *Individual* Physical aggression: 3.09 (2.09,4.56) / 1.49 (1.22,1.82) Impulsive/Hyperactive: 4.68 (3.40,6.44) / 1.61 (1.43,1.81) Low academic achievement: 1.75 (0.79,3.89) / 1.47 (0.85,2.54) Low school motivation: 2.03 (1.37,3.02) / 1.98 (1.53,2.56) Pos attitude to problem beh: 2.19 (1.97,2.44) / 1.89(1.77,2.03) Lack of guilt: 2.33 (1.74,3.12) / 1.80 (1.53,2.12) Had sex (<13.5y): 3.70 (1.26,10.9) / 5.69 (2.47,13.1) Carried hidden weapon: 2.42 (0.82,7.13) / 3.77 (1.83,7.78) *Family* Low communication: 1.16 (1.09,1.22) / 1.72 (1.66,1.79) Boy not involved: 1.72 (1.30,2.28) / 1.56 (1.32,1.86) Discipline not persistent: 1.10 (0.75,1.62) / 1.05 (0.86,1.28) Poor supervision: 0.90 (0.58,1.39) / 1.43 (1.17,1.73) *Peer* Peer delinquency: 4.43 (1.42,13.8) / 2.94 (1.48,5.85) Nonconventional peers: 0.80 (0.73,0.88) / 1.03 (0.97,1.10) Bad friends: 1.41 (1.06,1.86) / 1.58 (1.32,1.88) Adjusted Odds Ratio for significant factors Physical aggression: 3.09 Lack of guilt: 1.53 Had sex: 3.94 Carried hidden weapon: 2.50 Poor communication: 1.57

Appendix C1: Evidence Table 03: Risk Factors Contributing to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) Demographics Sample Size	Study Characteristic Risk Factors Studied Inclusion/Exclusion Criteria	Outcome (Violence) Definition and characterization.	Findings Implications
37 Borowsky 2002 Ambula-tory Pediatrics Page 1 of 2	Study Design: Prospective cohort study (ADD Health - a national study of adolescents in grades 7-12). Individual study quality score Poor (attrition > 20%) Sample size (initial and actual): CompletedTime 1 interviews: 20,745 (77% of invited to participate) Completed Time 2 interviews: 14,738 (71%) Completed Time 1 & 2: 13,781 (66%) Analysis: 11,781 (57%) Index group defined as those with history of grade retention: 3,265 Subjects in analysis 1: Total: 11,781 (57%) Repeated a grade Yes No Girls 1374 3607 Boys 1891 4909 Subjects in analysis 2: Total: 3,265 Girls 1374 Male: 1891 Ethnicity/Race: not reported	Time (begin, end): Time 1 interview: Apr-Dec 95 Time 2 interview: Apr-Aug 96 Place (city, state): US Study Population: • Analysis 1: Adolescents in grades 7-12 • Analysis 2: Adolescents repeating a grade Inclusion criteria: Not specified Exclusion criteria: Not specified Main independent factor(s): History of grade retention Risk/Protective Factors Community characteristics: • Fear of violence in school or neighborhood, • peer suicide involvement, • perceived racism, • connectedness with school Family factors: • Parent-family relationships, • parental expectations for adolescent behavior, • parental modeling, and • household features Individual characteristics: • Academic performance, • violence-related behaviors, • substance use • employment, • Emotional well-being, • health status, • perceived risk of premature mortality, and • religious identity	**Outcome (violence):** **Outcome 1:** **Violence perpetration** Measure: 8 items (see list Findings), equally weighted, reflecting serious interpersonal violence perpetration within the past 12 months. Scale was dichotomized at the 80th percentile. Type: See list of outcome measures in Findings Instruments Used: Not specified Circumstance, Proactive/reactive, Victim-offender relationship: Not specified Weapon used: See measures **Adverse Health Outcome:** Not studied **Are mechanisms of violence theorized?** Yes. A risk and resiliency framework which proposes that vulnerability to health-jeopardizing outcomes among youth is affected by the number and nature of life stressors as well as the presence of protective factors that buffer the impact of these stressors.	**Violence Outcome** 1) To compare violence perpetration between youth who have and have not reported a history of repeating a grade by gender* **Repeat a grade** **Outcome** — **Yes Girls** / **No Girls** / **Yes Boys** / **No Boys** Got into serious fight: 20.6 / 13.3 / 33.2 / 25.5 Participation in group fight: 19.9 / 13.7 / 31.1 / 21.0 Hurt someone badly enough to require bandages or medical care: 6.8 / 4.4 / 17.5 / 11.5 Fighting that resulted in personal Injury requiring medical care: 4.7 / 2.5 / 9.5 / 4.3 Use or threatened use of a weapon: 5.6 / 1.8 / 7.1 / 3.9 Pulled a knife or gun on someone: 5.0 / 1.9 / 12.9 / 5.4 Use of weapon in fight: 3.2 / 1.4 / 8.5 / 3.8 Shot or stabbed someone: 1.4** / 0.7 / 5.7 / 2.0 *p<.001 for all comparisons except as noted **p=.01 2) To identify risk factors for Time 2 violence perpetration among youth **who have repeated a grade** **Odds Ratios (95% CI)** **Risk Factors** — **Girls** / **Boys** Community context Suicidal behavior of friend: 2.16 (1.45-3.21)[c] / 1.80 (1.29-2.50)[c] Family context Suicide behav of family member: 1.02 (0.59-1.76) / 2.06 (1.28-3.31)[b] Gun in home: 1.30 (0.71-2.37) / 1.37 (1.00-1.90)[a] Individual characteristics Suicide attempt: 3.23 (1.86-5.59)[c] / 1.67 (0.92-3.03) Mental health treatment: 2.00 (1.41-2.84)[c] / 1.53 (1.06-2.23)[a] Perceived risk of untimely death: 1.19 (0.91-1.56) / 1.47 (1.20-1.79)[c] Somatic symptoms: 2.17 (1.18-3.99)[a] / 2.65 (1.53-4.58) Poor perceived general health: 2.36 (1.14-4.87)[a] / 2.16 (1.27-3.66)[b] Same sex attraction: 1.20 (0.58-2.46) / 2.05 (1.29-3.26)[b] School problems: 4.49 (2.42-8.34)[c] / 3.08 (1.91-4.95)[c] Skipping school: 2.23 (1.19-4.20)[a] / 2.63 (1.77-3.91)[c] Violence victimization: 3.49 (2.31-5.28)[c] / 3.79 (2.90-4.94)[c] Weapon carrying: 3.60 (2.20-5.89)[c] / 3.24 (2.38-4.24)[c] Violence perpetration at Time 1: 5.77 (3.98-8.35)[c] / 4.72 (3.72-6.01)[c] Alcohol use: 7.17 (3.81-13.5)[c] / 4.91 (3.00-8.07)[c] Marijuana use: 3.53 (1.88-6.61)[c] / 3.45 (2.25-5.28)[c] Other illicit drug use: 2.18 (1.33-3.58)[b] / 2.90 (1.96-4.28)[c] ***Continued***

Appendix C1: Evidence Table 03: Risk Factors Contributing to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) Demographics Sample Size	Study Characteristic Risk Factors Studied Inclusion/Exclusion Criteria	Outcome (Violence) Definition and characterization.	Findings Implications
37 Borowsky 2002 Ambula-tory Pediatrics Page 2 of 2				3) To identify protective factors for Time 2 violence perpetration among youth **who have repeated a grade** (adjusted for age, race/ethnicity, family structure, and welfare status) **Adjusted Odds Ratios (95% CI)** **Risk Factors** — **Girls** — **Boys** Community context Adult caring: 0.46(0.20-1.09) — 0.45(0.26-0.76)[b] School connectedness: 0.29(0.15-0.56)[c] — 0.44(0.27-0.70)[c] School safety: 0.50(0.27-0.93)[a] — 0.78(0.49-1.24) Family context Parental presence: 0.72(0.35-1.50) — 0.49(0.27-0.89)[a] Parent-family connectedness: 0.36(0.21-0.62)[c] — 0.33(0.20-0.54)[c] Parental school expectations: 1.51(0.86-2.65) — 0.48(0.32-0.73)[c] Individual characteristics Emotional well-being: 0.36(0.20-0.64)[c] — 0.51(0.30-0.85)[b] Grade point average: 0.36(0.15-0.91)[a] — 0.23(0.13-0.41)[c] [a] p<0.05; [b] p<0.01; [c] p<0.001 4) Predicted probabilities that an **adolescent who has repeated a grade** will be in top quantile of violent behavior P(N) P(A) P(B) P(C) — Girls R(H) — Girls R(L) — Boys R(H) — Boys R(L) 0 0 0 0 — 56.7 — 12.3 — 52.4 — 23.8 1 1 0 0 — 54.9 — 11.5 — 49.9 — 22.0 1 0 1 0 — 54.2 — 11.3 — 47.6 — 20.4 1 0 0 1 — 48.7 — 9.2 — 35.3 — 13.4 2 1 1 0 — 52.4 — 10.6 — 45.0 — 18.8 2 1 0 1 — 46.9 — 8.7 — 33.0 — 12.2 2 0 1 1 — 46.2 — 8.4 — 31.0 — 11.3 3 1 1 1 — 44.4 — 7.9 — 28.9 — 10.3 P(N): number of protective factors P(A): Protective factor A - parent-family connectedness P(B): Protective factor B - school connectedness/parental presence P(C): Protective factor C - grade point average R(H): High in all 3 risk factors: violence victimization or perpetration, substance use school problems R(L): Low in all 3 risk factors.

Appendix C1: Evidence Table 04: Risk Factors Contributing to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) Demographics Sample Size	Study Characteristic Risk Factors Studied Inclusion/Exclusion Criteria	Outcome (Violence) Definition and characterization.	Findings Implications
5303 Brezina. 1999 Youth & Society	Study Design: Prospective cohort study (Youth in Transition (YIT) survey, initiated in 1966 by the University of Michigan) Study Quality Score: Good if only retention rate is considered (85%) Poor if retention rate and % used in analysis are considered (69%) Sample size: Wave 1: N =2213 Wave 2: N =1883 (85%) Analysis: N=1519 (69%) Description of cohort(s) by age, gender, & race/ethnicity Age: Wave 1: 10th grade boys (beginning of year, modal age: 15 years) Wave 2: 11th grade boys (completion of year, age unspecified) Gender: Boys only Race: unspecified	Study Period (begin, end): 1966-1967 Place (city, state): Nationwide sample of male public high school students clustered in 87 schools. Study Setting: School Study Population: Sample obtained from first and second waves of Youth in Transition Study (1966) at the Insitute for Social Research, Univ. of Michigan (Bachman, O'Malley &Johnson, 1978) Inclusion criteria: Male, 10th grade, but otherwise unspecified Exclusion criteria: Female, but otherwise unspecified Main independent factor(s): Parental Aggression Instrument used to measure factors: Self-report: How often do your parents actually slap you? (likert scale: 1 (never) to 5 (always) Other independent factors: • SES • Parental attachment (Parental Attachment Scale) • Attitude toward aggression (Approval of Aggression Scale) • Parents' mean age • Physical size-respondent • Race (white/non-white	**Outcome (violence):** Outcome measure Child Aggression toward parents Parental aggression toward child Definition • # times a) hit their mother and b) hit their father (past 3 years, W1, past 1.5 years W2). • Measured in a Likert scale: 1 (never) to 5 (always) • 2-item scale created to index overall level of child-to-parent assault. • Mean of these items constitutes scale score Instrument used to measure outcome Child's self-report Type Physical aggression toward parent Circumstance/Situational Context Child-to-parent in response to parent-to-child aggression Proactive/Reactive Hypothesized to be reactive Weapon used Hitting Victim-offender relationship Family	**Violence Outcome** This study tests the reciprocal relationship between parental and child aggression, characterized by countervailing effects. Two models of reciprocity: A) cross-lagged, i.e.,parental aggression at T1 is assumed to have a lagged effect on child aggression in T2 and child aggression in Time 1 is assumed to have a lagged effect (negative/deterrent) on parental aggression in T2. B) contemporaneous, i.e., reciprocal effects are simultaneous, concurrent or occur in proximate time. The current level of aggression toward the child is likely to stimulate immediate reactive aggression toward the parents. Model A Aggression 2 / Model B Aggression 2 Independent variables — Parental — Child — Parental — Child Parental aggression 1: .49(.03)* — .20(.03)* — .53(.03)* — ---------- Child aggression 1: -.08(.03)* — .46(.03)* — ---------- — 49(.03)* Parental aggression 2: ---------- — ---------- — ---------- — .40(.07)* Child aggression 2: ---------- — ---------- — -.19(.06)* — --------- Socio-economic status: -.07(.03) — .03(.02) — -.06(.03) — .06(.02) Race: -.10(.04) — .26(.02)* — -.06(.03) — .30(.03)* Parental attachment: -.04(.03) — -.13(.02)* — -.07(.03) — -.11(.02)* Approval of aggression: ---------- — .08(.02)* — ---------- — .08(.02)* Parents' age: -.06(.02)* — .06(.02)* — -.05(.02) — .08(.02)* Physical size-respondent: -.02(.02) — .02(.01) — -.01(.02) — .02(.02) R**2: .17 — .36 — .25 — .37 **Are mechanisms of violence theorized?** Yes, Strain Theory, Social Learning Theory, and Coercion Theory. Consistent with theorectical accounts, the results indicate a reciprocal relationship between parental and child aggression, characterized by countervailing effects. Although aggression by parents (slapping) tends to foster aggression on the part of the male adolescent child, aggression by the male adolescent child tends to deter the assaultive behavior of parents.

Appendix C1: Evidence Table 05: Risk Factors Contributing to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) Demographics Sample Size	Study Characteristic Risk Factors Studied Inclusion/Exclusion Criteria	Outcome (Violence) Definition and characterization.	Findings Implications
5689 Dishion 1997 Social Develop-ment	Study Design: Prospective cohort study (Oregon Youth Study) Study Quality Score: Good if only retention rate is considered. Poor if both participation and retention rates are considered. Sample size: N=206 (of 277 eligible) Cohort 1: '83-84 (n=102) Cohort 2: '84-85 (n=104) Analysis: 195 (95%) Description of cohort(s) by age, gender, & race/ethnicity Age: Wave 1: 9-10 years Wave 2: 11-12 years Wave 3: 13-14 years Wave 4: 15-16 years Wave 5: 17-18 years Gender: Boys only Race: "predominently white"	Study Period (begin, end): 1983 - 1992 Place (city, state): Medium-sized metropolitan region of the Pacific Northwest Study Setting: School Study Population: At-risk boys, their parents and friends, sampled from public schools in higher juvenile crime neighborhoods. Inclusion criteria: 4th grade boys Exclusion criteria: Female Main independent factor(s) and instruments used: • Antisocial behavior (Child-interview; parent and teacher: CBC-L Externalizing (Achenbach) • Parental Discipline (Family Process Code for nattering and abusive cluster and Discipline questionnaire) • Deviancy training (Topic Code rule- breaking talk and Dyad Violence questionnaire)	**Outcome (violence):** Outcome measure Number of violent acts committed in past year Definition Self report: Assault, robbery and rape. Arrest: assault, menacing, robbery, rape. Instrument used to measure outcome Child's self-report (Elliot's delinquency interview, 1983) Juvenile court records from county of residence – all police contacts, excluding child neglect or abuse Type: see above Circumstance/Situational Context Except gang-related violence, not specified Proactive/Reactive Not specified Weapon used Not specified Victim-offender relationship Peer and other unspecified **Adverse Health Outcome:** None **Are mechanisms of violence theorized?** Yes If yes, state the theory: Coercion Model of Antisocial Behavior	**Violence Outcome** With infrequent violence reported during adolescence, a wave by wave growth model was difficult to model. Instead, indicators of violence (self report and juvenile records) were aggregated throughout adolescence and analyzed using multiple regression procedures. **Correlations between constructs (N=195)** **Construct 1 2 3 4 5** 1. Parental discipline 1.00 2. Child antisocial -.65*** 1.00 3. Peer deviancy training -.19** .42*** 1.00 4. Self-report violence -.21** .51*** .32*** 1.00 5. Arrest violence -.29*** .34*** .32*** .21** 1.00 Note: * $p < .05$; ** $p < .01$; *** $p < .001$ **Multiple regression analyses for Self-reported violence (n=194):** β t p Childhood antisocial behavior 0.44 5.59 <0.001 Parental discipline in childhood 0.11 n/r ns Deviancy training 0.29 4.48 <0.01 Model R**2 is 0.32, F=31.02, p<0.001. **Logistic regression analyses for Police contacts for violence offense (n=194):** β Wald p Childhood antisocial behavior 0.48 3.16 <0.10 Parental discipline in childhood -0.48 3.55 <0.10 Deviancy training 0.78 11.2 <0.01 The odds ratio for Arrest was 2.14, corresponding to a probability of 0.76. Thus controlling for the influence of earlier levels of both child antisocial behavior and parental discipline practices, boys who engage in deviancy training with friends tended to have a high probability of being arrested for a violent act than those whose friendships were based on normative topics.

Appendix C1: Evidence Table 06: Risk Factors Contributing to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) Demographics Sample Size	Study Characteristic Risk Factors Studied Inclusion/Exclusion Criteria	Outcome (Violence) Definition and characterization.	Findings Implications
5704 Dornbusch 1999 Intl J Adolesc Medicine and Health Page 1 of 5	Study Design: Prospective cohort study (ADD Health - the National Longitudinal Study of Adolescent Health) Study Quality Score: Poor (attrition believed to be >20%) Sample size: 13,568 [n used in the analysis not reported. However, Figure 2 gave an n=9,233 in the cross-lagged model. The question is raised as to whether 9,233 cases were used in all analyses] Description of cohort(s) by age, gender, & race/ethnicity Age: Not specified Gender: Not specified Race: Not specified	Study Period (begin, end): 1995-1996 Place (city, state): U.S.A. Study Setting: School-based Study Population: A nationally representative sample of 7th-12th grade students in the U.S., surveyed in Waves I and II of the National Longitudinal Study of Adolescent Health, 1994-1996 Inclusion criteria: All adolescents who participated in both Wave I (1995) and Wave II (1996) in-home data collection, and for whom sample weights were available. Exclusion criteria: None Main independent factor(s): •Cigarette smoking •Alcohol use •Marijuana •Cocaine •Inhalants •Other illicit drugs •Polydrug use (multiple drugs) - 2 derived indicators *Continued*	**Outcome (violence):** Outcome measure Violent behavior at Time 2 Definition Any of the following in the preceding 12 months: •pulled knife/gun •shot/stabbed someone •in a serious physical fight •used a weapon in a fight •victim needed bandages or medical care •used or threatened to use weapon to get something •in a group against group fight Instrument used to measure outcome None Type Physical aggression/fight, use or threat to use a weapon Circumstance/Situational Context Not specified Proactive/Reactive Not specified Weapon used Not specified Victim-offender relationship Not specified *Continued*	**Violence Outcome** To study the effects of the use of 6 types of substances on the longitudinal change in adolescent violence. **Multivariate Regression-Baseline Model 1:** Time 2 violence Everyone / Male / Female R^2: 0.277 / 0.239 / 0.318 Factor — Coeff. p-value — Coeff. p-value — Coeff. p-value Female gender: -0.014 <0.001 Age: -0.002 <0.05 — -0.001 ns — -0.003 <0.001 Parent education: -0.002 <0.01 — -0.003 <0.05 — -0.001 ns Intact family structure: -0.009 <0.001 — -0.012 <0.01 — -0.006 <0.01 African American: 0.006 ns — 0.005 ns — 0.006 ns Hispanic American: 0.009 <0.05 — 0.015 <0.05 — 0.003 ns Asian American: 0.003 ns — 0.008 ns — -0.002 ns Time 1 violence: 0.073 <0.001 — 0.071 <0.001 — 0.076 <0.001 **Multivariate Regression w/ Cigarettes-Model 2:** Time 2 violence Everyone / Male / Female R^2: 0.288 / 0.258 / 0.323 Factor — Coeff. p-value — Coeff. p-value — Coeff. p-value Female gender: -0.016 <0.001 Age: -0.003 <0.001 — -0.003 <0.05 — -0.004 <0.001 Parent education: -0.002 <0.01 — -0.003 <0.05 — -0.001 ns Intact family structure: -0.006 <0.01 — -0.008 <0.05 — -0.005 <0.05 African American: 0.013 <0.001 — 0.014 <0.05 — 0.010 <0.05 Hispanic American: 0.013 <0.001 — 0.019 <0.01 — 0.005 ns Asian American: 0.007 ns — 0.014 ns — -0.000 ns Time 1 violence: 0.068 <0.001 — 0.064 <0.001 — 0.074 <0.001 Cigarettes: 0.005 <0.001 — 0.008 <0.001 — 0.002 <0.001 **Multivariate Regression w/ Alcohol-Model 3:** Time 2 violence Everyone / Male / Female R^2: 0.285 / 0.247 / 0.327 Factor — Coeff. p-value — Coeff. p-value — Coeff. p-value Female gender: -0.015 <0.001 Age: -0.003 <0.001 — -0.003 <0.05 — -0.004 <0.001 *Continued*

Appendix C1: Evidence Table 06: Risk Factors Contributing to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) Demographics Sample Size	Study Characteristic Risk Factors Studied Inclusion/Exclusion Criteria	Outcome (Violence) Definition and characterization.	Findings Implications
5704 Dornbusch 1999 Intl J Adolesc Medicine and Health page 2 of 5		<u>Covariates</u> Gender Family structure Parent education Age Race Ethnicity <u>Instrument used to measure factors:</u> Add Health designed questionnaire	**<u>Adverse Health Outcome</u>:** Not studied **<u>Are mechanisms of violence theorized?</u>** No	<u>Time 2 violence</u> <u>Everyone</u> <u>Male</u> <u>Female</u> <u>Factor</u> <u>Coeff.</u> <u>p-value</u> <u>Coeff.</u> <u>p-value</u> <u>Coeff.</u> <u>p-value</u> Parent education -0.002 <0.01 -0.003 <0.01 -0.001 ns Intact family structure -0.008 <0.001 -0.010 <0.01 -0.005 <0.05 African American 0.009 <0.01 0.010 ns 0.009 <0.1 Hispanic American 0.011 <0.01 0.015 <0.05 0.005 ns Asian American 0.006 ns 0.012 ns -0.000 ns Time 1 violence 0.068 <0.001 0.065 <0.001 0.072 <0.001 Alcohol 0.005 <0.001 0.006 <0.001 0.004 <0.001 **Multivariate Regression w/ Marijuana-Model 4:** <u>Time 2 violence</u> <u>Everyone</u> <u>Male</u> <u>Female</u> R^2 0.282 0.245 0.323 <u>Factor</u> <u>Coeff.</u> <u>p-value</u> <u>Coeff.</u> <u>p-value</u> <u>Coeff.</u> <u>p-value</u> Female gender -0.015 <0.001 Age -0.003 <0.001 -0.002 ns -0.003 <0.001 Parent education -0.002 <0.01 -0.003 <0.01 -0.001 ns Intact family structure -0.007 <0.001 -0.009 <0.05 -0.005 <0.05 African American 0.007 <0.05 0.006 ns 0.008 <0.1 Hispanic American 0.010 <0.01 0.014 <0.05 0.004 ns Asian American 0.004 ns 0.009 ns -0.002 ns Time 1 violence 0.068 <0.001 0.065 <0.001 0.073 <0.001 Marijuana 0.005 <0.001 0.007 <0.01 0.004 <0.01 **Multivariate Regression w/ Cocaine-Model 5:** <u>Time 2 violence</u> <u>Everyone</u> <u>Male</u> <u>Female</u> R^2 0.277 0.239 0.319 <u>Factor</u> <u>Coeff.</u> <u>p-value</u> <u>Coeff.</u> <u>p-value</u> <u>Coeff.</u> <u>p-value</u> Female gender -0.014 <0.001 Age -0.002 <0.05 -0.001 ns -0.003 <0.001 Parent education -0.002 <0.01 -0.003 <0.05 -0.001 ns Intact family structure -0.009 <0.001 -0.012 <0.01 -0.006 <0.01 African American 0.006 ns 0.005 ns 0.007 ns Hispanic American 0.009 <0.05 0.014 <0.05 0.003 ns Asian American 0.003 ns 0.008 ns -0.002 ns Time 1 violence 0.073 <0.001 0.071 <0.001 0.075 <0.001 Cocaine -0.001 ns -0.005 ns 0.007 ns *<u>Continued</u>*

Appendix C1: Evidence Table 06: Risk Factors Contributing to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) Demographics Sample Size	Study Characteristic Risk Factors Studied Inclusion/Exclusion Criteria	Outcome (Violence) Definition and characterization.	Findings Implications
5704 Dornbusch 1999 Intl J Adolesc Medicine and Health page 3 of 5				**Multivariate Regression w/ Inhalant-Model 6:** Time 2 violence Everyone / Male / Female R^2: 0.278 / 0.240 / 0.319 Factor — Coeff. p-value — Coeff. p-value — Coeff. p-value Female gender: -0.014 <0.001 Age: -0.002 <0.05 — -0.001 ns — -0.003 <0.001 Parent education: -0.002 <0.01 — -0.003 <0.05 — -0.001 ns Intact family structure: -0.009 <0.001 — -0.012 <0.01 — -0.006 <0.01 African American: 0.006 <0.1 — 0.005 ns — 0.007 ns Hispanic American: 0.010 <0.05 — 0.015 <0.05 — 0.003 ns Asian American: 0.003 ns — 0.009 ns — -0.002 ns Time 1 violence: 0.071 <0.001 — 0.069 <0.001 — 0.075 <0.001 Inhalant: 0.007 ns — 0.008 ns — 0.006 ns **Multivariate Regression w/ Other Illicit Drugs-Model 7:** Time 2 violence Everyone / Male / Female R^2: 0.278 / 0.239 / 0.321 Factor — Coeff. p-value — Coeff. p-value — Coeff. p-value Female gender: -0.015 <0.001 Age: -0.002 <0.01 — -0.001 ns — -0.003 <0.001 Parent education: -0.002 <0.01 — -0.003 <0.05 — -0.001 ns Intact family structure: -0.009 <0.001 — -0.011 <0.01 — -0.006 <0.01 African American: 0.007 <0.1 — 0.006 ns — 0.008 <0.1 Hispanic American: 0.010 <0.01 — 0.015 <0.05 — 0.004 ns Asian American: 0.003 ns — 0.009 ns — -0.002 ns Time 1 violence: 0.071 <0.001 — 0.069 <0.001 — 0.073 <0.001 Other illicit drugs: 0.004 ns — 0.004 ns — 0.005 <0.1 **Multivariate Regression w/ All Substances-Model 8:** Time 2 violence Everyone / Male / Female R^2: 0.292 / 0.263 / 0.329 Factor — Coeff. p-value — Coeff. p-value — Coeff. p-value Female gender: -0.016 <0.001 Age: -0.004 <0.001 — -0.004 <0.01 — -0.004 <0.001 Parent education: -0.002 <0.01 — -0.003 <0.01 — -0.001 ns Intact family structure: -0.006 <0.01 — -0.008 <0.05 — -0.005 <0.05 African American: 0.013 <0.001 — 0.015 <0.01 — 0.011 <0.05 *Continued*

Appendix C1: Evidence Table 06: Risk Factors Contributing to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) Demographics Sample Size	Study Characteristic Risk Factors Studied Inclusion/Exclusion Criteria	Outcome (Violence) Definition and characterization.	Findings Implications
5704 Dornbusch 1999 Intl J Adolesc Medicine and Health page 4 of 5				Time 2 violence Everyone / Male / Female Factor — Coeff. p-value — Coeff. p-value — Coeff. p-value Hispanic American 0.013 <0.001 0.019 <0.01 0.005 ns Asian American 0.008 ns 0.015 ns -0.000 ns Time 1 violence 0.066 <0.001 0.062 <0.001 0.070 <0.001 Cigarettes 0.004 <0.001 0.007 <0.001 0.001 ns Alcohol 0.003 <0.01 0.003 <0.01 0.003 <0.01 Marijuana 0.002 ns 0.002 ns 0.001 ns Cocaine -0.008 ns -0.014 ns 0.003 ns Inhalant 0.005 ns 0.010 ns 0.002 ns Other illicit drugs 0.000 ns -0.000 ns 0.002 ns **Mean level of Time 2 Violence by prevalence of specific drug use and of polydrug use:** Number of substances used 0 — 1 — 2 — 3 — 4 — 5 — 6 Mean T2 Violence 0.054 0.090 0.124 0.201 0.214 0.243 0.550 Ever used alcohol 0.093 0.120 0.201 0.216 0.246 *p-value** *ns* *ns* *ns* *ns* *ns* Ever used cigarettes 0.084 0.116 0.200 0.213 0.236 *p-value** *ns* *<0.01* *ns* *ns* *ns* Ever used marijuana 0.168 0.190 0.201 0.214 0.245 *p-value** *ns* *<0.01* *ns* *ns* *ns* Ever used cocaine 0.000 0.180 0.288 0.246 0.258 *p-value** *ns* *ns* *<0.1* *ns* *ns* Ever used inhalants 0.046 0.166 0.208 0.234 0.236 *p-value** *<0.1* *ns* *ns* *ns* *ns* Ever used other drugs 0.334 0.115 0.169 0.201 0.242 *p-value** *<0.1* *ns* *ns* *ns* *ns* *p-value for significance test comparing users of a drug with non-users, controlling for number of substances used *Continued*

Appendix C1: Evidence Table 06: Risk Factors Contributing to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) Demographics Sample Size	Study Characteristic Risk Factors Studied Inclusion/Exclusion Criteria	Outcome (Violence) Definition and characterization.	Findings Implications
5704 Dornbusch 1999 Intl J Adolesc Medicine and Health page 5 of 5				**Mean level of Time 2 Violence by specific substance use and overall frequency of polydrug use:** Frequency score of polydrug use 0 / 1 / 2 / 3 / 4 to 5 / 6 to 7 / 8 to 18 Mean T2 Violence: 0.054 / 0.089 / 0.103 / 0.129 / 0.153 / 0.185 / 0.298 Ever used alcohol: 0.088 / 0.107 / 0.120 / 0.150 / 0.183 / 0.301 *p-value**: *ns* / *ns* / *ns* / *ns* / *ns* / *<0.1* Ever used cigarettes: 0.086 / 0.095 / 0.119 / 0.149 / 0.185 / 0.295 *p-value**: *ns* / *ns* / *<0.1* / *ns* / *ns* / *ns* Ever used marijuana: 0.175 / 0.155 / 0.126 / 0.164 / 0.194 / 0.301 *p-value**: *ns* / *<0.1* / *ns* / *ns* / *<0.05* / *ns* Ever used cocaine: 0.000 / 0.118 / 0.158 / 0.197 / 0.210 / 0.373 *p-value**: *ns* / *ns* / *ns* / *ns* / *ns* / *<0.05* Ever used inhalants: 0.052 / 0.279 / 0.250 / 0.163 / 0.140 / 0.338 *p-value**: *ns* / *<0.1* / *<0.05* / *ns* / *<0.05* / *ns* Ever used other drugs: 0.180 / 0.204 / 0.227 / 0.086 / 0.170 / 0.293 *p-value**: *ns* / *ns* / *ns* / *<0.05* / *ns* / *ns* *p-value for significance test comparing users of a drug with non-users, controlling for frequency of polydrug use **Mean level of Time 2 violence by gender and by prevalence and frequency of polydrug use:** Mean level of T2 violence Number of substances used / Boys / Girls 0: 0.07 / 0.04 1: 0.12 / 0.06 2: 0.16 / 0.08 3: 0.28 / 0.12 4: 0.30 / 0.13 5: 0.31 / 0.17 6: 0.66 / 0.41 Mean level of T2 violence Frequency score of polydrug use / Boys / Girls 0: 0.07 / 0.04 1: 0.13 / 0.05 2: 0.12 / 0.09 3: 0.17 / 0.08 4 to 5: 0.22 / 0.09 6 to 7: 0.23 / 0.14 8 to 18: 0.40 / 0.18 **Associated Adverse Health Outcome** Not studied

Appendix C1: Evidence Table 07: Risk Factors Contributing to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) Demographics Sample Size	Study Characteristic Risk Factors Studied Inclusion/Exclusion Criteria	Outcome (Violence) Definition and characterization.	Findings Implications
1573 Ellickson 2001 J Adolescent Health	Study Design: Prospective cohort study; secondary data analysis of RAND Adolescent Panel Study. Study Quality Score: Poor (retention rate <80%) Sample size: 6527 reduced to 4327 (66%) after exclusions from 30 schools at Grade 7 and assessed at Grade 12. Nonsmoker (NON): 2230 Experimental (EXP): 1322 Smoker (SMK): 775 Description of cohort(s) by age, gender, & race/ethnicity Age Grade 7 to 12 Gender: 48% female 52% male male female NON 994 1236 EXP 703 619 SMK 301 474 Race African American 10.2% Hispanic: 9.8 % Asian: 8.2 % White: 68% Other: 4.2%	Study Period (begin, end): Baseline: 1985 Assessment: 1990 Place (city, state): California and Oregon Study Setting: Schools Study Population: Grade 7 students recruited from 30 schools Inclusion criteria: Participate in RAND Adolescent Panel Study Exclusion criteria: Dropped out of study, lost to follow-up failed to complete grade 12 survey, missing smoking information grade 7 Main independent factor(s): • Smoking status Other risk factors: *Academic problems*: • Skipped or been sent out of school • Missed 5 + days over last year • Earned grades C or less • Repeated grade *Substance Use:* • Weekly marijuana use • Weekly alcohol use • Binge drinking • Hard drug use ever *Other Problem Behavior*: • Stealing Instruments Used: Investigator-developed	**Outcome (violence):** Outcome measure • predatory violence • relational violence Definition *Predatory violence*: Gang fighting, using force to get money or things from others, carrying a hidden weapon other than a pocket knife, disorderly conduct, or attacking someone with the intent to seriously harm or kill. *Relational violence* (hitting or threatening to hit family or non family) Type: see definition Circumstance/Situational Context 9-predatory violence including 4 gang fighting, 5 robbery, 3 assault, 7 relational violence Proactive/Reactive, Weapon used. Victim-offender relationship: Not specified **Adverse Health Outcome:** Not studied **Are mechanisms of violence theorized?** Yes Problem Behavior Theory	**Violence Outcome** To demonstrate that smoking at grade 7 correlates with other problem behaviors both concurrently or after five years. **Weighted percentages Grade 7 non smokers (NON), Experimenters (EXP) and Smokers (SMK) with Violent Behaviors at Grade 12** **Total** **NON (2230)** **EXP (1322)** **SMK (775)** **% Predatory violence** 16.1 26.4 35.4 **% Relational violence** 42.5 57.8 60.1 **Male** **NON (994)** **EXP (703)** **SMK (301)** **% Predatory violence** **24.7** 36.4 51.7 **% Relational violence** 52.9 64.9 69.6 **Female** **NON (1236)** **EXP (619)** **SMK (474)** **% Predatory violence** 7.6 11.9 21.2 **% Relational violence** 32.4 47.5 51.8 **All are significant at p<0.05.** **[**Multivariate analysis findings not usable because it did not separate predatory and relational violence from other problem behavior.]

Appendix C1: Evidence Table 08: Risk Factors Contributing to Violent Behavior and Adverse Health Outcome

Record # Author Year,Jnl	Study Quality Group(s) Demographics Sample Size	Study Characteristic Risk Factors Studied Inclusion/Exclusion Criteria	Outcome (Violence) Definition and characterization.	Findings Implications
9629 Ellickson 2003 Pediatrics	Study Design: Prospective cohort study (Rand Adolescent Panel Study - 30 California and Oregon schools) Study Quality Score: Poor (Attrition rate > 20%) Sample size: Final sampe used: Grade 7: 6338 Grade 12: 4265 (67%) Nondrinkers: 1059 Experimenters: 1964 Drinkers: 1242 Age: Baseline: grade 7 Violence outcome measured at grade 12 Gender: 48% female at baseline Race: Unspecified (32% self-classified as minority at baseline)	Study Period (begin, end): 1985-1995 Place (city, state): California and Oregon Study Setting: schools Study Population: All 7th grade students at 30 study schools who completed a survey Inclusion criteria: see above Exclusion criteria: • Missing drinking information at grade 7 • Dropped out of the study at grade 12 or age 23 • Lost to follow up • Failed to complete the survey Main independent factor(s): Drinking status at grade 7 • Nondrinkers (never had a drink of alcohol, not even a few sips), • experimenters (drank alcohol <3 times in the past year and not in the past month), and • drinkers (drank alcohol 3 or more times in the past year or drank alcohol in the past month) Instruments Used: Investigator-developed Covariates Measured at baseline (grade 7): • Demographic variables • Substance use • Academic problems • Problem behaviors (stealing)	**Outcome (violence):** Outcome measure Predatory violence, Relational violence Definition • Predatory violence: gang fighting, using force to get money or things from others, carrying a hidden weapon, attacking someone with the intent to seriously harm or kill • Relational violence = hitting or threatening family or nonfamily Type: See definition Circumstance/Situational Context; Proactive/Reactive; Weapon used; Victim-offender relationship: Unspecified **Adverse Health Outcome:** Not studied **Are mechanisms of violence theorized?** No	**Violence Outcome** To study the association between early adolescent drinking status (at grade 7) and later problem behavior such as violence (at grade 12). Problem Behavior At Grade 12 Grade 7 Drinking status / n / Predatory Violence Weighted % / Relational Violence Weighted % Nondrinkers 1059 17.4 [a] 43.9 [a] Experimenters 1964 21.7 [b] 51.1 [b] Drinkers 1242 30.8 [v] 55.7 [v] [a,b ,v] %'s do not share the same superscript differ at p<0.05. [The regression model lumped all problem behaviors including non-violent behavior. Thus the findings are not reported here. No adjusted p-values were reported for predatory and relational violence.]

Appendix C1: Evidence Table 09: Risk Factors Contributing to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) Demographics Sample Size	Study Characteristic Risk Factors Studied Inclusion/Exclusion Criteria	Outcome (Violence) Definition and characterization.	Findings Implications
5894 Felson 1992 The Socio-logical Quarterly	Study Design: Prospective Comparative Cohort Study Study Quality Score: Good if only retention rate is considered (85%) Poor if retention rate and % used in analysis are considered (69%) Sample size: Wave 1: N =2213 Wave 2: N =1883 (85%) Analysis: N=1519 (69%) (Information obtained from #5303) Sample size: 1886 (sample taken from the Youth in Transition project-Bachman, 1970) Description of cohort(s) by age, gender, & race/ethnicity Age: 10th grade students at baseline Gender: all male Race- Not reported	Study Period (begin, end): T1- 10th grade students in the fall T2- same students 18 months later in the spring of their junior year. Year not specified Place (city, state): Not reported (The Youth in Transition project was started by University of Michigan, in 1966.) Study Setting: School. Study Population 10th grade boys Inclusion criteria: Not reported Exclusion criteria: Not reported Main independent factor(s): • Anxiety (7-item scale) • Tension (5-item scale) • Depression (6-item scale) • Somatic symptoms (18-item scale) • Anger (7-item scale) Instruments Used: Youth in Transition questionnaire: Cronbach's alphas for the 5 independent measures are 0.76, 0.51, 0.83, 0.58, 0.63 respectively.	**Outcome (violence):** Outcome measure Physical violence Definition An 8-time scale measure including: • Threatened or hurt someone • Hit their parents or teachers • Engaged in gang fights • Used weapons Type: See above Circumstance/Situational Context, Not reported Proactive/Reactive This study is looking to correlate that frustration and stress increases the likelihood of aggression Weapon used Included in definition but not in analysis Victim-offender relationship Not reported **Adverse Health Outcome:** Not reported **Are mechanisms of violence theorized?** Yes If yes, state the theory: Aversive events in general lead to aggression because they produce negative affect. This emphasizes subjective states rather than external events as determinants of aggression.	**Violence Outcome** **Examines the interrelationship between stressful life events, negative affect, and aggression.** **Zero Order Correlations, Means, and SD** **Time 2 Variable** Time 1 Variable / Physical Aggression Anxiety .08 Tension .09 Somatic Symptoms .20 Depression .12 Anger .20 Verbal Aggression .27 Physical Aggression .39 School Deviance .26 Theft/ Vandalism .22 Mean 123.8 SD 44.7 **Standardized Coefficients Representing Effects of Distress and Anger (T1) on Behavior (T2) and controlling for behavior (T1)** **Dependent Variable** Physical Aggression Anxiety .04 Tension .06* Symptoms .11* Depression .04* Anger .10* * p<.05 • Anger predicts change in aggressive behavior over time.

Appendix C1: Evidence Table 10: Risk Factors Contributing to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) Demographics Sample Size	Study Characteristic Risk Factors Studied Inclusion/Exclusion Criteria	Outcome (Violence) Definition and characterization.	Findings Implications
634 Foshee 2001 Preventive Medicine Page 1 of 2	Study Design: Prospective Cohort Study (Safe Date Program) Study Quality Score: Fair (if 90% retention rate is used. Evidence of validity check of instrument for measuring risk factors and outcomes not provided): Sample size: Eligible: 2,434 Consented: 2,045 (84%) Baseline: 1,965 (96%) 1 year followup: 1759 (90%) 1,013 subjects who met eligibility; 931 subjects in multivariate analysis: 529 female; 402 male Description of cohort(s) by age, gender, & race/ethnicity Age: 8th or 8th graders Gender: 51.4% female Race: 77.3% white	Study Period (begin, end): • Baseline: Oct 1994; • Program activities: Nov 94 - Mar 1995; • Follow-up: 1 year after program activities Place (city, state): Johnston County, North Carolina Study Setting: 14 public schools Study Population: 8th and 9th grade students Inclusion criteria: Those who completed baseline and follow-up, who reported at follow-up that they had begun dating, who lived with a mother, and who reported at baseline that they had never been a perpetrator of dating violence. Exclusion criteria: Not specified Main independent factor(s): Social-environmental: • Peer environment • Family environment • Social norms Individual • Personal competency • Involvement in other problem behaviors • Demographic characteristics Instruments used: Investigator-developed.	**Outcome (violence):** Outcome measure Dating violence perpetration Definition Violence was defined on a three-level ordinal variable on ever done the following: • **Severe (2)**: Choked, burned them, hit with a fist or something hard, beat, assault with knife or gun • **Mild** (1): Slapped, scratched, bent back their fingers, bit, pushed, grabbed or shoved, dumped out of a car, threw object at, forced sex, forced doing unwanted sexual things. • **none** Type: Dating violence Circumstance/Situational Context On a date Proactive/Reactive: Proactive Weapon used: Not specified Victim-offender relationship a person that the respondent dated **Adverse Health Outcome:** Not specified **Are mechanisms of violence theorized?** Ecologic perspective with 6 domains as opposed to the more typical approach of examining only individual level predictors.	The purpose of this study is to examine predictors of adolescent dating violence from several domains guided by an ecological perspective. **Domain-Specific Models for Identifying Longitudinal Predictors of Dating Violence Perpetration** **Females** OR+ / **Males** OR+ **Peer environment (n=514) (n=415)** Friends who are victims 1.65* 0.75 Friends who are perpetrators 1.28 3.27** **Family Environment (n=504) (n=435)** Family Structure 1.14 0.69 Supervision by Mom 0.79 0.72* Being hit by Mom 0.92 0.78 Being hit by an adult 1.16 1.10 Seen a parent hit a parent 1.04 1.15 **Social Norms (n=523) (n=452)** Acceptance of prescribed norms 1.48 1.92* Negative sanctions 0.83 1.12 Perceived normalcy 1.00 1.44* Gender Stereotyping 1.02 1.30 **Personal competencies (n=526) (n=443)** Self-esteem 0.96 0.95 Destructive responses to anger 1.05 1.60* Poor communication skills 1.33 0.93 Depressed affect 1.21 0.98 **Other problem behavior (n=536) (n=460)** Physical fight with same gender 1.36 1.23 Brought weapon to school 0.72 1.61 Alcohol use 1.20 1.08 **Demographic characteristics (n=514) (n=450)** Age 1.10 1.13 Race 0.59* 0.47** Mom education 1.00 0.95 + Adjusted for other variables in the SAME domain * significant at p=05; ** significant at p=01. *Continued*

Appendix C1: Evidence Table 10: Risk Factors Contributing to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) Demographics Sample Size	Study Characteristic Risk Factors Studied Inclusion/Exclusion Criteria	Outcome (Violence) Definition and characterization.	Findings Implications
634 Foshee 2001 Preventive Medicine Page 2 of 2				**Final Cumulative Model for Identifying Longitudinal Predictors of Dating Violence Perpetration Females (n=529)** ***b*** **SE OR+ p** Intercept 1 -2.72 .35 0.00 .000 Intercept 2 -1.11 .31 0.00 .000 Friends who are victims .50 .24 1.65 .035 Alcohol use .17 .09 1.19 .046 Race -.60 .25 .56 .017 **Final Cumulative Model for Identifying Longitudinal Predictors of Dating Violence Perpetration Males (n=402)** ***b*** **SE OR+ p** Intercept 1 -2.44 .83 .00 .003 Intercept 2 -1.29 .82 .00 .112 Friends who are Perpetrators .56 .41 1.75 .171 Supervision by mom -.12 .18 .89 .494 Acceptance of prescribed Norms .57 .29 1.77 .053 Perceived normalcy -.33 .19 1.39 .075 Destructive responses to anger -.03 .22 .97 .894 Brought weapon to school .33 .32 1.40 .281 Race -.44 .33 .65 .182 + Adjusted for all variables in the model.

Appendix C1: Evidence Table 11: Risk Factors Contributing to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) Demographics Sample Size	Study Characteristic Risk Factors Studied Inclusion/Exclusion Criteria	Outcome (Violence) Definition and characterization.	Findings Implications
6213 Halpern 1993 Social Biology	Study Design: Prospective cohort study Study Quality Score: Poor (only 50-60% of subjects were used in analysis.) Sample size: Initial: 127 (≈ 50% of eligible) Analysis: 64-81 (50-64%) Description of cohort(s) by age, gender, & race/ethnicity Age: 12-13 year old at entry Gender: All males Race: White	Study Period (begin, end): Not specified. 5 semiannual interviews followed by a sixth questionnaire 1 year later (about 3 years in duration) Place (city, state): Southeastern state Study Setting: interviews at subject's home Study Population: 7th and 8th grade white males age 12 and 13 in school district Inclusion criteria: Exclusion criteria: Parental consent not given Main independent factor(s): • Testosterone levels Covariates None mentioned. Instrument used to measure factors: • Self-reported questionnaire • Physical exam (Tanner stage)	**Outcome (violence):** Outcome measure • self reported fighting: a) fights; b) fights non-family at 6-month or 1-year follow-up. • Provoked aggression scale score at the last followup. • Aggression scale scores from the Adjective Checklist and the Personality Research Form Definition: Instrument used to measure outcome • Self-report on questionnaire, items taken from the Interpersonal Competence Scale-S (Cairns et al., 1989) • Personality Research Form, Form E • Adjective Checklist • Interpersonal Competence Scale-S • Olweus Multifaceted Aggression Inventory (OMAI) Scales Type: physical fighting Circumstance/Situational Context Proactive/Reactive Weapon used Victim-offender relationship: see above **Adverse Health Outcome:** Not studied **Are mechanisms of violence theorized?** No	**Violence Outcome** The primary objective of this study was to assess the influence of pubertal increases of testosterone on aggressive behavior of adolescent males. **Mean (SD) of Aggression Measures by Rounds** Round* / T (ng/dl) (n=64) / Pubertal Development. (n=81) / Fights (n=78) / Fights Non-Family (n=73) 1 / 157(122) / -0.83(0.98) / 2.08(1.26) / 1.65(1.30) 2 / 242(165) / -0.12(0.87) / 2.24(1.35) / 0.97(1.22) 3 / 294(154) / 0.17(0.82) / 2.06(1.18) / 0.89(1.24) 4 / 339(191) / 0.41(0.80) / 2.14(1.32) / 0.97(1.31) 5 / 369(179) / 0.65(0.83) / 2.12(1.16) / 0.87(1.30) 6 / 433(187) / 0.99(0.65) / 2.01(1.11) / 1.08(1.39) *Round 1 ratings reflect frequency in past year. Rounds 2-6 reflect frequency in past 6 months. Repeated measure ANOVA for change scores, 6-month change periods, lagged by 6 months showed no significance difference for testosterone change, time, and pubertal change as well as the interactions between time and testosterone and pubertal change.

Appendix C1: Evidence Table 12: Risk Factors Contributing to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) Demographics Sample Size	Study Characteristic Risk Factors Studied Inclusion/Exclusion Criteria	Outcome (Violence) Definition and characterization.	Findings Implications
2658 Herrenkohl 1997 Am J Ortho-psychiatry	Study Design: Prospective comparative cohort study (16-year study) Study Quality Score: • Retention rate unknown. • % in analysis: 66%-69%. Sample size: Total initial sample: n=457 children from 297 families. Final sample: Parent-child interaction: n=317 (69%); Adolescent sexual abuse: n=303 (66%) Description of cohort(s) by age, gender, & race/ethnicity Age: Time 1: Range 18 mos – 6 yrs Time 2: Range 14 – 22 yrs (90% between 14 – 20 yrs) Gender: Initial sample: Male n=248 (54.3%) Female n=209 (45.7%) Race: Initial sample: White 83% Spanish surname 12% African American 5%	Study Period (begin, end): Time 1: 1976-1977 Time 2: 1990-1992 Place (city, state): Bethlehem, Pennsylvania Study Setting: Time 1: Observations of parent-child interactions in home Time 2: Unspecified Study Population: Preschool maltreated and non-maltreated children recruited from 5 sources: • Child welfare abuse programs • Protective service programs • Head-Start classrooms • Day-care programs • Private nursery programs Inclusion criteria: Children from one of the above from a family with at least one preschool child between the ages of 18 months and 6 years Exclusion criteria: Unspecified Main independent factor(s): Severity of the following domains based on mean weighted mean scores of items during the past 3 months at interview: [see finding list] • Mother's physical and emotional discipline • Evidence of neglect • Occurrence of sexual abuse • Quality of mother-child interactions Covariates • Age • Sex • SES	**Outcome (violence):** Outcome measure An Adolescent assaultive behavior score based on 7 items rated for frequency on a 9-point scale. Range: 0-35; mean 3.83. Definition • Being involved in a gang fight • Hitting parents, people at work, or others • Hitting with the idea of seriously injuring or killing • Having sexual relations with someone against his or her will • Using force or strong-arm methods to get money or things from people Instrument(s) Used Items were taken from the Elliott et. Al. (1987) national survey instrument. Type Aggravated assault, non-aggravated assault, gang fight, robbery, physical aggression, rape/sexual assault Circumstance/Situational Context, Proactive/Reactive Weapon used Victim-offender relationship Unspecified **Adverse Health Outcome:** None **Are mechanisms of violence theorized?** No	**Violence Outcome** To examine the relationship between preschool parenting-based variables and assaultive behavior in adolescence **Zero-order correlational relationship (R) between preschool parenting, SES, Age, and Sex and adolescent assaultive behavior**: Risk Factor — R — p — N SES — - 0.23 — p≤0.001 Age — +0.14 — p≤0.01 — 418 Sex — - 0.27 — p≤0.001 — 418 Maternal discipline Emotional — +0.04 — ns — 418 Physical — +0.22 — p≤0.001 — 418 Mother interaction Positive — +0.18 — p≤0.01 — 317 Negative — +0.27 — p≤0.001 — 317 Neglect — +0.16 — p≤0.05 — 317 **Regression Coefficients (β) from Multiple Regression Analysis (n=317)** Variable — β — SE(β) — t Age — +0.20 — 0.15 — 1.37 Sex — - 2.44 — 0.43 — -5.67**** SES — - 0.13 — 0.79 — -1.67 Maternal discipline Physical — +0.43 — 0.15 — 2.89** Emotional — - 0.64 — 0.15 — <1 Neglect — +0.06 — 0.12 — <1 Mother interaction Negative — +0.16 — 0.07 — 2.31* Positive — +0.02 — 0.06 — <1 *p<0.05; **p<0.01; ****p<0.0001. In a sub-sample of 235, sexual abuse was the significant risk factor (p<=0.05), replacing that of negative mother interaction.

Appendix C1: Evidence Table 13: Risk Factors Contributing to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) Demographics Sample Size	Study Characteristic Risk Factors Studied Inclusion/Exclusion Criteria	Outcome (Violence) Definition and characterization.	Findings Implications
2660 Herrenkohl 2000 J Adoles-cent Health Page 1 of 2	Study Design: Prospective Comparative Cohort Study (Seattle Social Development Project (SSDP) Study Quality Score: Good Sample size: Eligible: 1053 Participation: 808 (77%) Retention: Age 14: 96% Age 16: 95% Age 18: 94% Analysis: Age 14: 715 (88%) Age 16: 720 (89%) Age : Baseline: Median 10.7 Follow-up: at 14, 16, 18 Gender: 396 (49%) female Race: Caucasian: 372 (46%) African Am: 195 (24%) Asian Am: 170 (21%) Other 72 (9%)	Study Period (begin, end): Baseline: 1985 Follow-up: annually though 1991 and at age 18 in 1993 Place (city, state): Seattle, Washington Study Setting: Looked at various domains of individual, family, school, peer, and community. Study Population: 5th grade cohort from public elementary schools serving high crime areas. Inclusion criteria: See above Exclusion criteria: Lack of consent Risk factors studied: Factors in 5 domains [see Findings column for list]: • Individual • Family • School • Peer • Community Instruments Used: A combination of Youth Interview, school records, and Teacher/Child Behavior Checklist.	**Outcome (violence):** Violence at age 18 Definition Acts involving serious harm or threats of harm to other persons in the past year. Measured with a single dichotomous variable. Type • Hit a teacher • Picked a fight* • Hit someone with intent of hurting him or her* • Threatened someone with a weapon • Used force or threats of force to get things from others • Beat someone so badly he or she required medical attention. *3 or more acts each required before a youth was identified as having committed a violent act with these indicators Instrument(s) Used, Circumstance/Situational Context; Proactive/Reactive; Weapon used; Victim-offender relationship Not specified **Adverse Health Outcome:** Not reported **Are mechanisms of violence theorized?** Yes. Demonstrates the significance of non-familial social influences on violent behavior during adolescence. There is a dynamic influence of risk factors during different developmental periods.	**Violence Outcome** To replicate earlier research findings and to explore the effects of risk factors on violent behavior Unadjusted Odds Ratios (OR) Age risk factor measured: 10 (703) 14 (715) 16 (720) Risk Factor: OR OR OR **Individual** Male gender 2.31*** 2.31*** 2.31*** Hyperactive-teacher 2.17*** 1.98** nd Hyperactive-parent 1.67 2.11*** 1.96** Risk Taking nd 3.18*** 3.50*** Drug Selling nd 3.34*** 4.55*** Early Violence (12-13) nd 3.71*** nd Pro-Violence attitude nd 2.09** nd **Family** Parental Violemce nd 1.84* 1.35 Parent Criminal nd 2.16** 2.03** Poor family Mgmt 1.29 2.11*** 2.63*** Family conflict 1.05 1.61* 2.16*** Parent favored violence 2.32** nd nd Residential mobility nd 1.32 2.69*** **School** Low Acad Performance 1.65* 2.56*** 2.71*** Low School Commitment 1.10 1.87** 1.80** Low education aspiration 1.20 1.86** 1.60* School transitions nd 1.82** 2.97*** Antisocial behavior 2.66*** 2.46*** nd **Peer** Sibling Delinquency 1.79 1.40 2.26*** Peer Delinquency. 2.25*** 2.82*** 3.95*** Gang Membership nd 3.39*** 4.58*** **Community** Economic deprivation 1.61* 1.33 1.51* Community disorganization nd 2.19*** 3.16*** Low nghbrhd attachment 1.54* 1.00 1.69* Available drugs 1.77** 2.63*** 3.09*** Adults involved in crime nd 3.15*** 3.90*** Law enforcement nd 1.11 1.38 *.p<05 **p<.01 ***p<.001 nd= not measured. ***Continued***

Appendix C1: Evidence Table 13: Risk Factors Contributing to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) Demographics Sample Size	Study Characteristic Risk Factors Studied Inclusion/Exclusion Criteria	Outcome (Violence) Definition and characterization.	Findings Implications
2660 Herrenkohl 2000 J Adoles-cent Health Page 2 of 2				Additive risk for violence at age 18 years expressed as odds ratios (odds for violence based on comparison to "very low-risk" category) Number of Risk factors — Age 10 OR (n) — Age 14 OR (n) — Age 16 OR (n) 0-1 — 1.0 (268) — 1.0 (239) — 1.0 (240) 2-3 — 3.0 (328) — 2.0 (206) — 1.8 (206) 4-5 — 6.1 (169) — 5.9 (149) — 4.1 (139) >5 — 10.2 (43) — 7.2 (214) — 10.9 (223)

Appendix C1: Evidence Table 14: Risk Factors Contributing to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) Demographics Sample Size	Study Characteristic Risk Factors Studied Inclusion/Exclusion Criteria	Outcome (Violence) Definition and characterization.	Findings Implications
6306 Herrenkohl 2001 J Early Adolescence Page 1 of 2	Study Design: Prospective cohort study (3 waves of data from the Seattle Social Development Project (SSDP)) Study Quality Score: Good Sample size at assessment time points: Study population: 1053 Consented participants: T1 (age 10): 808 T2 (age 14): 776 (96%) T3 (age 18): 760 (94%) Analysis: 808 (using missing data techniques) Description of cohort(s) by age, gender, & race/ethnicity Ages at 3 time points: T1 10 yrs T2 14 yrs T3 18 yrs Gender at T1 51% male 49% female Race at T1 European american 372 (46%) African american 195 (24%) Asian american 170 (21%) Other 72 (9%)	Study Period (begin, end): T1: 1985 T2: 1989 T3: 1993 Place (city, state): Seattle, WA Study Setting: school Study Population: 5th grade students from 18 Seattle public elementary schools Inclusion criteria: Consented to participate Exclusion criteria: Not specified Main independent factor(s): **Measured at 10 yrs**: • male gender, • teacher-rated hyperactivity/low attention, • teacher-rated antisocial behavior, • perceived parental attitudes favorable toward violence, • low academic performance, • involvement with antisocial peers, • low family income, • availability of drugs in the neighborhood, • low neighborhood attachment **Measured at 14 yrs**: • family domain (low bonding to parents, poor family management, family conflict); *(continued)*	**Outcome (violence):** Outcome measure Violent behavior at age 18 Definition • Hit a teacher, • picked a fight, • hit someone with intent of hurting him/her, • threatened someone with weapon, • used force or threats of force to get things from others, • beat someone so badly he/she required medical attention, • hit a parent Instrument(s) Used: • Annual assessment through 1991 and at age 18 in 1993. • Teachers' annual assessment through 1989 • Official school records Type: See definition Circumstance/Situational Context; Proactive/Reactive; Weapon used; Victim-offender relationship Not specified except by definition **Adverse Health Outcome:** Not addressed **Are mechanisms of violence theorized?** No	**1. To estimate effect of early risk factors on violent behavior at age 18, as well as estimate risk factor's direct and indirect effect on violence, having controlled for predictors in each and all of the three domains at 14 yrs of age** Regression coefficients (and SE) reflecting total, direct, and indirect effects of childhood risks on violent behavior at age 18 Direct Effects of Violence Controlling for: (SE) Risk — Total — Family — School — Peer — All Male .73(.18)[c] .76(.18)[c] .70(.18)[c] .68(.18)[c] .67(.19)[c] Hyperactivity/Low attention .83(.21)[c] .79(.22)[c] .60(.22)[b] .73(.23)[b] .58(.23)[b] Antisocial behavior .85(.27)[c] .77(.20)[c] .66(.21)[b] .67(.21)[c] .56(.21)[b] Parental Attitudes Favorable toward Violence .84(.27)[c] .74(.27)[b] .70(.28)[b] .72(.28)[b] .59(.29)[a] Low academic Performance .48(.19)[b] .51(.19)[b] .27(.20) .42(.19)[a] .31(.21) Involvement with Antisocial peers .83(.21)[c] .77(.21)[c] .72(.22)[b] .66(.22)[b] .61(.23)[b] Low family income .45(.20)[b] .42(.21)[a] .35(.21) .37(.20) .33(.21) Availability of drugs .56(.20)[b] .43(.21)[a] .44(.21)[a] .41(.21) .31(.23) Low neighborhood Attachment .45(.19)[a] .42(.20)[a] .45 (.20)[a] .44(.20)[a] .43(.21)[a] [a] p<.05 [b] p<.01 [c] p<.001 Notes: 1. Total effect is the bivariate estimate of each childhood risk factor with the violence outcome measure. 2. Direct effect is the effect of each childhood risk factor's total effect mediated by each domain at 14 years of age (expressed as a change in the regression coefficient and as a percentage of the risk factor's total effect involved in that change. *(continued)*

Appendix C1: Evidence Table 14: Risk Factors Contributing to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) Demographics Sample Size	Study Characteristic Risk Factors Studied Inclusion/Exclusion Criteria	Outcome (Violence) Definition and characterization.	Findings Implications
6306 Herrenkohl 2001 J Early Adolescence Page 2 of 2		• school domain(low academic performance, low school commitment, low educational Aspirations); • peer domain (involvement with antisocial peers, gang membership) Instrument(s) Used: A combination of Youth Interview, school records, and Teach/Child Behavior Checklist.		Indirect Effects of Age 10 Predictors Through: (%) Risk — Family — School — Peer — All Male .00 (0) .03 (4) .05 (7) .06 (8) Hyperactivity/low attention .04 (5) .23 (28) .10 (12) .25 (30) Antisocial behavior .08 (9) .19 (22) .18 (21) .29 (34) Parental Attitudes Favorable toward Violence .10 (12) .14 (17) .12 (14) .25 (30) Low academic Performance .00 (0) .21 (44) .06 (13) .18 (38) Involvement with Antisocial peers .06 (7) .11 (13) .17 (21) .22 (27) Low family income .03 (7) .10 (22) .08 (18) .12 (27) Availability of drugs .13 (23) .12 (21) .15 (27) .25 (45) Low neighborhood Attachment .03 (7) .00 (0) .01 (2) .02 (4) Note: Larger indirect effects reflect stronger mediation. **2. Added percentage of variance explained in violent behavior at 18 for each domain at 14 beyond that for each childhood risk** Variance Explained — Additional Variance Explained: Risk — Childhood — Family — School — Peer — All Male 3.3 4.9 6.1 3.8 9.4 Hyperactivity/Low attention 3.7 4.4 4.7 3.4 8.2 Antisocial behavior 4.0 4.0 4.8 2.6 7.8 Parental Attitudes Favorable toward Violence 2.0 4.4 5.9 3.8 9.2 Low academic Performance 1.2 5.0 5.8 4.1 9.6 Involvement with Antisocial peers 3.7 4.3 5.5 2.9 8.4 Low family income 1.3 4.8 6.1 4.0 9.7 Availability of drugs 1.6 4.3 5.9 3.6 9.2 Low neighborhood Attachment 1.0 4.8 6.6 4.4 10.2

Appendix C1: Evidence Table 15: Risk Factors Contributing to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) Demographics Sample Size	Study Characteristic Risk Factors Studied Inclusion/Exclusion Criteria	Outcome (Violence) Definition and characterization.	Findings Implications
10990 Herrenkohl 2003 Social Work Research Page 1 of 2	Study Design: Prospective cohort study (a subsample of the Seattle Social Development Project cohort) Study Quality Score: Good Sample size: Baseline: n=154 At baseline: Age: 10 yrs Gender: N % Boys 99 64 Race: N % European-Am 52 34 African-Am 76 49 Other/mixed 26 17 NOTES: Design: Students followed for eight years from 1985 with annual assessments through 1991 and a final assessment in 1993 (age 18). Data used in this study were at age 10, 15 and 18.	Study Period (begin, end): 1985 - 1993 Place (city, state): Seattle, Washington Study Setting: 18 public elementary schools Study Population: Subsample of aggressive fifth grade students defined as those scored above 3 on their childhood aggression measure. Inclusion criteria: Need consent Exclusion criteria: unspecified Main independent factor(s): •Childhood aggression at age10 •Factors at age15 in the following domains (see results for individual factors) •*Community* •*Family* •*School* •*Peer* •*Prosocial beliefs* •Neighborhood disorganization Instrument used to measure factors: •Child Behavior Checklist rated by teachers (10 items to form composite measure of aggression) •Self-report to measure attachment to socialization factors (peer, family, school, community and individual) Covariates •Gender •Race/ethnicity	**Outcome (violence):** Youth violence at age 18 Definition Youth as committing any of the following violent acts in the past year: • picked a fight • hit someone with intent of hurting him or her • threatened someone with a weapon • used force or threats of force to get things from others • beat someone so badly he or she required medical attention • hit a parent Dichotomous variable (engaged or not engaged in violence) determined if: 1) engaged in three or more incidents of picking a fight and hitting someone with intent of hurting someone 2) one or more acts of violence on the remaining indicators Instrument used: Annual assessment and school records. Type: see definition Other Characteristics: Not specified **Adverse Health Outcome:** Not addressed **Are mechanisms of violence theorized?** Yes Social Development model: risk of antisocial behavior in adolescence be reduced when youths encounter prosocial influences in the community, families, schools and peer networks.	**Identify risk factors for violence and determine to what extent does exposure to multiple protective factors decreases probability of violence.** **Likelihood of violence at age 18** % Violence in Factors at age 15 β SE OR Exposed Not Exp. *Community* Prosocial Neighborhood opportunities .03 .29 1.03 36 35 Neighborhood attachment -.63 .46 0.53 25 38 Religious service attendance -.73 .40 0.47* 25 41 *Family* Bonding to family -.39 .52 0.68 28 37 Positive family involvement -.06 .39 0.94 34 35 Good family management -1.25 .50 0.29* 17 41 *School* Bonding to school -.99 .51 0.37* 20 40 Positive school involvement -.07 .43 0.93 34 36 High academic achievement -.87 .70 0.42* 20 37 *Peer* Prosocial peer involvement -.08 .46 0.92 34 36 *Individual* Prosocial beliefs -.86 .53 0.42 21 39 *Risk Factors* Neighborhood Disorganization .88 .39 2.41* 48 28 Antisocial peer opportunities .91 .36 2.48* 48 27 Antisocial peer involvement 1.18 .37 3.25* 53 26 *p<=.05 *Continued*

Appendix C1: Evidence Table 15: Risk Factors Contributing to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) Demographics Sample Size	Study Characteristic Risk Factors Studied Inclusion/Exclusion Criteria	Outcome (Violence) Definition and characterization.	Findings Implications
10990 Herrenkohl 2003 Social Work Research Page 2 of 2				**Probability of violence at age 18**** Good Family Management at age 15 Exposed — Unexposed African American: 11 — 49 European American: 30 — 32 **Probability of violence at age 18**** # Protective factors # Risk Factors: 0 — 1 — 2 — 3 0: 30 — 20 — 12 — 7 1: 41 — 29 — 19 — 18 2: 55 — 40 — 28 — 18 3: 67 — 53 **Estimated probability from bar graphs **Associated Adverse Health Outcome** None *Note: Multiple imputation was used for missing data, Socialization factors were measured at age 15.

Appendix C1: Evidence Table 16: Risk Factors Contributing to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) Demographics Sample Size	Study Characteristic Risk Factors Studied Inclusion/Exclusion Criteria	Outcome (Violence) Definition and characterization.	Findings Implications
10991 Herrera 2003 Violence and Victims	Study Design: Prospective cohort study Study Quality Score: Poor (retention rate 79% Sample size: 141 Mother-daughter pairs (79%) (Original sample size= 179) Description of cohort(s) by age, gender, & race/ethnicity Age: 9.1 years at baseline 14.9 yrs. at followup (range: 11-18) Gender: all females Race 56% Anglo European 34% Hispanic/ Mexican 4% African American 4% Native American 2% Asians, Pacific Islanders, and unclassified groups.	Study Period (begin, end): 1990-1997 Place (city, state): Mid-size city, Southwestern US Study Setting: Place of interview not specified. Recruited by public announcements. Study Population: 55 girls whose mother reported being abused by partner. 86 comparison girls. Inclusion criteria: Daughter lived with mother over the past year. Between ages 6-12. Mother and daughter consent. Exclusion criteria: Specified above. Main independent factor(s): (All measured at baseline) 1.Marital violence 2.Physical abuse on child 3.Child sexual abuse Instrument used to measure factors: 1. Modified Conflict Tactics Scale (CTS) (Mother's report) 2. CTS "Escalated abuse" tactics. (Mother and child's report on paternal abuse, child's report of maternal abuse.) 3. No instrument used. Open-ended questions for mothers and daughters. Covariates family income, age	**Outcome (violence):** 1. violent delinquency 2. violence against parents Definition 1. *Self –reports, past year*: Gotten in many fights Physically attacked people Threatened to hurt someone Threatened someone w/ weapon Hurt someone badly *2.Self-reports, ever engaged in at least one of the following (yes/no):* Thrown or hit something in anger Hit or pushed parent Physically threatened parent Instrument used to measure outcome Investigator-developed The following are not specified: Type, Circumstance/Situational Context, Proactive/Reactive, Weapon used Victim-offender relationship #1 is violence on anyone. #2 is violence on parents. **Adverse Health Outcome: (not abstractable)** Type: physical injury Definition: hurting someone badly enough that victim needed bandages or a doctor. **Are mechanisms of violence theorized?** No.	**Violence Outcome** **Aim was to test the relative influence of domestic violence and physical/sexual abuse during early childhood on later violence among adolescent girls.** **Correlations between violent outcomes and other study variables:** *Violent Delinquency* / *Violence Against Parents* Variable: r / r Marital violence: NS / NS Physical abuse: .21 / .40 Sexual abuse: .27 / .36 Runaway: .33 / .39 Non-violent delinquency: .49 / .42 Note. Correlation between violent delinquency and violence against parents= .43. **Simultaneous Regression of Violent Delinquency** Predictors: B / SE / β Age: 0.01 / 0.07 / 0.01 Family income: 0.00 / 0.00 / -0.08 Marital violence: 0.29 / 0.27 / 0.09 Physical abuse: 0.46 / 0.29 / 0.14 Sexual abuse: 0.84 / 0.29 / 0.25* Note. R-squared model= .10; F (5, 135) = 3.29, p= .0007. *p< .001. **Simultaneous Regression of Violence Against Parents** Predictors: B / χ^2 / OR Age: 0.11 / 1.10 / 1.12 Family income: 0.00 / 0.04 / 1.00 Marital violence: 0.16 / 0.16 / 1.17 Physical abuse: 0.93 / 5.24 / 2.54* Sexual abuse: 0.53 / 1.59 / 1.70 Note. χ^2-model (5df)= .13.48, p= .01. *p< .05.

Appendix C1: Evidence Table 17: Risk Factors Contributing to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) Demographics Sample Size	Study Characteristic Risk Factors Studied Inclusion/Exclusion Criteria	Outcome (Violence) Definition and characterization.	Findings Implications
8540 Huang 2001 Criminology	Study Design: Prospective cohort study (Seattle Social Development Project (SSDP)) Study Quality Score: Good Sample size: Study population: 1053 Acceptance of participation: 808 Analysis: 807 Age: 1985: 10 1988: 13 1989: 14 1991: 16 1993: 18 Gender Male 411 Female 396 Race White 46% Black 24% Asian-American 21% Native American 6% Other 3%	Study Period (begin, end): Baseline: 1985 Follow-ups: 1988, 1989, 1991, and 1993 Place (city, state): Seattle, WA Study Setting: • 5th grade survey-group administered in school • Follow-up individual interviews in person Study Population: 5th grade students enrolled in 18 Seattle elementary schools in 1985 Inclusion criteria: Student and parent consent to participate in study Exclusion criteria: Not specified Main independent factor(s): • Early violent behavior at age 10 and 13 • Prosocial and antisocial opportunities • Prosocial and antisocial involvement • Skills for interaction • Prosocial and antisocial rewards • Prosocial and antisocial bonding • Belief in the moral order Instrument(s) Used: A combination of Youth Interview, school records, and Teach/Child Behavior Checklist. Covariates Gender Ethnicity	**Outcome (violence):** Violent behavior at age 18 yrs Definition • Picking a fight with someone, • hitting someone with the intention of hurting, • beating someone so badly that a doctor's help was needed, and • threatening someone with a gun Type: See definition Circumstance/Situational Context; Proactive/Reactive;Weapon used See definition Victim-offender relationship: Not specified **Adverse Health Outcome:** Not addressed **Are mechanisms of violence theorized?** Yes If yes, state the theory: The social development model (SDM) integrates key features of differential association, social learning, and social control theories to more fully describe causal and mediating processes hypothesized to predict behavior over the course of development (Catalano and Hawkins, 1996). The SDM hypothesizes parallel developmental processes leading to prosocial and antisocial outcomes.	**Violence Outcome** **Factor correlation with violence at age 18 (12)** Number Factor R p-value 1. Violent behavior (age 10) .23 <.001 2. Prosocial opportunities - .07 ns 3. Antisocial opportunities .36 <.001 4. Prosocial involvement - .09 <.05 5. Antisocial involvement .39 <.001 6. Skills for interaction - .31 <.001 7. Prosocial rewards - .19 <.001 8. Antisocial rewards .28 <.001 9. Prosocial bonding - .22 <.001 10. Antisocial bonding .17 <.001 11. Belief in the moral order - .31 <.001 13. Violent behavior (age 13) .38 <.001 **Structural Path Estimates** Path path coefficients Path Path coefficient 1→12 .15* 1→2 - .13** 2→4 .85*** 4→7 .76*** 7→9 .40*** 9→11 .53*** 11→12 - .17*** 1→3 .56*** 3→5 .80*** 5→8 .38*** 8→10 .24*** 10→11 - .08* 11→12 - .17*** 6→7 .26*** 7→9 .40*** 9→11 .53*** 11→12 - .17*** 6→8 - .55*** 8→10 .24*** 10→11 - .08* 11→12 - .17*** 10→12 .04 8→12 .16** *<.05; **<.01; ***<.001 [Second-order factor model findings not reported here]

Appendix C1: Evidence Table 18: Risk Factors Contributing to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) Demographics Sample Size	Study Characteristic Risk Factors Studied Inclusion/Exclusion Criteria	Outcome (Violence) Definition and characterization.	Findings Implications
10619 Kaplan 2001 Crimino-logy	Study Design: Prospective cohort study (offspring of cohort of 7th graders from Houston Independent School Districts) Study Quality Score: Poor (retention rate <80%) Sample size: Eligible: 6359 Baseline: 5887 3 year follow-up: 2,222 (38%) Age: At time of initial interview: Age % 12 22% 13-14 25% 15-16 21% 17-18 16% 19-20 9% >20 7% Gender: 49% male 51% female Race: 45% white 38% African American 16% Mexican American	Study Period (begin, end): Interviews initiated in 1994, followup interview in 1997 Place (city, state): Houston, Texas Study Setting: Study Population: Offspring of a study cohort who had been followed since 7th grade from 18 of 36 junior high schools in 1971 Inclusion criteria: consented to participate Exclusion criteria: None Main independent factor(s): At baseline, use in past year: • Alcohol use (score 0 to 15) • Marijuana use (0 to 5) • Illicit drug use (0 to 65) • Carrying weapons (0 to 5) • Fights (0 to 15) Instrument used to measure factors: Investigator-developed Covariates Gender Black Latino Social class (1 lowest; 6 highest)	**Outcome (violence):** Fights in the last year at 3 year follow-up Definition Fist fights, gang fights and beating up someone within the last year Instrument used to measure outcome: Investigator-developed Type: see definition Circumstance/Situational Context Proactive/Reactive Weapon used Victim-offender relationship Not specified **Adverse Health Outcome:** Substance use after violence. See (C) under Findings. **Are mechanisms of violence theorized?** Yes The theoretical model hypothesized positive within-wave relationships between substance use and violence and a direct INVERSE effect of substance use at time 1 on violence at time 2. They hypothesized inverse effects of drug use on later violence was predicated primarily on the assumptions that motivation to engage in violence is associated with distressful self-feelings, that negative self-feelings motivate substance use, and that substance use functions to alleviate the negative self-feelings associated with the disposition to engage in violence. The findings support this theoretical orientation.	**(A) Zero-Order Correlation of Behavioral Variables at Baseline Controlling for Demographic Variables for Total Sample** Variable at Baseline — Correlation with Fights Reported at 3 Year Follow-up Alcohol use .017 ns Marijuana use .017 ns Illicit drug use .041 ns Carrying weapon .053 <.05 Fights .186 <.05 **(B) Structural Model of Standardized Effects of Early Substance Use on Later Violence** Pathway — Coefficients T1Substance use→T2Fights - .35 <.05 T1Violence*→T2Fights .82 <.05 * included both weapon carrying and fights. **(C) Structural Model of Standardized Effects of Violence on Concurrent and Later Substance Use** Pathway — Coefficients T1Violence*↔T1Substance Use .67 <.05 T1Violence*→T2Substance Use .06 ns T2Violence*↔T2Substance Use .43 <.05 *included both weapon carrying and fights.

Appendix C1: Evidence Table 19: Risk Factors Contributing to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) Demographics Sample Size	Study Characteristic Risk Factors Studied Inclusion/Exclusion Criteria	Outcome (Violence) Definition and characterization.	Findings Implications
6595 Kingery 1996 Social Psychology International	Study Design: Prospective cohort study (2nd and 3rd waves of a longitudinal study of 6th and 7th grade boys residing in South Florida which began in 1990.) Study Quality Score: Poor (Attrition rate >20%) Sample size: Eligible: 9763 Baseline n=6760 (69%) Final sample n=3955 (59% of baseline) Description of cohort(s) by age, gender, & race/ethnicity Age: Baseline measured at grades 6 and 7 Violence outcome measured at grade 8 (n=1704) and grade 9 (n=2251)) Gender: 3955 male (100%) Race: Cuban: 1172 (28.8%) Non-Cuban Hisp: 1109 (27.2%) American Black: 503 (12.4%) White: 640 (15.7%) Haitian: 96 (2.4%) Caribbean Black: 110 (2.7%) Nicaraguan: 340 (8.4%) Others: 101 (2.5%)	Study Period (begin, end): Baseline – 1990 Time 2 – Fall, 1991 Time 3 – Spring, 1993 Place (city, state): Dade County, Florida Study Setting: middle schools Study Population Inner-city male adolescents living in South Florida (around Miami) Inclusion criteria: All 6th and 7th grade males from 48 middle schools in Dade county Exclusion criteria: • Female adolescents • Did not return consent forms • Parents did not allow participation • Moved away or out of the school system before the conclusion of the study • Absent during second and third wave data collection • Admitted to answering questions dishonestly • Missing key response components of the violence composite Main independent factor(s): • Race/ethnicity • Normative values (Normative Values Scale by Kaplan 1986) • Derogation (Kaplan's Derogation Scales) • Cocaine & crack use (composite score by author) • Marital & education status of parents • Grade in school • Beliefs (several levels) • Behaviors (Likelihood that, when insulted by someone, would hit them or try to get even) Instruments Used: Indicated above	**Outcome (violence):** Violence-related behaviors At time 2 and 3 measured over the past month. Definition • Taking part in gang fights • Using force to get money or items • Beating someone up for no reason Type • Aggravated assault • Non-aggravated assault • Gang fight • Robbery Circumstance/Situational Context; Proactive/Reactive; Weapon used; Victim-offender relationship: Unspecified **Adverse Health Outcome:** Not Studied **Are mechanisms of violence theorized?** Yes The study attempts to dispel the "race hypothesis" and show that race and ethnicity do not play a large role in weapon carrying and interpersonal violence among young adolescent boys living under the same deprivations.	**To test the hypothesis that blacks are more violent than whites within a similar socio-cultural context in an urban area.** Ethnicity / N / Gang fight / Used force / Beat Someone All Ethnicities 4071 8.1 6.8 8.5 Cuban 1172 8.0 5.6 6.8 Other Hispanic 1109 8.9* 7.7 8.3 US Black 503 6.1 8.1 10.2 White 640 6.3 6.6 9.3 Haitian 96 10.6 8.5 7.4 Caribbean Black 110 10.4 9.3 13.9 Nicaraguan 340 10.7* 6.0 10.7 Other 101 7.1 6.1 4.0 * $p<0.05$ by Chi-square test. Stepwise logistic regression results not used because the composite violent score included carrying a weapon which is a non-violent behavior according to the Task Order definition.

Appendix C1: Evidence Table 20: Risk Factors Contributing to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) Demographics Sample Size	Study Characteristic Risk Factors Studied Inclusion/Exclusion Criteria	Outcome (Violence) Definition and characterization.	Findings Implications
6638 Komro 1999 J Child & Adolescent Substance Abuse	Study Design: Prospective cohort study (part of a 9-year community trial, Project Northland, in rural northeastern Minnesota) Study Quality Score: Poor (attrition > 20%) Sample size: Initial cohort: 1266 Both surveys: 1088 Analysis sample: 937 (74% of initial cohort; 86% of those completed both surveys) Description of cohort(s) by age, gender, & race/ethnicity Age: 9th grade students (study also reports non violence-related outcomes of same cohort measured in 8th grade) Gender: Male: 51% (478) Female: 49% (459) Race: White: 97% (909) American Indian: 2% (19) Other: 1% (9)	Study Period (begin, end): Spring 1994 and 1995 (8th and 9th grades) Place (city, state): Rural Northeastern Minnesota Study Setting: Classroom-based in 10 school districts Study Population: 8th and 9th grade students Inclusion criteria: see above Exclusion criteria: • Did not complete a survey in **both** 8th and 9th grade • Moved between intervention and reference conditions • Did not meet criteria for valid responding (i.e., response inconsistencies or exaggerations) Main independent factor(s): • MMPI-A (the Minnesota Multiphasic Personality Inventory-Adolescent) classification on 5 scales: 1. Family Problems Scale 2. School Problems Scale 3. Low Aspirations Scale 4. Alcohol/Drug Problem Proneness Scale 5. Alcohol/Drug Problem Acknowledgement Scale • Alcohol use: 1. Past month alcohol use 2. Binge drinking (5 or more drinks in a row in the last 2 weeks) Covariates • Race • Gender Instruments Used: see above	**Outcome (violence):** Violence behaviors Definition • Hit or beat up someone • Pulled a weapon such as gun or knife on someone Type: Physical aggression Circumstance/Situational Context; Proactive/Reactive; Victim-offender relationship: Unspecified Weapon used Hitting, Threatening (with gun or knife) **Adverse Health Outcome:** Not studied **Are mechanisms of violence theorized?** No	**Longitudinal associations between race, gender, MMPI-A high risk status, and alcohol use with violent behavior** **(A) Alcohol Use** Independent factors — N — OR (95%CI) Race Other 27 1.00 White 896 0.29 (0.12, 0.70) Gender Girls 455 1.00 Boys 468 2.78 (2.09, 3.72) MMPI-A risk status Low 611 1.00 High** 312 2.40 (1.76, 3.28) Alcohol use None in past mo. 663 1.00 Use past mo./no binge drinking 168 1.33 (0.92, 1.93) Use past mo./binge drinking 92 2.06 (1.26, 3.36) **(B) Acknowledgment of Alcohol/Drug Problems Use** Race Other 24 1.00 White 880 0.21 (0.08, 0.57) Gender Girls 450 1.00 Boys 454 2.83 (2.11, 3.79) MMPI-A risk status Low 588 1.00 High** 316 2.36 (1.71, 3.26) Acknowledgment of Alcohol/drug problem use Low 813 1.00 High 91 2.15 (1.29, 3.57) **MMPI-A high risk status is defined as students with at least one elevated MMPI-A scales score on four MMPI-A scales Note: Rates of having ever "pulled a weapon such as a gun or knife on someone" were too low for the results of logistic regression analysis to be valid.

Appendix C1: Evidence Table 21: Risk Factors Contributing to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) Demographics Sample Size	Study Characteristic Risk Factors Studied Inclusion/Exclusion Criteria	Outcome (Violence) Definition and characterization.	Findings Implications
9560 Loeber 1993 Develop-ment and Psycho-pathology	Study Design: Prospective cohort study (3 year follow-up data from the Pittsburgh Youth Study) Study Quality Score: Good Sample size: 7th grade cohort: 506 Analysis: 435 (86%) Age: Mean (SD) 13.4 (0.9) Gender: 100% male Race African Amer 291 (57.5%) Caucasian 215 (42.5%)	Study Period (begin, end): 1987-1990 Place (city, state): Pittsburgh, PA Study Setting: Public schools Study Population: A sample of 1st, 4th, and 7th grade boys enrolled in Pittsburgh public schools and their primary caretakers (Only the 7th grade cohort findings are reported here). Inclusion criteria: see above Exclusion criteria: None Main independent factor(s): •Aggression •Fighting Instrument used to measure factors: •Maternal Child Behavior Checklist •Diagnostic Schedule for Children-revised •Self-reported Delinquency Scale •Youth Self Report Covariates •Age group •Race	**Outcome (violence):** Violence for the study period (age 16) Definition •Attacking someone •Strong arming •Forcing sex Instrument used to measure outcome •Self-reported Delinquency Scale Type: see definition Not specified Circumstance/Situational Context; Proactive/Reactive; Weapon used: Victim-offender relationship: Not specified **Adverse Health Outcome:** Not studied **Are mechanisms of violence theorized?** Yes If yes, state the theory: Violent behavior develops via the overt pathway: 1: Aggression (annoying others, bullying) 2: Fighting (physical fighting, gang fighting) 3: Violence	**Violence Outcome** **To identify developmental pathways in disruptive child behavior, such as violence.** **Overt pathway behavior rates** Behavior — African Amer N (%) — Caucasian N (%) — p-value for Chi-sq Aggression — 116 (29.9) — 102 (47.4) — ns Fighting — 132 (45.4) — 72 (33.5) — <0.01 Violence — 72 (24.7) — 28 (13.0) — <0.01 **Overt pathway sequence* for those showing 1 or more forms of overt behavior** Behavior — Total N (%) — Afric-Amer N (%) — Caucasian N (%) •Sequences starting with Aggression A→F→V — 15 (5.3) — 12 (7.0) — 3 (2.7) A→F — 48 (17.0) — 23 (13.5) — 25 (22.3) A only — 73 (25.8) — 32 (18.7) — 41 (36.6) A→V — 9 (3.2) — 3 (1.8) — 6 (5.4) Total — 145 (51.2) — 70 (40.9) — 75 (67.0) •Sequences starting with Fighting F→V — 24 (8.5) — 18 (10.5) — 6 (5.4) F only — 47 (16.6) — 32 (18.7) — 15 (13.4) Total — 71 (25.1) — 50 (29.2) — 21 (18.8) •Sequences starting with Violence V only — 13 (4.6) — 11 (6.4) — 2 (1.8) •Nonfitting sequences — 54 (19.1) — 40 (23.4) — 14 (11.8) •No overt behavior — 152 (34.9) — 86 (33.5) — 66 (37.1) Sample size — 435 — 257 — 178 *A=Aggression F=Fighting V=Violence

Appendix C1: Evidence Table 22: Risk Factors Contributing to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) Demographics Sample Size	Study Characteristic Risk Factors Studied Inclusion/Exclusion Criteria	Outcome (Violence) Definition and characterization.	Findings Implications
6855 Loeber 1999 Studies on Crime and Crime Prevention Page 1 of 3 The Pittsburgh Youth Study	Study Design: Prospective cohort study (Joint analysis of 3 longitudinal studies: Pittsburgh Youth Study, Denver Youth Survey, and Rochester Youth Development Study) Study Quality Score: Poor (attrition rate >20%) Sample size: Pittsburgh: Baseline: 506 (84.7% of eligible) Analysis: 365 (72%) Description of cohort(s) by age, gender, & race/ethnicity Age: Not specified Gender: 100% Male Race: Pittsburgh African Amer 291 (57.5%) Caucasian 215 (42.5%) Total African Amer 916 (53.9%) Caucasian 380 (22.4%) Hispanic 357 (21.0%) Other 46 (2.7%)	Study Period (begin, end): 1987-1993 Place (city, state): Pittsburgh, PA Study Setting: Public schools Study Population: Adolescent males Inclusion criteria: Boys randomly drawn from the 7th grades, over-sampled "at risk" population; A total of 9 assessments: 6-months for first 6 follow-up and yearly thereafter. Exclusion criteria: None Main independent factor(s): •Age of onset of physical fighting, gang fighting or violent behavior. •Overt developmental pathway: 1. Persisters: Those who engaged in any violent behavior at more than 1 annual assessment. 2. Experimenters: Those who engaged in any violent behavior only once. 3. Nonfitters: Those whose ordering of reported behaviors was the inverse of that postulated by the overt development pathway. Instrument used to measure factors: See Instruments used to measure outcome. Covariates Race	**Outcome (violence):** Violent behavior Definition •Attacking someone •Strong-arming •Rape Instrument used to measure outcome •37-item Self-Reported Delinquency Scale (SRD), improved version of the SRD scale used by National Youth Survey •Extended version of the Maternal Child Behavior Checklist (Pittsburgh only) •Extended version of the Youth Self-Report (Pittsburgh only) •Parent version of the Diagnostic Interview Schedule for Children (Pittsburgh only) Type: Rape, attack Circumstance/Situational Context; Proactive/Reactive; Weapon used; Victim-offender relationship: Not specified **Adverse Health Outcome:** Not studied **Are mechanisms of violence theorized?** Yes Overt pathway to boys' violent behavior stems from minor aggression (step 1) to physical fighting (step 2) to violent behavior (step 3).	**To replicate a developmental pathway to violent juvenile delinquency across different studies.** **Prevalence of behaviors:** Fighting (Step 2) / Violence (Step 3) **Pittsburgh, PA** **N=447** **<0.01** **N=417** **<0.0001** Total 268 (60.0) 155 (37.2) African American 172 (65.6) 108 (44.3) Caucasian 96 (51.9) 47 (27.2) **Fit in the overt developmental pathway:** **Pittsburgh, PA** Persisters: Steps 2 to 3 # (%); Step 2 only # (%); Step 3 only # (%); Total # (%) Total 76 (15.0) 65 (12.8) 4 (0.8) 145 (28.7) Afr Amer 53 (18.2) 40 (13.7) 3 (1.0) 96 (33.0) Caucasian 23 (10.7) 25 (11.6) 1 (0.5) 49 (22.8) Exper.: # (%); Excl./miss.: # (%); Nonfitters: # (%); No overt behav.: # (%) Total 73 (14.4) 37 (7.3) 41 (8.1) 210 (41.5) Afr Amer 41 (14.1) 21 (7.2) 31 (10.7) 102 (35.1) Caucasian 32 (14.0) 16 (7.4) 10 (4.7) 215 (22.8) **Entry into overt developmental pathway:** Looking at proportion of Persisters and Experimenters entering at Step 2: Proportion (%) Pittsburgh 90 Denver 98 Rochester 98 Comparing Persisters with Experimenters on the proportion entering at Step 2*: Odds ratios (95%CI) Pittsburgh 11.5 (3.7-35.7) Denver Not reported Rochester 10.1 (1.9-52.6) *Details on regression model not provided in study.

Appendix C1: Evidence Table 22: Risk Factors Contributing to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) Demographics Sample Size	Study Characteristic Risk Factors Studied Inclusion/Exclusion Criteria	Outcome (Violence) Definition and characterization.	Findings Implications
6855 Loeber 1999 Studies on Crime and Crime Prevention Page 2 of 3 **The Denver Youth Survey**	Study Design: Prospective cohort study (Joint analysis of 3 longitudinal studies: Pittsburgh Youth Study, Denver Youth Survey, and Rochester Youth Development Study) Study Quality Score: Good Sample size: **Denver:** Baseline: 464 Analysis 373 (80%) Description of cohort(s) by age, gender, & race/ethnicity Age: Not specified Gender: 100% Male Race: Denver African Amer 161 (34.7%) Caucasian 31 (6.7%) Hispanic 226 (48.7%) Other 46 (9.9%) Total African Amer 916 (53.9%) Caucasian 380 (22.4%) Hispanic 357 (21.0%) Other 46 (2.7%)	Study Period (begin, end): 1987-1993 Place (city, state): Denver, CO Study Setting: Households in high risk neighborhoods Study Population: Adolescent males Inclusion criteria: Boys aged 11, 13, or 15 at time of study enrollment; first 5 yearly interviews were analyzed. Exclusion criteria: None Main independent factor(s): •Age of onset of physical fighting, gang fighting or violent behavior. •Overt developmental pathway: 1. Persisters: Those who engaged in any violent behavior at more than 1 annual assessment. 2. Experimenters: Those who engaged in any violent behavior only once. 3. Nonfitters: Those whose ordering of reported behaviors was the inverse of that postulated by the overt development pathway. Instrument used to measure factors: See Instruments used to measure outcome. Covariates Race	**Outcome (violence):** Violent behavior Definition •Attacking someone •Strong-arming •Rape Instrument used to measure outcome •37-item Self-Reported Delinquency Scale (SRD), improved version of the SRD scale used by National Youth Survey Type Rape, attack Circumstance/Situational Context; Proactive/Reactive; Weapon used; Victim-offender relationship: Not specified **Adverse Health Outcome:** Not studied **Are mechanisms of violence theorized?** Yes Overt pathway to boys' violent behavior stems from minor aggression (step 1) to physical fighting (step 2) to violent behavior (step 3).	**To replicate a developmental pathway to violent juvenile delinquency across different studies.** **Prevalence of behaviors:** Fighting (Step 2) / Violence (Step 3) **Denver, CO** **N=419** **ns** **N=382** **<0.0001** Total 248 (59.2) 66 (17.3) African American 95 (65.5) 36 (27.9) Caucasian 16 (53.3) 2 (6.9) Hispanic 117 (57.9) 27 (14.5) Other 20 (47.6) 1 (2.6) **Fit in the overt developmental pathway:** **Denver, CO** Persisters: Steps 2 to 3 # (%) / Step 2 only # (%) / Step 3 only # (%) / Total # (%) Total 47 (10.1) 107 (23.1) 2 (0.4) 156 (33.6) Afr Amer 25 (15.5) 38 (23.6) 2 (1.2) 65 (40.4) Caucasian 1 (3.2) 7 (22.6) 0 (0.0) 8 (25.8) Hispanic 21 (9.3) 52 (23.0) 0 (0.0) 73 (32.3) Other 0 (0.0) 10 (21.7) 0 (0.0) 10 (21.7) Exper.: # (%) / Excl./miss.: # (%) / Nonfitters: # (%) / No overt behav.: # (%) Total 58 (12.5) 34 (7.3) 7 (1.5) 209 (45.0) Afr Amer 21 (13.0) 11 (6.8) 3 (1.9) 61 (37.9) Caucasian 5 (16.1) 2 (6.5) 1 (3.2) 15 (48.4) Hispanic 26 (11.5) 17 (7.5) 3 (1.3) 107 (47.3) Other 6 (13.0) 4 (8.7) 0 (0.0) 26 (56.5) **Entry into overt developmental pathway:** Looking at proportion of Persisters and Experimenters entering at Step 2: Proportion (%) Pittsburgh 90 Denver 98 Rochester 98 **Comparing Persisters with Experimenters on the proportion entering at Step 2*:** Odds ratios (95%CI) Pittsburgh 11.5 (3.7-35.7) Denver Not reported Rochester 10.1 (1.9-52.6) *Details on regression model not provided in study.

Appendix C1: Evidence Table 22: Risk Factors Contributing to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) Demographics Sample Size	Study Characteristic Risk Factors Studied Inclusion/Exclusion Criteria	Outcome (Violence) Definition and characterization.	Findings Implications
6855 Loeber 1999 Studies on Crime and Crime Prevention Page 3 of 3 **The Rochester Youth Develop-ment Study**	Study Design: Prospective cohort study (Joint analysis of 3 longitudinal studies: Pittsburgh Youth Study, Denver Youth Survey, and Rochester Youth Development Study) Study Quality Score: Poor (attrition rate >20%) Sample size: Rochester: Baseline: 729 Analysis: 562 (77%) Description of cohort(s) by age, gender, & race/ethnicity Age: Not specified Gender: 100% Male Race: Rochester African Amer 464 (63.6%) Caucasian 134 (18.4%) Hispanic 131 (18.0%) Total African Amer 916 (53.9%) Caucasian 380 (22.4%) Hispanic 357 (21.0%) Other 46 (2.7%)	Study Period (begin, end): 1987-1993 Place (city, state): Rochester, NY Study Setting: Public schools Study Population: Adolescent males Inclusion criteria: 7th and 8th grade boys enrolled in study in Spring 1988, over-sampled from high-crime neighborhoods or census tracts, using 9 waves covering 4.5 year. Exclusion criteria: None Main independent factor(s): •Age of onset of physical fighting, gang fighting or violent behavior. •Overt developmental pathway: 1. Persisters: Those who engaged in any violent behavior at more than 1 annual assessment. 2. Experimenters: Those who engaged in any violent behavior only once. 3. Nonfitters: Those whose ordering of reported behaviors was the inverse of that postulated by the overt development pathway. Instrument used to measure factors: See Instruments used to measure outcome. Covariates Race	**Outcome (violence):** Violent behavior Definition •Attacking someone •Strong-arming •Rape Instrument used to measure outcome •37-item Self-Reported Delinquency Scale (SRD), improved version of the SRD scale used by National Youth Survey Type: Rape, attack Circumstance/Situational Context; Proactive/Reactive; Weapon used; Victim-offender relationship: Not specified **Adverse Health Outcome:** Not studied **Are mechanisms of violence theorized?** Yes Overt pathway to boys' violent behavior stems from minor aggression (step 1) to physical fighting (step 2) to violent behavior (step 3).	**To replicate a developmental pathway to violent juvenile delinquency across different studies.** **Prevalence of behaviors:** Fighting (Step 2) / Violence (Step 3) **Rochester, NY** **N=668** **<0.01** **N=606** **<0.0001** Total 462 (69.2) 165 (27.2) African American 315 (73.4) 121 (31.1) Caucasian 70 (58.8) 14 (12.6) Hispanic 77 (64.2) 30 (27.5) **Fit in the overt developmental pathway:** **Rochester, NY** Persisters: Steps 2 to 3 # (%) / Step 2 only # (%) / Step 3 only # (%) / Total # (%) Total 130 (17.8) 201 (27.6) 2 (0.3) 333 (45.7) Afr Amer 95 (20.5) 125 (26.9) 2 (0.4) 222 (47.8) Caucasian 12 (9.0) 41 (30.6) 0 (0.0) 53 (39.6) Hispanic 23 (17.6) 35 (26.7) 0 (0.0) 58 (44.3) Exper.: # (%) / Excl./miss.: # (%) / Nonfitters: # (%) / No overt behav.: # (%) Total 87 (11.9) 35 (4.8) 16 (2.2) 258 (35.4) Afr Amer 64 (13.8) 23 (5.0) 13 (2.8) 142 (30.6) Caucasian 13 (9.7) 4 (3.0) 0 (0.0) 64 (47.8) Hispanic 10 (7.6) 8 (6.1) 3 (2.3) 52 (39.7) **Entry into overt developmental pathway:** Looking at proportion of Persisters and Experimenters entering at Step 2: Proportion (%) Pittsburgh 90 Denver 98 Rochester 98 **Comparing Persisters with Experimenters on the proportion entering at Step 2*:** Odds ratios (95%CI) Pittsburgh 11.5 (3.7-35.7) Denver Not reported Rochester 10.1 (1.9-52.6) *Details on regression model not provided in study.

Appendix C1: Evidence Table 23: Risk Factors Contributing to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) Demographics Sample Size	Study Characteristic Risk Factors Studied Inclusion/Exclusion Criteria	Outcome (Violence) Definition and characterization.	Findings Implications

7020

McCloskey

2003

J Inter-personal. Violence

Study Design:
Prospective comparative cohort study

Study Quality Score:
Fair (differences found between lost to follow-up and remaining cohort; analysis didn't take this into consideration).

Sample size:
No. of Mother-child pairs:
Time 1 (1990) 363
Time 2 (1996-7) 310
Time 3 (1998-9) 296 (82%)

Marital violence 193
Comparison group 170

Description of cohort(s) by age, gender, & race/ethnicity

Age
Time 1 Mean 9.2
Range 6 - 12
Time 2 Mean 14.7
Time 3 Mean 16.4

Gender Not specified

Race
African American 4.7%
Anglo European 53.7%
Asian American 0.7%
Hispanic 35.8%
Native American 4.4%
Other 0.7%

Study Period (begin, end):
1990-1999
Place (city, state):
southwestern mid-size city
Study Setting:
Low-income community
Study Population:
Women from shelters and the community who had experienced partner abuse in the past year and their child; and comparison women without recent history of marital violence and their child
Inclusion criteria:
Mother-child pairs who completed interviews at all 3 time periods
Exclusion criteria:
None specified

Main independent factor(s): provided by mother
- Childhood exposure to marital violence
- Sex
- Child age
- Child depression symptoms
- Child's capacity for empathy

Instrument used to measure factors:
- Conflict Tactics Scale modified by PI
- Catchment Epidemiologic Survey for Depression
- PI developed instrument

Covariates
- Child's empathy
- Child's depression

Outcome (violence):
Adolescent aggression (provided by youth at time 3)

Definition
Physical or threatened physical aggression towards same-sex peers, dating partners, and to parent

Instrument used to measure outcome
- PI developed instrument
- Child Behavior Checklist
- Conflict Tactics Scale modified by PI

Type
Physical or threatened physical aggression

Circumstance/Situational Context; Proactive/Reactive; Weapon used: not specified

Victim-offender relationship
- Peers
- Dating partners
- Parents

Adverse Health Outcome:
Not studied

Are mechanisms of violence theorized?
Yes
Depression and empathy are plausible mediators in the cycle of violence.

To determine whether exposure to marital violence in childhood predicts later adolescent aggression in different relationships.

Prevalence of Physical Aggression

Type	Boys (%)	Girls (%)	Chi-sq	p-value
Same-sex peer	77.4	58.0	12.70	0.001
Dating partner	11.1	20.3	4.61	0.03
Child-to-parent	NA	NA	NA	ns

Physical Aggression by Childhood Exposure to Marital Violence

Type	Exposed N (%)	Unexposed N (%)
Same-sex peer	109 (73.6)	91 (62.0)
Dating partner	26 (17.7)	20 (13.8)
Child-to-parent	16 (12.6)	19 (13.6)

Logistic Regressions Predicting *Peer Aggression* (N=295)

Factor	β (SE)	OR	95% CI	p-value
•Regression 1				
Marital violence	0.32 (0.10)	1.37	1.12-1.68	<0.01
Child's sex (girl)	-0.72 (0.27)	0.41	0.24-0.69	<0.001
Older than 18	0.62 (0.29)	1.87	1.05-3.30	<0.05
•Regression 2				
Marital violence	0.25 (0.11)	1.28	1.04-1.58	<0.05
Child's sex (girl)	-1.02 (0.28)	0.36	0.21-0.62	<0.001
Older than 18	0.62 (0.30)	1.86	1.04-3.36	<0.05
Depression	1.22 (0.34)	3.40	1.74-6.63	<0.001
•Regression 3				
Marital violence	0.31 (0.11)	1.36	1.11-1.67	<0.01
Child's sex (girl)	-0.72 (0.28)	0.49	0.28-0.85	<0.05
Older than 18	0.70 (0.30)	2.02	1.12-3.63	<0.01
Empathy	-0.65 (0.28)	0.52	1.12-3.63	<0.01

Continued

Appendix C1: Evidence Table 23: Risk Factors Contributing to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) Demographics Sample Size	Study Characteristic Risk Factors Studied Inclusion/Exclusion Criteria	Outcome (Violence) Definition and characterization.	Findings Implications
7020 McCloskey 2003 J Inter-personal. Violence Page 2 of 2				**Logistic Regressions Predicting *Dating Aggression* (N=292)** Factor β (SE) OR 95% CI p-value •Regression 1 Marital violence -0.07 (0.13) 0.94 0.73 - 4.20 ns Child's sex (girl) -2.28 (1.48) 0.10 0.006- 1.86 ns Older than 18 1.35 (0.37) 3.86 1.87 - 7.97 <0.001 Depression 0.18 (0.67) 1.19 0.32 - 4.44 ns Depression x Sex 1.74 (0.83) 5.70 1.12 -28.93 <0.05 •Regression 2 Marital violence 0.03 (0.12) 1.04 0.82 - 1.30 ns Child's sex (girl) 1.18 (0.39) 3.26 1.54 - 6.94 <0.01 Older than 18 1.37 (0.36) 3.92 1.95 - 7.85 <0.001 Empathy -0.94 (0.32) 0.39 0.21 - 0.73 <0.01 **Logistic Regressions Predicting *Child-to-Parent* Aggression (N=267)** Factor β (SE) OR 95% CI p-value •Regression 1 Marital violence -0.28 (0.21) 0.76 0.50-1.15 ns Child's sex (girl) 0.13 (0.38) 1.14 0.54-2.42 ns Older than 18 -0.09 (0.58) 0.91 0.29-2.82 ns Marital violence x Older than 18 0.48 (0.28) 1.62 0.94-2.78 <0.10 Depression 0.72 (0.39) 2.05 0.96-4.40 <0.10 •Regression 2 Marital violence 0.23 (0.21) 0.80 0.53-1.20 ns Child's sex (girl) 0.30 (0.40) 1.35 0.62-2.96 ns Older than 18 -0.02 (0.57) 0.98 0.32-3.00 ns Marital violence x Older than 18 0.49 (0.28) 1.63 0.95-2.79 ns Empathy -0.38 (0.38) 0.68 0.33-1.43 ns

Appendix C1: Evidence Table 24: Risk Factors Contributing to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) Demographics Sample Size	Study Characteristic Risk Factors Studied Inclusion/Exclusion Criteria	Outcome (Violence) Definition and characterization.	Findings Implications
7114 Miller-Johnson 1999 J Emotional & Behav Disorders [Longitudinal study description in Coie et al., 1992 and Coie et al., 1995]	Study Design: Prospective cohort study (part of an ongoing longitudinal study of the development of antisocial behavior from childhood to young adulthood) Study Quality Score: Poor (attrition rate > 20%) Sample size: 3rd grade participants 1749 6th grade particpants 622 Completed followup: 327 (53%) Description of cohort(s) by age, gender, & race/ethnicity Age Baseline: Grade 3 Follow-up: Grades 6 Grade 8 and Grade 10 Gender 164 (50.2%) male Race 100% African Amer	Study Period (begin, end): 1984-1993 Place (city, state): Durham, NC Study Setting: Public school system Study Population: A subsample of 3rd graders from 12 elementary schools in the local district who participated in follow-up at 2-year intervals across adolescence, beginning in 6th grade. Inclusion criteria: Study participation in grades 6, 8, and 10 Exclusion criteria: Students who were not African American Main independent factor(s): •Measures of peer social status •Measures of social behavior and aggression Instrument used to measure factors: PI developed instrument Covariates •Gender	**Outcome (violence):** Serious offenses scale at Grade 6, 8 and 10 over the past year. Definition Part of the FBI's measure of serious crime and include felony, theft, felony assault, robbery Instrument used to measure outcome National Youth Survey Type Not specified Circumstance/Situational Context Not specified Proactive/Reactive Not specified Weapon used Not specified Victim-offender relationship Not specified **Adverse Health Outcome:** Not studied **Are mechanisms of violence theorized?** Yes No If yes, state the theory:	**To examine peer rejection and aggression as predictors of the severity and type of adolescent delinquency** **Serious offense rates by Sex** Grade 6: Boys (%) 30.1; Girls (%) 15.9; Chi-sq 9.34; p-value <0.01 Grade 8: Boys (%) 30.7; Girls (%) 15.2; Chi-sq 11.01; p-value <0.01 Grade 10: Boys (%) 27.6; Girls (%) 21.3; Chi-sq NA; p-value ns **Log-linear analyses examining 3rd grade rejection and aggression as predictors of serious scales** Aggression: For Boys Chi-sq (p-value) 7.56 (<0.01); For Girls Chi-sq (p-value) 4.02 (<0.05) Rejection: For Boys ns; For Girls ns Rejection x Aggression: For Boys 7.73 (<0.01); For Girls ns **Log-linear analyses of Rejection and Aggression as predictors of minor assault, felony assault, and robbery** **Boys** Risk Factor — Minor Assault OR (p-value) / Felony Assault OR (p-value) / Robbery OR (p-value) Rejection: ------ (ns) / 1.16 (<.05) / ------ (ns) Aggression: 1.22 (<.01) / 1.22 (<.01) / 0.96 (<0.01) Interaction: ------ (ns) / ----- (<.01) / ------ (ns) **Girls** Risk Factor — Minor Assault OR (p-value) / Felony Assault OR (p-value) / Robbery OR (p-value) Rejection: 1.10 (<0.01) / ----- (ns) / ----- (ns) Aggression: ----- (ns) / ----- (ns) / ----- (ns) Interaction: ----- (ns) / ----- (ns) / ----- (ns)

Appendix C1: Evidence Table 25: Risk Factors Contributing to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) Demographics Sample Size	Study Characteristic Risk Factors Studied Inclusion/Exclusion Criteria	Outcome (Violence) Definition and characterization.	Findings Implications
11065 McNulty 2003 Justice Quarterly Page 1 of 2	Study Design: Prospective comparative cohort Study Quality Score: Poor (attrition >20%) Sample size: Target: 25,000 3 waves: 16,489 (66%) Analysis:14,358 (57%) Age Not specified Gender Male 50% Race Mean SD Asian 4% 19% Am. Indian 1% 9% Black 12% 33% Latino 9% 29% Other 1% 9% White 83% ------	Study Period (begin, end): 1988 (wave 1) 1990 (wave 2) 1992 (wave 3) Place (city, state): U.S. Study Setting: School from 2,988 locales Study Population: 25 8th graders each from 1000 middle schools followed to 1992 Inclusion criteria: 8th graders Exclusion criteria: Missing values on violence outcome but missing values on explanatory measures were imputed. Main independent factor(s): *Race-ethnicity* *Community-level measures* - Concentrated disadvantage composite index of • % persons with 1989 incomes below poverty threshold • % households headed by women • % civilian labor force who are unemployed • % population African American *Measures of Family Well-being* • family structure: two-biological-parent families, single-parent/stepparent families • family income • welfare receipt • parental education *Continued*	**Outcome (violence):** Fighting Definition Number of times respondents had been in a physical fight at or on the way to or from school over the previous half year (once or more) Instrument used to measure outcome Survey Type Fights Circumstance/Situational Context To/From School Proactive/Reactive, Weapon used, Victim-offender relationship Not specified **Adverse Health Outcome:** Not studied **Are mechanisms of violence theorized?** Yes If yes, state the theory: Racial-ethnic differences in violence should disappear when variation in structural components, family well-being and social capital is adequately controlled.	**Violence Outcome** **To specify a contextual model of differences in violence between youths who are white and those from five racial-ethnic groups.** **Logistic regression of fighting (variables entered separately)** **Variable 1 2 3 4** Race-Ethnicity White (ref) Asian .08 .07 .07 .02 Am. Indian .95** .76* .85** .94** Black .51** .32 .42** .48** Latino .41** .32* .21 .37** Other .02 -.03 -.05 -.02 Community Context % urban -.00 % owner -.00 % aged 15-24 -.01 Concentrated disadv. .04** Family Well-being Live with both parents -.04 Family income -.00 Welfare receipt .68 Parents' Education Less than High School (ref) High school degree -.45** Some college -.47** College degree -.54** Professional degree -1.10** Social Capital Parents Know Friends' parents No parents (ref) Some parents -.25** Many parents -.29** Adolescent's Interaction with Adults Rare/never (ref) Sometimes -.30** Frequently -.20** Parents' Interaction at School -.01 Constant -1.76 -1.58 -1.37 -1.50 Pseudo R-square .19 .19 .19 .19 N 14,358 Controlled for sex, moved, prior fighting, perception is okay to fight, school grades, drug use *Continued*

Appendix C1: Evidence Table 25: Risk Factors Contributing to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) Demographics Sample Size	Study Characteristic Risk Factors Studied Inclusion/Exclusion Criteria	Outcome (Violence) Definition and characterization.	Findings Implications
11065 McNulty 2003 Justice Quarterly Page 2 of 2		*Measures of Social Capital* • parental interaction with other parents (Parents know friends' parents) • parental interaction at school (how often discuss things with other parents at school) • adolescent interaction with adults (time adolescent spends talking or doing things with parents) <u>Instrument used to measure factors:</u> • Race-ethnicity and individual data: Survey • Community-level measures: derived from zip code-level data from 1990 U.S. Census • Parent well-being data from parent survey <u>Covariates</u> *Individual controls* • Gender • Moved in the past two years • Prior fighting • Perception of fighting (often/sometimes okay vs. rarely/never okay to fight) • School achievement (grades in English, math, history, science) • Alcohol/drug use in the past 30 days *Community* • % housing units owner occupied • % population in crime-prone ages (15-24) • % urban		**<u>Logistic regression of fighting (variables entered sequentially)</u>** **<u>Variable 1 2 3 4 5</u>** Race-Ethnicity White (ref) Asian .07 .03 -.02 .01 .01 Am. Indian .76* .72* .73* .76* .84** Black .32 .27 .25 .30 .39** Latino .32* .15 .11 .28* .17 Other -.03 -.08 -.11 -.06 -.08 Community Context % urban -.00 -.00 -.00 -.00 % owner -.00 -.00 -.00 -.00 % aged 15-24 -.01 -.01 -.01 -.01 Concentrated disadv. .04** .03 .03 .03* Family Well-being Live with both parents -.03 -.03 -.04 Family income -.00 -.00 -.00 Welfare receipt .70 .70 .68 Parents' Education Less than High School (ref) High school degree -.42** -.42** -.49** Some college -.44** -.43** -.46** College degree -.51** -.51** -.54** Professional degree -1.11** -1.09** -1.08** Social Capital Parents Know Friends' parents No parents (ref) Some parents -.24* -.25* -.25* Many parents -.26* -.29** -.26* Adolescent's Interaction with Adults Rarely/never (ref) Sometimes -.28** -.28** -.29** Frequently -.21* -.20* -.22* Parents' Interaction at School -.01 -.01 -.01 Constant -1.58 -1.20 -.97 -1.31 -1.13 Pseudo R-square .19 .20 .20 .19 .20 N 14,358 Controlled for gender, moved, prior fighting, perception okay to fight, school grades, drug use **p<.01, *p<.05 (two-tailed test)

Appendix C1: Evidence Table 26: Risk Factors Contributing to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) Demographics Sample Size	Study Characteristic Risk Factors Studied Inclusion/Exclusion Criteria	Outcome (Violence) Definition and characterization.	Findings Impl1ications
11087 O'Leary 2003 J Clinical Child and Ado-lescent Psych-ology	Study Design: Prospective comparative cohort, although data is from an intervention study. Study Quality Score: Unknown (attrition rate not reported). Sample size: 206 (a subset of 2,320 students included in a psychometric study) Age: Boys= 16.51 years ± 0.70 Girls= 16.40 years ± 0.73 Gender: 86 boys, 120 girls Race: Boys% Girls% White: 69.8 59.2 Black: 12.8 17.5 Latino: 7.0 9.2 Asian: 4.7 3.3 Mixed: 5.8 8.3 Other: 0 2.5	Study Period (begin, end): Beginning of Spring, 1995 End of Fall, 1996 Place (city, state): Seven Suffolk County, NY Study Setting: high schools Study Population: Ethnically and racially diverse sample of high school students enrolled in a mandatory health education class. Inclusion criteria: Student consent and passive parental consent Students reported that they were in the same relationship at baseline and 14-week followup. Exclusion criteria: See inclusion criteria. Main independent factors 1. Psychological aggression and victimization (verbal, jealous behavior, controlling behavior) 2. Physical victimization Instrument used to measure factors: 1. *Verbal*= mCTS *Jealous and controlling behaviors*= Control and Jealous scales from the Psychological Maltreatment of Women Inventory 2. mCTS Covariates None specified.	**Outcome (violence):** physical aggression Definition Ever threw something at, kicked, bit, hit, or restrained partner. Instrument used to measure outcome: mCTS (Modified Conflict Tactics Scale) The following not specified: Type, Circumstance/Situational Context, Proactive/Reactive, Weapon used, adverse health outcome. Victim-offender relationship in a romantic relationship. **Are mechanisms of violence theorized?** Yes If yes, state the theory: The notion of male dominance within a patriarchical marriage (Dobash & Dobash, 1979) The background-situational model of dating aggression (Riggs & O'Leary 1989, 1996).	**Violence Outcome** **Objectives were the following:** **1.** Examine stability of dating aggression. 2. Determine whether psychological victimization at baseline predicted physical aggression (at baseline and followup) **Correlations between physical aggression and other study variables :** ***Physical aggression Follow-up T2*** Variable Boys Girls Verbal Aggression .45** .35** Jealous Aggression .25* .21* Controlling Aggression .41** .22* Verbal Victimization .61** .43** Jealous Victimization .39** .16 Controlling Victimization .42** .33** Physical Aggression T1 .55** .57** Physical Victimization T1 .77** .67** *p< .05; **p< .001. **STRUCTURAL EQUATION MODEL FINDINGS:** **Regression Coefficient (from T1 to T2)** Boys Girls Own psych aggression T1→ Own phys aggression T1 .50** .58** Own phys. aggression T1→ Own phys. aggression T2 -.17 .13 Own phys. aggression T1→ Partner's phys aggression T2 .53** .54** Partner's psych aggression T1→ Partner's phys aggression T1 .72** .61** Partner's phys aggression T1→ Own phys aggression T2 .77** .57** Partner's phys aggression T1→ Partner's phys aggression T2 .23 .20

Appendix C1: Evidence Table 27: Risk Factors Contributing to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) Demographics Sample Size	Study Characteristic Risk Factors Studied Inclusion/Exclusion Criteria	Outcome (Violence) Definition and characterization.	Findings Implications
7453 Piquero 1999 Studies on Crime and Crime Prevention	Study Design: Prospective cohort study (from the Collaborative Perinatal Project (CPP), a nationwide study of genetic, biological, and environmental influences on child development (Niswander & Gordon, 1972) Study Quality Score: Unsure (attrition rate is not clear.) Sample size: Original cohort: 2,958 Study cohort: 987 (33%) Analysis: 867 (88%) The study cohort was taken from the ICPSR secondary data analysis archive assembled by Denno (1990). Age: Followed from birth to late adolescence Gender: 425 (49%) male 442 (51%) female Race: African Amer: 100%	Study Period (begin, end): Initial cohort: 1959-1962 Follow-up: until age 22 Place (city, state): Philadelphia, PA Study Setting: Recruited from Pennsylvania Hospital Study Population: High risk inner city sample of children born to women who attended Pennsylvania Hospital between 1959 and 1962 Inclusion criteria: see above Exclusion criteria: •Unregistered emergency deliveries •Women planning to deliver elsewhere Main independent factor(s): •Pre/perinatal disturbances •Disadvantaged familial environment •Biosocial interaction of pre/perinatal disturbances and disadvantaged familial environment Instrument used to measure factors: •PI of Collaborative Perinatal Project developed Covariates •Sex	**Outcome (violence):** Criminal violent offending between 7 and 22 Definition Violent/injury offenses: •murder •assault with intent to kill •aggravated assault •simple assault •rape •robbery with injury •any other offense that involved injury to the victim Instrument used to measure outcome •Official Philadelphia Police Department records Type: see above Circumstance/Situational Context; Proactive/Reactive; Weapon used; Victim-offender relationship: Not specified **Adverse Health Outcome:** Not studied **Are mechanisms of violence theorized?** Yes Biosocial interaction hypothesis: Pre/perinatal disturbances, when combined with disadvantaged familial environment at age seven, increase the chances of criminal offending during early adulthood.	**Violence Outcome** **To evaluate the impact of pre/perinatal disturbances and disadvantaged familial environment in predicting criminal violent offending.** **Prevalence of violent offending** Both sexes / Male / Female / p Number (%): 38 (4.4%) / 33 (7.8%) / 5 (1.1%) / <.001 **Logistic regression predicting violent offending (n-867)** Factor / β / SE / p-value Pre/perinatal disturbances: 0.0717 / 0.3521 / ns Disadv. familial environ.: 0.0918 / 0.0647 / ns Biosocial interaction*: 0.2484 / 0.1293 / <0.05 Sex: -2.0635 / 0.4874 / <0.05 Constant: -0.4489 / 0.5799 / ns -2 Log Likelihood: 280.585 Chi-square/df (p-value): 31.411/4 (<0.05) *Biosocial interaction modeled as a continuous variable. **Logistic regression of 4 category biosocial interaction on violent offending (n=867)** Factor / β / SE / p-value Biosocial interaction*: ns Disadvantaged familial envir. / Pre/perinatal disturbances yes / no: -0.1874 / 0.5800 / ns no / yes: -0.2076 / 0.4097 / ns yes / yes: 0.8874 / 0.4672 / 0.057 Sex: -2.048 / 0.4874 / <0.05 Constant: -0.4555 / 0.6103 / ns -2 Log Likelihood: 281.873 Chi-square/df (p-value): 30.123/4 (<0.05) *Biosocial interaction modeled as a categorical variable: 0=no in both factors; 1=weak familial environment and no pre/perinatal disturbance; 2=pre/perinatal disturbance and no weak familial environment, 3=both present. Reference group includes those who did not have a weak familial environment and no pre/perinatal disturbance.

Appendix C1: Evidence Table 28: Risk Factors Contributing to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) Demographics Sample Size	Study Characteristic Risk Factors Studied Inclusion/Exclusion Criteria	Outcome (Violence) Definition and characterization.	Findings Implications
1029 Rivera 1990 Violence and Victims [Findings on juveniles were also reported in a later publication by Maxfield in 1996, ID#437].	Study Design: Prospective comparative cohort study (a National Institute of Justice funded project) Study Quality Score: Fair (attrition rate not known) Sample size: Victimized Group: 908 Control Group: 667 Description of cohort(s) by age, gender, & race/ethnicity Victimzed Group (n=908) Age Mean/SD 25.69/3.53 Range 16-32 Gender 49% Male Race 67% White 31% Black Control Group (n=667) Age Mean/SD 25.76/3.53 Range 16-33 Gender Not specified (“equal numbers of males and females”) Race 65% White 35% Black	Study Period (begin, end): Initial cohorts: 1967 thru 1971; Follow-up 1987 and 1988 Place (city, state): Midwest Study Setting: Metropolitan area Study Population: All cases of physical and sexual abuse and neglect processed in the county juvenile court and matched control children. Inclusion criteria: *Victimized group*: All cases of physical and sexual abuse and neglect processed in the county juvenile court *Control group*: Children matched to controls on sex, race, date of birth, and hospital of birth or under school age or class. Exclusion criteria: *Victimized group*: Children who were not less than 11 years of age at the time of abuse or neglect *Control Group*: Any evidence that the child had been abused or neglected Main independent factor(s): Physical abuse, sexual abuse, and neglect Instrument used to measure factors: Juvenile court and juvenile probation department files Other risk factprs Sex Race	**Outcome (violence):** Outcome measure Violent criminal behavior as a juvenile (less than 18 years of age) Definition Arrests for: •murder/attempted murder •manslaughter/involuntary manslaughter/reckless homicide •rape/sodomy •robbery/robbery with injury •assault/assault and battery/aggravated assault •battery/battery with injury Instrument used to measure outcome •Juvenile probation department files Type, Circumstance/Situational Context, Proactive/Reactive, Weapon used, and Victim-offender relationship: Not specified **Adverse Health Outcome:** Not studied **Are mechanisms of violence theorized?** No	**Violence Outcome** **To examine the role of childhood abuse and neglect in violent offending.** **Percentage of violent offenders** Victimized / Controls / Chi-sq / p-value All 4.2 / 2.8 / 1.97 / ns Male 6.5 / 5.4 / 0.45 / ns Female 1.9 / 0.3 / 2.79 / <0.10 White 2.0 / 1.6 / 0.18 / ns Black 9.2 / 5.2 / 3.09 / <0.10 **Logistic regression for violent arrest as a juvenile** Factor / Coefficent (SE) / Coeff greater than 2x SE? Male 1.67 (0.35) yes Black -1.51 (0.29) yes Age (in years) 0.02 (0.04) no Victimized 0.53 (0.29) no Constant -4.88 (1.27) no **Chronicity of violent offending** Arrests for violent crime (%) None / One / 2 or more / Chi-sq / p-value Victimized 95.8 / 3.0 / 1.2 / 5.86 / 0.053 Controls 97.2 / 2.7 / 0.1

Appendix C1: Evidence Table 29: Risk Factors Contributing to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) Demographics Sample Size	Study Characteristic Risk Factors Studied Inclusion/Exclusion Criteria	Outcome (Violence) Definition and characterization.	Findings Implications
7662 Roitberg 1995 Studies on Crime and Crime Prevention Page 1 of 2	Study Design: Prospective, cohort study (taken from the first 5 years of the National Youth Survey (NYS)) Study Quality Score: Unsure •Poor if participation rate is considered. •Good if participation rate is not considered. Sample size: Initial 1725 (75% of original) Actual 1494 (87% of initial) Age : Mean Not specified Baseline: Range11-17 Outcome: Range 15-21 Gender: Not specified Race: Not specified	Study Period (begin, end): 1976-1980 Place (city, state): United States Study Setting: Household-based Study Population: American youths aged 11-17 in 1976 Inclusion criteria: Unmarried Exclusion criteria: None Main independent factor(s): Measured at or prior to outcome: •Delinquent peer group bonding (DPGB) •Belief that it is wrong to violate the law •Family involvement •School involvement •Family normlessness •School normlessness •Occupational strain •School strain •Sex •Age *Continued*	**Outcome (violence):** Outcome measure Felony assault scale, 2 measures: • annual frequency • prevalence during year (yes or no) Definition •Aggravated assault •Gang fighting •Sexual assault Instrument used to measure outcome National Youth Survey Type: see above Circumstance/Situational Context; Proactive/Reactive; Weapon used; Victim-offender relationship: Not specified **Adverse Health Outcome:** Not studied *Continued*	**To test an integrated theory of illegal behavior for non-profitable illegal violent behavior.** **Standardized regression coefficients for FREQUENCY of felony assault:** •Model 1 (no time-lagged endogenous variable) 1977 1978 1979 1980 Factor β p-val β p-val β p-val β p-val DPGB 0.323 le 0.01 0.232 le 0.01 0.415 le 0.01 0.260 le 0.01 Belief 0.072 le 0.05 -0.080 le 0.01 0.057 ns -0.051 ns Family involve. -0.045 ns 0.007 ns -0.009 ns -0.008 ns School involve. 0.035 ns -0.030 ns -0.047 ns 0.055 ns Family normless. 0.024 ns -0.027 ns -0.101 le 0.01 -0.017 ns School normless 0.005 ns 0.046 ns 0.103 le 0.01 -0.011 ns School strain (-) -0.049 ns -0.087 le 0.01 -0.041 ns -0.042 ns Job strain (-) 0.018 ns -0.004 ns -0.005 ns 0.004 ns Rural residence -0.023 ns -0.033 ns -0.040 ns -0.035 ns SES (high) -0.078 le 0.01 -0.037 ns -0.037 ns -0.036 ns |Age-15| -0.029 ns 0.079 ns 0.055 ns 0.050 ns Avg parity -0.043 ns 0.053 ns 0.033 ns -0.014 ns Gender (female) -0.102 le 0.01 -0.082 le 0.01 -0.040 ns -0.058 ns Race (nonwhite) 0.048 ns 0.024 ns 0.084 le 0.01 0.011 ns •Model 2 (with the time-lagged endogenous variable) 1977 1978 1979 1980 Factor β p-val β p-val β p-val β p-val DPGB 0.289 le 0.01 0.172 le 0.01 0.371 le 0.01 0.175 le 0.01 Belief 0.098 le 0.05 -0.022 ns 0.077 le 0.05 0.012 ns Family involv. -0.039 ns -0.013 ns 0.008 ns -0.004 ns School involv. 0.050 le 0.05 -0.009 ns -0.046 ns -0.001 ns Family normless 0.009 ns -0.018 ns -0.089 le 0.01 0.031 ns School normless -0.019 ns 0.032 ns 0.062 ns -0.046 ns School strain (-) -0.018 ns -0.053 ns -0.019 ns 0.008 ns Job strain (-) 0.016 ns 0.000 ns -0.001 ns -0.004 ns Rural residence 0.006 ns -0.022 ns -0.039 ns 0.007 ns SES (high) -0.059 le 0.05 -0.010 ns -0.022 ns -0.038 ns |Age-15| -0.038 ns 0.096 ns 0.021 ns 0.016 ns Avg parity -0.022 ns 0.077 ns 0.002 ns -0.022 ns Gender (female) -0.060 le 0.01 -0.049 le 0.05 -0.016 ns -0.052 ns Race (nonwhite) 0.040 ns 0.004 ns 0.074 le 0.01 0.047 ns Prior offending 0.328 le 0.01 0.411 le 0.01 0.342 le 0.01 0.511 le 0.01 *Continued*

Appendix C1: Evidence Table 29: Risk Factors Contributing to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) Demographics Sample Size	Study Characteristic Risk Factors Studied Inclusion/Exclusion Criteria	Outcome (Violence) Definition and characterization.	Findings Implications
7662 Roitberg 1995 Studies on Crime and Crime Prevention Page 2 of 2		•Race •Parents' socioeconomic status •Average parity, family size at time of birth •Urban, suburban, or rural residence <u>Instrument used to measure factors:</u> National Youth Survey <u>Covariates</u> None	**<u>Are mechanisms of violence theorized?</u>** Yes <u>If yes, state the theory:</u> Integrated theory: •Social and demographic background variables influence perceived and objective opportunities to attain academic, occupational and other goals, and may be associated with differences in socialization. •Combines elements of strain, social control, and social learning theories. •Delinquent peer group bonding leads to illegal behavior.	**<u>Standardized regression coefficients for PREVALENCE of felony assault</u>** •Model 1 (no time-lagged endogenous variable) 1977 1978 1979 1980 <u>Factor β p-val β p-val β p-val β p-val</u> DPGB 0.304 le 0.01 0.220 le 0.01 0.361 le 0.01 0.256 le 0.01 Belief 0.078 ns -0.150 le 0.01 0.028 ns -0.128 ns Family involv. -0.109 le 0.05 -0.030 ns -0.042 ns -0.071 ns School involv. 0.077 ns -0.101 ns -0.161 le 0.05 -0.106 ns Family normless 0.093 ns 0.010 ns -0.167 ns -0.087 ns School normless 0.050 ns 0.051 ns 0.252 le 0.01 0.093 ns School strain (-) -0.164 le 0.01 -0.153 le 0.01 -0.109 ns -0.122 ns Job strain (-) 0.016 ns 0.034 ns 0.008 ns 0.010 ns Rural residence -0.081 ns -0.026 ns -0.039 ns -0.082 ns SES (high) -0.183 le 0.01 -0.138 le 0.05 -0.074 ns 0.000 ns |Age-15| -0.007 ns 0.168 ns 0.288 ns 0.093 ns Avg parity -0.120 ns 0.138 ns 0.190 ns -0.032 ns Gender (female) -0.275 le 0.01 -0.235 le 0.01 -0.150 le 0.05 -0.224 le 0.01 Race (nonwhite) 0.070 ns 0.053 ns 0.161 le 0.01 0.065 ns •Model 2 (with the time-lagged endogenous variable) 1977 1978 1979 1980 <u>Factor β p-val β p-val β p-val β p-val</u> DPGB 0.301 le 0.01 0.189 le 0.01 0.391 le 0.01 0.224 le 0.01 Belief 0.121 le 0.05 -0.101 ns 0.012 le 0.05 -0.053 ns Family involv -0.102 ns -0.055 ns 0.004 ns -0.067 ns School involv 0.112 le 0.05 -0.067 ns -0.169 le 0.05 0.011 ns Family normless 0.061 ns -0.007 ns -0.157 ns -0.066 ns School normless -0.008 ns 0.035 ns 0.196 le 0.05 -0.011 ns School strain (-) -0.126 le 0.05 -0.166 ns -0.058 ns -0.066 ns Job strain (-) 0.015 ns 0.033 ns 0.025 ns -0.002 ns Rural residence -0.043 ns -0.001 ns -0.056 ns -0.058 ns SES (high) -0.192 le 0.01 -0.083 ns -0.046 ns -0.000 ns |Age-15| -0.022 ns 0.234 ns 0.282 ns -0.004 ns Avg parity -0.072 ns 0.244 ns 0.160 ns -0.097 ns Gender (female) -0.209 le 0.01 -0.184 le 0.01 -0.090 ns -0.221 le 0.01 Race (nonwhite) 0.071 ns 0.018 ns 0.144 le 0.05 -0.017 ns Prior offending 0.486 le 0.01 0.656 le 0.01 0.414 le 0.01 0.613 le 0.01

Appendix C1: Evidence Table 30: Risk Factors Contributing to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) Demographics Sample Size	Study Characteristic Risk Factors Studied Inclusion/Exclusion Criteria	Outcome (Violence) Definition and characterization.	Findings Implications
395 Saner 1996 J Adoles Health	Study Design: Prospective Cohort Study (Rand's California and Oregon Study - 6 year followup study) Study Quality Score: Poor (retention <80%) Sample size: 4,586 (70% of the baseline sample) Description of cohort(s) by age, gender, & race/ethnicity Age: Not specified Risk factors measured from 7 - 12 grades; Outcome measured at 12 grades. Gender: 2476 (54%) female 2110 (46%) male Race: 71% white 8% African-American 9% Hispanic 9% Asian the rest as multiethnic or Indian	Study Period (begin, end): Used data collected in 1990 Place (city, state): California and Oregon Study Setting: Junior high and middle schools Study Population: High school seniors and high school dropouts. Inclusion/Exclusion Criteria: Not specified Main independent factor(s): *Demographic risk factors*: • Gender • Disrupted family status • Limited income • Low socioeconomic status • Parent's educational level • High mobility *Negative life events to parent(s) in past 2 years*: • Separated/divorced • Death • Lost job 2 or more months *Behavior risk factors*: • Involvement with drugs • Dropping out of school • Nonviolent felony offenses • Minor delinquency *Environmental risk factors or institutional bonds:* • High perceived drug use by parents or friends • Negative academic orientation • Low religiosity • Low parental affection • Little sense of peer connectedness Instruments: Investigator-developed	**Outcome (violence):** Outcome measure Violent behavior in the past year: Any violence, persistent hitting, and predatory violence Definition **Any violence** is equal to one if any (or all) of these violent behavior: 1) gang fights, 2) use of force or strong arm methods to things from people, 3) carry a hidden weapon 4) attack someone with the idea of seriously to hurt or kill, 5) hit or threaten to hit someone in family, and 6) hit or threaten to hit someone not in your family. **Persistent hitting** is defined as hitting family members or acquaintances three or more times in the past year. **Predatory violence** is defined as involvement in gang fights, the use of strong arm methods, carrying a hidden weapon, and attacking with intent to hurt or kill. Type Gang fight, other serious injury or harm Circumstance/Situational Context, Proactive/Reactive; Weapon used; Victim-offender relationship: Not specified **Adverse Health Outcome:** Not specified **Are mechanisms of violence theorized?** No	**Violence Outcome** To examine the risk and protective factors for different types of violent behavior in a sample of high school age adolescents drawn from the general population. Odds Ratio from Logistic Regression for **Persistent Hitting** Risk Factor / Total / Male / Female **Demographic** Male gender 1.6* Disrupted family 1.0 0.8 1.4* **Negative life events** Recent separation/divorce 1.0 1.0 1.0 Death of parent 1.2 1.6 0.9 Lost job 1.3* 1.2 1.5* **Behavioral risk factors** Nonviolent felony 1.9* 1.8* 2.3* Minor delinquency 2.3* 2.3* 2.4* Drug selling 2.2* 2.1* 2.8* Problem drug use 1.1 1.3* 0.9 Early drug use 1.1* 1.2* 1.1 Full time work 1.3* 1.6* 1.0 **Environmental** Drug use by friends 1.2 1.1 1.4* Drug use by parents 1.3* 1.3 1.4* Low academic orientation 1.3* 1.2 1.5* Low religiosity 1.0 1.3 0.7* Low parental support 1.6* 1.3* 2.1* Low peer support 0.9 0.8 1.0 * significant at p<0.05 [Only the findings for Persistent Hitting are reported here. Other violence indicators included non-violent behaviors].

Appendix C1: Evidence Table 31: Risk Factors Contributing to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) Demographics Sample Size	Study Characteristic Risk Factors Studied Inclusion/Exclusion Criteria	Outcome (Violence) Definition and characterization.	Findings Implications
7870 Simons 1998 J Marriage and the Family	Study Design: Prospective Cohort Study (part of study of family stress and coping in Iowa) Study Quality Score: Poor (attrition rate>20%) Sample size: Boys & parents: Wave 1: 205 All 5 waves: 163 (79.5%) Analysis: 113 of 163 who have been dating Description of cohort(s) by age, gender, & race/ethnicity Age: Seventh grade boys followed annually for five years Gender All male Race: white	Study Period (begin, end): Baseline: Spring 1989 Follow-up: yearly for 5 years Place (city, state): 8 counties in North Central Iowa Study Setting: Private and public schools Study Population: 7th grade boys with 2-parent families from private and public schools who have been dating. Inclusion criteria: See above Exclusion criteria: Not dating Main independent factor(s): Measured in waves 1, 2, and 3 • Use of Corporal punishment • Marital violence • Involved supportive parenting • Delinquent behavior of youth • Dating violence Instrument used to measure factors: • Conflict Tactics Scale • Delinquency inventory adapted from National Youth Survey • Questions standardized for mothers and fathers Covariates • Reside in small towns or farms • SES • Parental educational level • Parental age	**Outcome (violence):** Dating violence in waves 4 and 5 Definition "When you have a disagreement with your girlfriend, how often do you hit, push, grab or shove her." Instrument used to measure outcome Conflict Tactics Scale Type: Dating violence Circumstance/Situational Context; Proactive/Reactive Weapon used: not specified Victim-offender relationship Girlfriend-boyfriend **Adverse Health Outcome:** Not studied. **Are mechanisms of violence theorized?** Yes There is a discussion of competing theories regarding dating violence: 1) Imitation 2) Broader modeling 3) Social Learning Theory is used to explain 1 or 2. 4) Dating violence as an expression of a more general antisocial pattern of behavior and orientation arising from ineffective parenting practices.	**Violence Outcome** The objective of this study was to assess the influence of corporal punishment and witnessing parental marital violence, and the protective effects of involved supportive parenting, on the development of delinquent or antisocial behaviors and dating violence of adolescent boys. **Correlation with Dating Violence (n=113)** R p Involved/Supportive Parenting -0.06 ns Corporal Punishment 0.12 ns Marital violence -0.01 ns Delinquent behavior 0.28 <=0.05 **Results of Structural Equation Modeling (γ)** Involved/supportive parenting→Delinquent behavior:-0.19 Delinquent behavior→Dating violence: 0.28 (p<=0.05) Corporal punishment→Dating violence: 0.20 (p<=0.05) Although frequent exposure to corporal punishment increased the risk of dating violence, this was not the case for interparental aggression, which did not predict dating violence. Low support and involvement by parents was associated with adolescent delinquency and drug use, which, in turn, predicted involvement in dating violence. Neither family income nor parents' level of education was related to delinquent behavior or dating violence.

Appendix C1: Evidence Table 32: Risk Factors Contributing to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) Demographics Sample Size	Study Characteristic Risk Factors Studied Inclusion/Exclusion Criteria	Outcome (Violence) Definition and characterization.	Findings Implications
4495 Stouthamer-Loeber 2001 Develop-ment and Psycho-pathology	Study Design: Prospective Cohort Study (Pittsburgh Youth Study). Study Quality Score: Element score: Domain score: Actual sample size: 500 (250 risky* and 250 non-risky). (Average attrition rate is 7.8%, range from 0 to 12.5%) [Number of cases who were maltreated and number of controls were not specified. 2 controls were matched for each victim]. *Risk group consisted of boys who had already demonstrated some disruptive behavior (at least three antisocial or delinquent behaviors Description of cohort(s) by age, gender, & race/ethnicity **Overall:** Age(M): 13.8 at first follow-up Gender: 100% male African-American: 57.5% White: 42.5%	Study Period (begin, end): Not specified Place (city, state): Allegheny County, Pittsburgh, PA Study Setting: A community setting Study Population: Two groups of 7th grade male students: Non-risk group - boys with no such behavior. Inclusion/exclusion criteria: see above Main independent factor(s): Severity of maltreatment from birth or enrollment to age 18 (based on the Maltreatment Classification System by Cicchetti et al.). Each type is rated on a 5-point scale: • physical abuse • sexual abuse • failure to provide-physical neglect • lack of supervision physical neglect • emotional maltreatment • moral-legal maltreatment • educational maltreatment • incorrigibility Sources: • Children and Youth Services records	**Outcome (violence):** Outcome measure Overt pathway: • Physical fighting (physical fighting, gang fighting) • Violence (rape, attack, strongarm) • Age of onset of disruptive and delinquent behavior Definition: see above Sources: Juvenile court records Instruments • Child Behavior Checklist (Achenbach) • Diagnostic Schedule for Children • Self-Reported Delinquency interview • Youth Self-Report (Achenbach) Type Physical fighting, violence Circumstance/Situational Context; Proactive/Reactive; Weapon used; Victim-offender relationship; Not specified **Adverse Health Outcome:** Not studied **Are mechanisms of violence theorized?** Yes - The dsiiruptive-delinquent pathways. The steps in the "authority conflict pathway applies to boys up to age 12 years, because after that age truancy becomes more common. Because most maltreatment happens in the home, one could expect that conflict with authority figures is likely to happen. Another hypothesis is that the threat of maltreatment reduces authority conflict.	**Violence Outcome** This study addressed whether substantiated maltreatment, and its timing, was related to disruptive behaviors and delinquency in the triple pathways. One of the 3 pathways is the Overt pathway which goes from minor aggression to physical fighting to violence. We report here the findings related to the Overt pathway. Overt Pathway — Mal-treated(%) — Control (%) — Odds Ratio (CI) Aggression — 67.2 — 46.7 — 2.34(1.23-4.44) Fighting — 77.0 — 42.6 — 4.52(2.25-9.09) Violence — 50.8 — 34.4 — 1.97(1.05-3.68) Any overt pathway step — 91.8 — 70.5 — 4.69(1.74-12.66) Number of cases or controls not given.

Appendix C1: Evidence Table 33: Risk Factors Contributing to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) Demographics Sample Size	Study Characteristic Risk Factors Studied Inclusion/Exclusion Criteria	Outcome (Violence) Definition and characterization.	Findings Implications
8011 Stout-hamer-Loeber 2002 Criminal Behavior and Mental Health	Study Design: Prospective Cohort Study (8 waves of assessments from the oldest sample of the Pittsburgh Youth Study) Study Quality Score: Good Sample size: Original: 506 Analysis: 470 (93%) Description of cohort(s) by age, gender, & race/ethnicity Age 13 years at beginning of studyfollowed to age 18 Gender: males Race: not specified in this article. From #4834: African-american 47.5% Remainder described as "almost all white."	Study Period (begin, end): Not stated here. [The Pittsburgh Youth Study began in 1987] Place (city, state): Pittsburgh Study Setting: Public schools Study Population: Random sample of 7th grade boys enrolled in the City of Pittsburgh public schools in 1987-1988 Inclusion criteria: See above Exclusion criteria: Not specified Main independent factor(s): 3 types of disruptive behavior: • ADD - attention deficit/hyperactivity disorder • ODD - oppositional defiant disorder • CD - conduct disorder Instrument used to measure factors: Diagnostic Interview Schedule for Children (Costello, 1986) Covariates none	**Outcome (violence):** 4 outcome groups based on presence of outcome in at least 2 assessments over 5 years: 1. persistent serious violent offender (PVO) 2. Persistent serious property offender (PPO) 3. Persistent non-serious offender (PNO) 4. Non-delinquent group (ND) Definition Serious violent crimes include attack to seriously hurt or kill, strong-arm, gang-fight, and rape. Instrument used to measure outcome • Self Reported Delinquency Questionnaire • Archenbach Youth Self-Report • Child Behavior Checklist Type: see above Circumstance/Situational Context Proactive/Reactive Weapon used Victim-offender relationship Not specified **Adverse Health Outcome:** Not studied **Are mechanisms of violence theorized?** **No**	Postulate that parents' recognition of boys' behavior problems often is a first step towards curtailing a delinquent career. The second step is for parents to engage professional help for their child. This paper focuses on parents' recognition of early behavior problems in those boys who eventually become persistent serious delinquent and second whether these youth received professional help. **1. Prevalence of Outcome Groups in Sample** Total / ND / PNO / PPO / PVO Percent: 100% / 40.4 / 19.9 / 18.2 / 21.4 Estimated n: 470 / 190 / 94 / 86 / 100 **2. % with Disruptive behavior Diagnosis at age 13.5** ND / PNO / PPO / PVO Estimated from Fig 3 Percent: 10.1 / 19.0 / 21.0 / 27.7 Number: 19 / 18 / 18 / 28 Chi square for ND vs. PVO: 14.87 (P<.001) Chi square for ND vs PPO: 6.04 (P<.01) Chi square for ND vs PNO: 4.13 (p<.05)

Appendix C1: Evidence Table 34: Risk Factors Contributing to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group Demographics Sample Size	Study Characteristic Risk Factors Inclusion/Exclusion Criteria	Outcome (Violence) Definition and characterization.	Findings Implications
4815 Welte 1998 J Substance Abuse	Study Design: Prospective Cohort Study (Waves 1 and 2 of the Buffalo Longitudinal Study of Young Men (BLSYM) Study Quality Score: Good if retention rate only is considered; Poor if participation and retention rates are considered. Sample size: Wave 1: 625 (448 delinquent; 117 non-delinquent) Wave 2: 596 (95%) Description of cohort(s) by age, gender, & race/ethnicity Age range: 16-19 years Gender 100% male Race White 49% Af. Am 45% Other 6%	Study Period (begin, end): Wave 1- October 1992-January 1994 Wave 2- 18 months later Place (city, state): Buffalo, NY Study Setting: Private interview rooms at the Research Insitute on Addictions Study Population: Males 16-19 with over-sampling of delinquent adolescents (3 or more items answered in the delinquent direction) Inclusion criteria: see above Exclusion criteria: • Not English speaking • Gravely ill • Not able to communicate Main independent factor(s): • Alcohol consumption (from quantity and frequency for 6 forms of alcohol) • Verbal intelligence (by Ammons Quick Test) • Visual-motor intelligence (by Trail Making Test, Forms A and B) • Race Covariates Violent offending at baseline	**Outcome (violence):** Outcome measure Violent Offending (constructed from the National Youth Survey (Elliott et al., 1985) Definition Total # of times in past year committing: robbery, rape, gang fights, simple and aggravated assault. Type: See above Circumstance/Situational Context; Proactive/Reactive; Weapon used; Victim-offender relationship: Not specified **Adverse Health Outcome:** Not studies **Are mechanisms of violence theorized?** Yes Heavy drinking and lower intelligence is a dangerous combination. Pernanen (1981) suggests alcohol causes violent behavior by reducing intellectual functioning and promoting misunderstanding. Miczek (1994) suggests Left-hemisphere dysfunction interferes with linguistic processing and may be causal to violence in that poorer communication contributes to the mis-interpretation of events and motives. Moffit and Henry (1989) have a competing theory linked with alcohol reducing inhibitions. Persons under the influence of alcohol and with low intelligence would have weaker self-restraint.	**Violence Outcome** **ANCOVA: dependent variable: violent offending wave 2(N=568)** df F P Control/Covariates Race 1 1.6 0.200 Violent Offending wave 1 1 3.1 0.080 Alcohol consumption wave 1 1 31.1 <0.0001 Linear Trend Terms Verbal Intelligence wave 2 1 3.5 0.062 Trail making wave 2 1 1.8 0.179 Alcohol consumption wave 2 1 18.0 <0.0001 Interactions Race by alcohol consumption wave 2 1 11.8 0.001 Verbal Intelligence wave 2 by alcohol consumption wave 2 1 17.7 <0.0001 Trail making wave 2 by alcohol consumption wave 2 1 5.9 0.016 **Violent crimes in past year wave 2 broken down by alcohol consumption and verbal intelligence, N=596** Alcohol Consumption (ounces per day) / Wave 2 mean violent crimes in past year / Verbal Intelligence (high to low) / Wave 2 mean violent crimes in past year 0.0 5 1 3 0.01-0.1 2 2 3 0.1-0.2 2 3 43 0.2-0.4 7 4 14 0.4-0.8 2 5 5 0.8-1.2 20 6 21 1.2-2.1 7 7 2 2.1-3.9 24 8 8 3.9-20.5 96 9 18 10 65 Overall 17 Overall 17 Results: Alcohol use in wave 1 was strongly predictive of violent offending in wave 2. Race does not predict violent offending. Small and marginally significant main effect of verbal intelligence on violent offending. Heavier drinking men tend to be more violent. Violent offending is far higher among the lowest intelligence decile.

Appendix C1: Evidence Table 35: Risk Factors Contributing to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) Demographics Sample Size	Study Characteristic Risk Factors Studied Inclusion/Exclusion Criteria	Outcome (Violence) Definition and characterization.	Findings Implications
9447 Zhang 1997 J Quantitat Criminol	Study Design: Prospective cohort study (Pittsburgh Youth Study - 4 year follow-up of 3 school-grade cohorts (grades 1, 4 and 7) (6-12 years) Study Quality Score: Unsure Attrition rate not specified Sample size: 1517 for 3 cohorts; about 500 per cohort (only the results for the oldest cohort used). Age Mean Not specified Grades 1, 4, and 7 (only results from grades 4 and 7 sample will be reported) Range 6-12 Gender 1517 (100%) male Race African-Amer 58% Caucasian 41% Other 1%	Study Period: 1987-1992 Place (city, state): Pittsburgh, PA Study Setting: Public schools Study Population: Sample of males from grades 1, 4, and 7 from Pittsburgh public school system. Each grade consisted 250 high risk of disruptive behavior and 250 not. Inclusion criteria: See above Exclusion criteria: None specified Main independent factor(s): •Attitude toward delinquent behavior •delinquent behavior Instrument used to measure factors: • Attitude measures: PI developed • Behavior measures: SRD (National Youth Survey) Covariates Age	**Outcome (violence):** Serious violence during the study period. Definition •Severely attacking or hurting people with a weapon, strong-arming •Severely attacking or hurting people with a weapon, strong-arming, gang fighting, killing Instrument used to measure outcome Items selected from National Youth Survey instrument. Type: see definition Circumstance/Situational Context; roactive/Reactive; Weapon used; Victim-offender relationship Not specified **Adverse Health Outcome:** Not studied **Are mechanisms of violence theorized?** Yes Delinquent attitudes and behaviors were related to each other in various patterns, and age was a defining factor that provided much of the explanation for the inconsistencies in research findings.	**Violence Outcome** **To examine developmental trends in delinquent attitudes and behaviors for the Oldest sample (Grade 7 at study start) (n≈500)** **Odds Ratios (p-values) for Pairwise Attitude-Behavior relations** Oldest sample (grade 7 at study start): *Serious violence offenses* Yr 1 Yr 2 Yr 3 Yr 4 *Attitude to serious violence* Yr 1 3.9*** 3.1** Yr 2 3.7*** 4.6** Yr 3 9.5*** 4.6*** Yr 4 5.1*** ** p<.01; ***p<.001 **Growth curve estimates (p-values) as function of Age polynomial** Serious violence attitudes / Serious violence behaviors Age 0.0044 (<0.01) / 0.0169 (<0.01) Age^2 0.0006 (ns) / 0.0021 (ns) Age^3 0.0002 (ns) / 0.0002 (ns) **Change (p-value) between adjacent ages in Violent attitudes and behaviors by Random Regression Models** Ages / Serious violence attitudes / Serious violence behaviors 9-10 0.0008 (ns) / 0.0678 (ns) 10-11 0.0010 (ns) / -0.0002 (ns) 11-12 0.0172 (<0.01) / 0.0069 (ns) 12-13 -0.0045 (ns) / -0.0014 (ns) 13-14 -0.0009 (ns) / 0.0311 (ns) 14-15 0.0103 (ns) / 0.0552 (<0.01) 15-16 0.0164 (<0.01) / -0.0194 (ns) 16-17 -0.0038 (ns) / 0.0371 (ns) 17-18 0.0372 (ns) / 0.1023 (ns)

Appendix C2: Evidence Table 01: Effectiveness of Prevention Interventions to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) and Sample Size	Time/Place Inclusion/Exclusion Criteria Outcome Definition	Prevention Intervention: Definition and Characteristic	Findings
1729 Borduin 1995 J Consulting and Clinical Psych	Study Design: A pretest-posttest control group design, with random assignment to conditions and 4-year follow-up for arrests. Individual study quality score Poor (Comparability of groups was maintained; attrition>20%.) Sample size (initial and actual): Overall= 176 families (140, 79.5%, completed treatment). Intervention Group (Grp 1)-Multisystemic therapy(MST) =92 (77, 84%, completed treatment) Control Group (Grp 2)-Individual therapy (IT)=84 (63, 75%, completed treatment) Age, gender & race groups: Age 14.8 (SD 1.5) Gender – 67.5% male Race – 70% white, 30% African American Age, gender, and race only provided for all participants and not for specific intervention groups.	Time (begin, end): Not specified Place (city, state): Missouri Study Population Juvenile offenders at high risk for committing additional serious crimes Inclusion criteria: Consecutive referrals by juvenile court personnel included all families in which the youth: • Were ages 12 – 17 • Had at least 2 arrests • Currently lived with at least one parent figure Exclusion criteria: • signs of psychosis or dementia Moderating/mediating factors • gender, ethnic background, number of arrests for violent crime before treatment **Outcome 1: violence** Measures: 1. 4-year change in adolescent behavior problems as measured by mothers' reports on the 89-item Revised Behavior Problem Checklist (RBPC). 2. 4-year change in arrest rate of adolescent criminal activity 3. 4-year change in seriousness of adolescent criminal activity. 4. 4-year change in arrests for violent crimes. How measured: Criminal arrests and severity measured by record review of juvenile court, local police and department of Public Safety records from the time of the adolescent's release from juvenile court supervision.	**Description of Program** Multisystemic Therapy (Henggeler & Borduin, 1990) - • present-focused and action-oriented • directly addresses intrapersonal and systemic factors known to be associated with adolescent antisocial behavior. • individualized and highly flexible Name of program MST (Part of Missouri Delinquency Project) Level Tertiary Kind of program Multisystemic approach with youth and their families designed to empower parents with the skills and resources to independently address future problems. Mechanism of delivery Individual and family intervention Target population Adolescent offenders Setting where intervention took place Sessions were generally held in the families home and in community locations (school, rec center, etc.) Setting where subjects were recruited Identified in Juvenile court and contacted by phone or home visit. Person delivering program Graduate students in clinical psychology	**Primary Objective** To examine the long term effects of MST vs IT on the prevention of criminal behavior and violent offending among juvenile offenders at high risk for committing additional serious crimes. **Outcome 1: RBPC score (mean±SD)** Treated (n=70) / Control (n=56) Pre: 0.17±0.74 / -0.15±0.80 Post: -0.54±0.81 / 0.64±0.85 Significant decrease / Significant increase **Outcome 2: 4-year Arrest Rate** Treated (n=92) / Control (n=84) % arrested: 26.1 / 71.4 A log-rank test comparing the survival function (probability of not being arrested) revealed significant difference $\chi 2$ (1,*N*=176)=46.4, p<.0001. **Outcome 3:** **(a) Number of Serious Crimes (mean±SD)** *Completers and dropouts* Treated (n=92) / Control (n=84) / F (p) 1.71±1.04 / 5.43±3.62 / 10.4(<.002) *Completers Only* Treated (n=77) / Control (n=63) / F (p) 1.57±0.85 / 4.41±3.89 / 10.4(<.002) **(b) Seriousness of Crime (mean±SD)** *Completers and dropouts* Treated (n=92) / Control (n=84) / F (p) 5.17±5.01 / 9.40±3.37 / 20.1(<.001) *Completers Only* Treated (n=77) / Control (n=63) / F (p) 6.35±4.67 / 9.67±3.38 / 12.8(<.001)

Appendix C2: Evidence Table 01: Effectiveness of Prevention Interventions to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) and Sample Size	Time/Place Inclusion/Exclusion Criteria Outcome Definition	Prevention Intervention: Definition and Characteristic	Findings
1729 Borduin 1995 J Consulting and Clinical Psych Page 2		The seriousness of arrest was measured in a 17 point scale (1=truancy, 4=disorderly conduct, 8=assault/battery, 11=grand larceny, 13=unarmed robbery , 17=murder). Circumstance: not specified Proactive/reactive: not specified Weapon used: Not specified Victim-offender relationship: not specified **Outcome 2: Adverse health** Not addressed **Outcome 3: Effectiveness** Change in outcomes **Outcome 4: Safety** Not studied	Time period/duration/frequency MST families completed a mean of 23.9 hours of treatment (SD =8.2, range 5-49), IT families completed a mean of 28.6 hours (SD=9.8, range 15 –72). These means were significantly different (p<.01)	**Outcome 4: Arrests for Violent Crimes** *Completers and dropouts* F(2, 173)=11.7, p<.0008 *Completers Only* F(2, 137)=8.66, p<.003. [No other statistics were reported.] Generalization of Effectiveness: MST completers and drop outs were less likely to be arrested for violent crimes following treatment than were youth who participated in the IT group (even after controlling for the number of arrests for violent crime before treatment) MST was found to be equally effective with youths of different gender and ethnic backgrounds.

Appendix C2: Evidence Table 02: Effectiveness of Prevention Interventions to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) and Sample Size	Time/Place Inclusion/Exclusion Criteria Outcome Definition	Prevention Intervention: Definition and Characteristic	Findings
5246 Bosworth 2000 Am J Health Behav	Study Design: Randomized control trial. Each grade has 3 teams of 100 to 140 students. 2 teams in each grade randomly to the intervention and 1 team to the control. Individual study quality score • no intent-to-treat analysis • groups not comparable at the outset. Sample size (initial and actual): Overall: 558 completed initial survey; 538 completed follow-up survey. After exclusions, actual in analysis was 516. 1) Intervention group: N=321 2) Control group: N=195 Age: 42% (232) 6th graders, 31% (173) 7th graders, 27% (153) 8th graders Gender: 46% (258) males, 54% (300) females Race: 84% (468) Caucasian 9% (52) African-American 4% (19) Biracial 4% (19) Other 1) Intervention group Age: 42% 6th graders Gender: 45% males Race: Not specified 2) Control group Age: 25% 6th graders Gender: 46% males Race: Not specified	Time (begin, end): January to April 1995 Place (city, state): A major midwestern metropolis Study Population: 6th, 7th and 8th grades students Inclusion criteria: Not specified Exclusion criteria: Not specified Moderating/mediating factors Grade was the covariate in the multivariate analysis. **Outcome 1: violence** Measure: Self-reported aggressive behavior measured with 4 items from the U of Texas Hlth Science Center Aggression Scale and 3 items from the Conflict Tactic Scale in the past 30 days. Definition: " hit back when hit first", "pushed, slapped, shoved, or kicked other students", "got into a physical fight when angry", and "threatened to hurt or to hit another student. Scores ranged from 7 to 28. **Outcome 2: Adverse health** Not specified **Outcome 3: Effectiveness** Not specified **Outcome 4: Safety** Not specified	**Description of Program** This computer-based multimedia program was designed to teach adolescents how to resolve interpersonal issues without violence. Name of program SMART Talk (Students Management Anger and Resolution Together) Level: Primary Kind of program Anger management, perspective taking, dispute resolution Mechanism of delivery Computer-based multimedia program Target population 6th - 8th grade students Setting where intervention took place School Setting where subjects were recruited School Person delivering program Self access to the software Time period/duration/frequency Access to program was provided during the entire semester. Students had free access and during some class times.	To evaluate the impact of SMART Talk on aggressive behaviors. **Mean (SD) of aggression score** **(A) Both Gender, grade was covariate** Time **Intervention** (n=321) **Control** (n=195) Pre 14.98 (5.64) 15.06 (5.91) Post 14.98 (5.80) 15.27 (6.17) **(B) Males, grade was covariate** Time **Intervention** (n=145) **Control** (n=90) Pre 15.88 (5.92) 16.64 (6.32) Post 16.14 (6.23) 16.89 (6.46) **(C) Females, grade was covariate** Time **Intervention** (n=176) **Control** (n=105) Pre 14.24 (5.32) 13.71 (5.18) Post 14.03 (5.25) 13.87 (5.58) **(D) 6th Graders** Time **Intervention** (n=108) **Control** (n=106) Pre 15.94 (5.57) 14.26 (5.40) Post 15.68 (5.93) 15.33 (6.08) **(E) 7th Graders** Time **Intervention** (n=114) **Control** (n=42) Pre 14.61 (5.52) 17.56 (6.51) Post 14.66 (5.49) 16.24 (6.34) **(F) 8th Graders** Time **Intervention** (n=99) **Control** (n=47) Pre 14.36 (5.78) 14.64 (5.96) Post 14.61 (5.99) 14.26 (5.94) **No significant reduction in aggression in either group for gender or grade subgroups.**

Appendix C2: Evidence Table 03: Effectiveness of Prevention Interventions to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) and Sample Size	Time/Place Inclusion/Exclusion Criteria Outcome Definition	Prevention Intervention: Definition and Characteristic	Findings
5301 Breunlin 2002 J Educational Research	Study Design: Nonrandomized controlled study with pre and post intervention comparison. Six study groups, 3 accepted treatment, 3 declined treatment. Individual study quality score Poor (potential confounders not controlled for). Sample size (initial and actual): Total=165 All Gp1 Gp2 Gp3 Gp4 Gp5 Gp6 165 25 41 7 36 10 46 Grade 12th 11th 10th 9th All 4% 11% 30% 54% Gp1 12% 8% 39% 44% Gp2 5% 7% 27% 61% Gp3 14% 29% 57% 0% Gp4 3% 19% 28% 50% Gp5 0% 30% 50% 20% Gp6 0% 2% 24% 74% Gender: % Male All Gp1 Gp2 Gp3 Gp4 Gp5 Gp6 82 68 83 100 89 80 83 Race Af/Am Hisp Cauc API Other All 10% 12% 74% 2% 2% Gp1 16% 20% 60% 0% 0% Gp2 22% 12% 61% 0% 5% Gp3 14% 0% 71% 0% 14% Gp4 3% 8% 83% 6% 0% Gp5 0% 0% 100% 0% 0% Gp6 2% 15% 80% 2% 0%	Time (begin, end): Entire 1997-1998 school year and first semester of the 1998-1999 school year. Place (city, state): Western suburbs of Chicago, Il. Study Population: Public High School Students that were suspended between 8/97 and 12/98 Inclusion criteria: Suspended during time frame Exclusion criteria: Not noted Moderating/mediating factors: type of suspension and enrollment in program Gp 1: fighting-in ASVB Gp 2: fighting-declined ASVB Gp 3: oth violence-in ASVB Gp 4: oth violence-declined ASVB Gp 5: non-violence-in ASVB Gp 6: non-violence-declined ASVB **Outcome 1: physical violence** Measure: rate of resuspension for acts of physical violence per year, measured by the Physical Violence Index (PVI) Definition - physical confrontation Type- physical violence Circumstance, Proactive/reactive, Weapon used, Victim-offender relationship; Not reported **Outcome 2: Adverse health** Not reported **Outcome 3: Effectiveness** Reduced rate of resuspension. **Outcome 4: Safety** Not reported	**Description of Program** The core premises and skills of conflict resolution are derived from the principles and practices of mediation. The structure and format of this program is predicated on substantial evidence that violence is largely learned and consequently can be prevented through teaching alternatives to violence. Name of program Alternative for Suspension for Violent Behavior (ASVB) Level: Secondary Kind of program • Teaching social problem-solving and thinking skills • Family intervention • Anger management Mechanism of delivery Each family meets with a Trainer for 6 hours Target population High School Students who have been suspended Setting where intervention took place Family Institute satellite office near school site Setting where subjects were recruited High School Person delivering program Trainer- qualifications not described Time period/duration/frequency 6 hours spread over 4-90 minute sessions	Goal: To evaluate the impact of a conflict resolution skills training program that is offered as an alternative to out-of-school suspension in reducing acts of physical violence among high school students. **Number re-suspended for fighting and physical violence index (PVI)** **# /Total in group (%) PVI** All groups 16/165 (10%) 0.20 Group 1 (Tx) 1/ 25 (4%) 0.06 Group 2 (Con) 5/ 41 (12%) 0.18 Group 3 (Tx) 1/ 7 (14%) 0.41 Group 4 (Con) 2/ 36 (6%) 0.11 Group 5 (Tx) 1/ 10 (10%) 0.27 Group 6 (Con) 6/ 46 (13%) 0.32 Treatment 3/ 42 (7%) 0.17 No Treatment 13/123 (11%) 0.21 • Statistically significant differences between groups were not observed but important trends in data were identified. • Analyses of Pooled treatment and non treatment groups indicated a trend of treatment groups faring better on the three out of school suspension indices. • Lack of random assignment to treatment and non-treatment groups opens the possibility that differences in the acceptors and refusers explain the results instead of the particular intervention.

Appendix C2: Evidence Table 04: Effectiveness of Prevention Interventions to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) and Sample Size	Time/Place Inclusion/Exclusion Criteria Outcome Definition	Prevention Intervention: Definition and Characteristic	Findings
1308 Constan-tino 1997 J Child & Adolesc Psycho-pharma-cology	Study Design: Nonrandomized control trial Individual study quality score Poor (key confounders were given little or no attention). Sample size (initial and actual): Total - initial: 63 Total - actual 58 Treatment Group (Grp 1): 19 Control Group (Grp 2) 39 Age, gender & race groups: All Grp1 Grp2 Age 13-17 Gender Treated group 11 M 8 F Race not specified Comment: The Overt Aggression Scale includes Aggression against others as only one component,	Time (begin, end): August 1994-March 1995 Place (city, state): St. Louis, Missouri Study Population: Psychiatrically hospitalized adolescent (not selected for aggressiveness) Inclusion criteria: • Hospitalized for at least 4 weeks from 8/94 – 3/95 • Received trial of SSRI's for at least 5 weeks, initiated and completed in hospitalization Exclusion criteria: • Primary diagnoses drug or alcohol dependence • Received SSRI for less than 5 weeks Moderating/mediating factors Discharge Diagnosis (e.g. disruptive, affective or psychotic); Age; gender **Outcome 1: violence** Measure: Summation of behavior over 1 week based on a modified Overt Aggression Scale Definition: "physical aggression toward other people" Type Aggression towards others Circumstance Observed in hospital setting Proactive/reactive; Weapon used; Victim-offender relationship: not specified. **Outcome 2: Effectiveness** Reduction in violence **Outcome 3: Adverse health** Not studied **Outcome 4: Safety** Adverse effects	**Description of Program** Intervention group received at least 5 week treatment with SSRI, may use fluoxetine, paroxetine or sertraline. May have concurrant use of other psychotropic medication. Control group received no SSRI treatment. Name of program Selective serotonin reuptake inhibitors (SSRIs) treatment Level: secondary Kind of program: medication Mechanism of delivery Daily treatment with SSRI. Target population Youth in psychiatric hospital Setting where intervention took place Psychiatric Hospital Setting where subjects were recruited Psychiatric hospital Person delivering program Health care providers Time period/duration/frequency At least 5 weeks duration of treatment that were initiated and completed during hospitalization. Starting dose was 15±5mg and dosage was raised at a mean rate of 5 mg every 4 days up to a mean dose of 25±10mg daily. Notes if any SSRSI treated patients did not differ significantly in their diagnosis, length of stay, or level or aggression.	**Low concentrations of serotonin in the CNS have been associated with increased aggression in humans. Studies with adults shows that SSRIs reduce aggressive behavior in depressed adults. This study attempts to replicate this with adolescents.** Comparison of Aggressive events/week for 13 adolescents while treated with SSRI's and While not treated with SSRI's, shown only for those adolescents who were observed both on and off SSRIs during hospitalization # of physically aggressive events towards other per week Mean SD Paired-t p Off SSRIs 0.50 0.88 -1.33 0.21 On SSRIs 0.69 1.09 # of physically aggressive events towards others per week N Mean SD SSRI treated patients While Treated with SSRIs Disruptive 8 0.49 0.38 Affective 9 0.18 0.39 Psychotic 2 2.21 2.54 While Not Treated with SSRIs Disruptive 7 0.32 0.45 Affective 5 0.23 0.43 Psychotic 1 3.08 0 Contrast Group Disruptive 19 0.64 0.71 Affective 15 0.19 0.41 Psychotic 5 1.49 2.33 • There was no statistically meaningful improvement in the level of aggressive behavior during the SSRI trials. • 2 minor adverse effects of SSRIs. One experienced dose dependent tremor and insomnia and another developed mild recurrent headaches. Neither patient required discontinuation of drugs.

Appendix C2: Evidence Table 05: Effectiveness of Prevention Interventions to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) and Sample Size	Time/Place Inclusion/Exclusion Criteria Outcome Definition	Prevention Intervention: Definition and Characteristic	Findings
393 DuRant 1996 J Adoles Health	Study Design: Pre and Post Intervention design for two intervention programs. Two schools were randomly assigned one of the two programs. Individual study quality score Poor (no control program) Sample size (initial and actual): 1) *Violence Prevention Curriculum for Adolescents* N=151 (27% sixth, 40% seventh, 33% eighth) 2) *Conflict Resolution: A Curriculum for Youth Providers* N=74 (41% sixth, 27% seventh, 32% eighth) Age, gender & race groups: All Age: Not specified Gender: Male 48.4% (109) Female 51.6% (116) Race: Black 88.7% (189) White 10.3% (22) Native Amer .9% (2) 1) Violence Prevention Curriculum for Adolescents Age: Not specified Gender: Not specified Race: 84% Black 2) Conflict Resolution Age: Not specified Gender: Not specified Race: 100% Black	Time (begin, end): Two 6-week time blocks in November and December 1993 and February and March, 1994. Place (city, state): Augusta, GA Study Population: Students in Middle School (grades 6, 7, and 8) Inclusion criteria: 1) Violence Prevention: students who were in afternoon elective classes 2) Conflict Resolution: students who had free class periods during the morning Exclusion criteria: Not specified Moderating/mediating factors Not specified **Outcome 1: violence** Measure: • Use of Violence in the previous 30 days - assessed on a 7-item scale; • frequency in previous 30 days of engaging in a physical fight Definition of violence (same as CDC Youth Risk Behavior Survey and Denver Youth Delinquency Questionnaire): • openly carried a weapon, • had been in a fight, • had been injured in a fight and required medical attention, ***Continued***	**Description of Program** Name of program 1) Violence Prevention Curriculum for Adolescents 2) Conflict Resolution: A Curriculum for Youth Providers Level: both are primary Kind of program 1) Didactic and cognitive, combining information and role-playing. 2) Conflict resolution, skill building exercises, role-playing Mechanism of delivery Both are school curriculum Target population Both are middle school students Setting where intervention took place Both are in classrooms Setting where subjects were recruited Both are in schools Person delivering program Both are delivered by an experienced African-American mental health counselor Time period/duration/frequency Both programs had 10 50-min sessions . Both were conducted at the same time in each school during two 6-week time blocks in November and December 1993 and February and March 1994.	The purpose of this study was to compare the effectiveness of the two curriculums in reducing use and frequency of violence in middle school students living in or around public housing. Violence Prevention Pre-test Mean(SD) / Post-test Mean(SD) Use of violence .82(1.79) / .39(1.28) Freq of fighting 1.37(1.75) / .51(1.26) Freq of injury .15(.48) / .20(.78) Conflict Resolution Pre-test Mean(SD) / Post-test Mean(SD) Use of violence .73(1.65) / .51(1.38) Freq of fighting 1.74(1.99) / 1.03(1.51) Freq of injury .59(1.08) / .28(.63) Probability Levels Bet Group / Within Group / Group X Time Use of violence .92 / .004 / .35 Freq of fighting .028 / .001 / .62 Freq of injury .001 / .105 / .018 • Significant ($p<.001$) reductions in the violence scale by both groups following both interventions, but the groups did not differ at the posttest. • Significant ($P\leq.022$) Gender X Time interaction effect indicated that at pretest the female students had higher use of violence scale scores than did males, but they had significantly lower scores following the intervention. *Continued*

Appendix C2: Evidence Table 05: Effectiveness of Prevention Interventions to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) and Sample Size	Time/Place Inclusion/Exclusion Criteria Outcome Definition	Prevention Intervention: Definition and Characteristic	Findings
393 DuRant 1996 J Adoles Health Page 2		• had carried a hidden weapon, • had attacked someone with a weapon or with the idea of seriously hurting or killing them, • had used a weapon to stab something from someone, and • had been involved in a gang fight. **Outcome 2: Adverse health** Definition of outcome measure(s) Injury during a fight servere enough to require medical treatment **Outcome 3: Effectiveness** Definition of outcome measure(s) • Use of violence in hypothetical situations, • avoidance of violence • use of violence in the previous 30 days • fighting behaviors in the previous 30 days **Outcome 4: Safety** Definition of outcome measure(s) Not specified		• Students in both groups had significant (P≤.001) reductions in the frequency of fighting. • No significant Group X Time interaction effect in the frequency of fighting. • A significant (P≤.018) Group X Time interaction effect. Students in the violence prevention group had a slight increase in this scale, whereas students in the conflict resolution group reported a significant drop in more severe fighting behaviors. • A significant (P≤.018) Gender X Group interaction effect on this scale. Males scored higher on this scale at both pretest and posttest, but males in the conflict resolution group demonstrated the greatest reduction in the frequency of fighting resulting in injury requiring medical treatment.

Appendix C2: Evidence Table 06: Effectiveness of Prevention Interventions to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) and Sample Size	Time/Place Inclusion/Exclusion Criteria Outcome Definition	Prevention Intervention: Definition and Characteristic	Findings
1579 DuRant 2001 J Adoles Hlth	Study Design: Nonrandomized control trial. Two schools received the intervention and two schools that did not receive the intervention served as controls. Individual study quality score Poor (key confounders not given adequate attention) Sample size (initial and actual): Overall: initial 704, actual 563 Intervention Group Initial 292, actual 233 (80%) Control Group Initial 412, actual 330 (80%) Age, gender & race groups: All Age 11 235 12 320 13 126 14 22 Gender M 344 F 360 Race African American 88.7%	Time (begin, end): Oct 1994-Feb 1995 Place (city, state): Augusta, Georgia Inclusion criteria: Students in middle schools Living in or around public housing projects Exclusion criteria: Moderating/mediating factors **Outcome 1: violence** Measure: Use of violence in the previous 30 days, assessed on a 5-item scale ranged from 0 to 20. Definition: Frequency of 1. "Attacked someone with a weapon" or 2. "used weapon, force or strong-arm methods to get money" Type: assault, robbery Circumstance: Not specified Proactive/reactive: 1, not stated Weapon used: not specified Victim-offender relationship: not specified **Outcome 2: Adverse health** Frequency of fighting requiring medical treatment **Outcome 3: Effectiveness** Reduction in violence as determined by post test **Outcome 4: Safety** Not studied	**Description of Program** The curriculum was based on Social Cognitive Theory with 13 modules. Name of program Peaceful Conflict and Violence Prevention Curriculum Level: primary Kind of program: conflict resolution Mechanism of delivery Didactic and cognitive, information and role playing Target population Middle school students living in or around public housing Setting where intervention took place Taught in Health Education classes Setting where subjects were recruited Middle schools Person delivering program Same African American male instructor Time period/duration/frequency 50 minutes, once weekly for 13 weeks	To evaluate a Social Cognitive Theory-based violence prevention curriculum among sixth-grade students. **Outcome 1** **Mean (SD) of use of violence in previous 30 days (range of scale: 0-20)** Time / Treated / Control / p Pretest 1.4 (2.9) 1.1 (2.0) 0.31 Post test 1.1 (2.2) 1.2 (2.4) 0.63 A group x time interaction was found indicating that the differences between the groups were not consistent from pretest to posttest. **Outcome 2** **Mean (SD) of frequency of fighting requiring medical treatment in previous 30 days (range of scale: 0-20)** Time / Treated / Control / p Pretest 0.28 (0.81) 0.14 (0.50) 0.01 Post test 0.17 (0.57) 0.17 (0.56) 0.97 Theory Used: Social Cognitive Theory

Appendix C2: Evidence Table 07: Effectiveness of Prevention Interventions to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) and Sample Size	Time/Place Inclusion/Exclusion Criteria Outcome Definition	Prevention Intervention: Definition and Characteristic	Findings
5758 Dykeman 2003 J Instruct-ional Psycho-logy	Study Design: Single Group Before-after Intervention Study Individual study quality score Poor (lack of a control group and >20% incomplete follow-up) Sample size (initial and actual): Initial: 21 Actual: 15 Age, gender & race groups of actual sample: Mean± SD age: 13.1 years ± 5.8 months Gender: 13 boys, 2 girls. Ethnicity: 8 Caucasians 4 Hispanics, and 3 African-Americans.	Time (begin, end): Three school years: 1998-1999, 1999-2000, and 2000-2001. Place (city, state): Not specified. Author is at Roosevelt University, Chicago. Inclusion criteria: Students from recently dissolved families who were referred by teachers for special education assessment because of recent episodes of disruptive classroom behavior. Exclusion criteria: Those who did not complete treatment and follow-up. Moderating/mediating factors None specified. **Outcome 1: physical aggression** Measure: frequency of physical aggression acts as measured by subscale of the Conflict Tactics scale (self-report) at 6 month follow-up Definition: frequency of throwing objects at a person, pushing/shoving, hitting, and other physical aggression acts. None of these are specified below: Type, Circumstance, Proactive/reactive, Weapon used, Victim-offender relationship **Outcome 2: Adverse health** Not studied **Outcome 3: Effectiveness** Also examined verbal aggression and use of conflict resolution. Both from Conflict Tactics scale. **Outcome 4: Safety** Not studied	**Description of Program** Conflict resolution model of family-systems intervention for individual parent-child dyads. Name of program None specified. Level: Secondary Kind of program: conflict resolution Discussion topics: (1) how to appraise and interpret antecedents of conflict, (2) how to reinterpret a provocation, (3) how to solve problems, and (4) how to include others in the resolution of a disagreement. Mechanism of delivery • Teachers conducting student training. • Parent education. Target population Students from 5 junior high schools with behavior problems and whose parents are recently divorced or separated. Setting where intervention took place Community agency. Setting where subjects were recruited Middle school Person delivering program Community agency counselors. Time period/duration/frequency Once weekly for 90 minutes. Average length of treatment= 3 months ± 3.2 weeks.	Primary objective was to reduce family conflict and improve classroom behavior. Mean ± SD Baseline: 1.73 ± .88 6-moths follow-up: 1.33 ± .90 2-tailed paired samples t-tests to compare pre-test with follow-up: t (14)= 1.70; p = .11. No effects for physical aggression. Note: improvement in teacher-reported classroom behavior (Chi-square (1) = 5.40, p < .05).

Appendix C2: Evidence Table 08: Effectiveness of Prevention Interventions to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) and Sample Size	Time/Place Inclusion/Exclusion Criteria Outcome Definition	Prevention Intervention: Definition and Characteristic	Findings
5796 Elias 1991 Am J Ortho-psychiatry	Study Design: Nonrandomized controlled trial. Individual study quality score Poor (Groups are not comparable at baseline) Sample size (initial and actual): Three cohorts were studied: 1. E1: students who received intervention in 2 high fidelity schools; 2. E2: students who received intervention in 2 moderate fidelity schools; 3. C: students who received no intervention Cohort E is the combination of E1 and E2. Sample sizes were not given for all or by groups. Age, gender & race groups: Not specified.	Time (begin, end): Not specified Place (city, state): New Jersey Study Population: Students from four different elementary schools Inclusion criteria: Students in their last two years of elementary school (grades 4 and 5) Exclusion criteria: Not specified Moderating/mediating factors Two levels of school fidelity **Outcome 1: violence** Measure: Antisocial and self-destructive behavior as measured by the National Youth Survey (NYS) and the Youth Self Report rating scale in grade 11, 6 years after the 2-year intervention program. Definition: Not specified **Outcome 2: Adverse health** Not specified **Outcome 3: Effectiveness** Not specified **Outcome 4: Safety** Not specified	**Description of Program** A 2-year intervention program implemented in grades 4 and 5 with outcome measured in grades 9-11. Name of program Improving Social Awareness-Social Problem Solving Project (ISA-SPS) Level: Primary Kind of program Social decision-making, problem-solving, and social awareness skills Mechanism of delivery School curriculum Target population Grades 4 and 5 students Setting where intervention took place School Setting where subjects were recruited School Person delivering program Teachers Time period/duration/frequency 2 year program with 3 phases: Readiness phase, instructional phase, and application phase Note: This study did not provide sample sizes and standard errors making it impossible to assess effect size	The purpose of this study was to provide a benchmark for the expected impact of a two-year intensive, high quality primary prevention program aimed at the promotion of **social competence**. **Mean Scores on Primary Variables** **Boys** **E / E2 / E1 / C** Striking/threatening other students .69 / .71 / .67 / .59 Attack w/ intent to injure .37 / .41 / .33 / .46 Striking/threatening parents .15 / .15 / .14 / .23 **Girls** **E / E2 / E1 / C** Striking/threatening other students .77 / .74 / .79 / .76 Attack w/ intent to injure .68 / .66 / .70 / .79 Striking/threatening parents .04 / .05 / .03 / .05 Discriminant analysis findings: 1. For Boys, attack with intent to injure and striking/threatening parents combined with 6 other non physical aggression variables provided a discriminant function significantly discriminated experimental subjects from controls; $F(8, 121) = 2.11$, $p<0.04$; $R=0.35$). The three groups could not be significantly differentiated. 2. For girls, none of the physical aggressions were entered into the discriminant function.

Appendix C2: Evidence Table 09: Effectiveness of Prevention Interventions to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) and Sample Size	Time/Place Inclusion/Exclusion Criteria Outcome Definition	Prevention Intervention: Definition and Characteristic	Findings
5871 Farrell 2003 J Child and Family Studies	Study Design: Randomized controlled trial. At each school, 7th grade homerooms were randomly assigned to intervention or no-intervention. Individual study quality score • retention rate <80% Sample size (initial and actual): Overall: Initial: 476 Pre- & Post: 350 6-month follow-up: 340 12-month follow-up: 195 Initial: Intervention Group (Grp 1): 239 students (10 classrooms) Control Group (Grp 2): 237 students (11 classrooms) Age Overall Range: 11.9-15.9 Mean±SD: 12.8±0.6 Gender: All Grp1 Grp2 Males 224 118 106 Race: overall 97% African American Note: no significant diffrences between interverntion and control groups on gender, race, age, or family structure at p<0.05. No differences between actual and those who left program	Time (begin, end): 1997/98 implementation Follow up data collected at 6 and 12 months post completion. Place (city, state): Richmond, Virginia Study Population: 7th graders at 2 public urban middle schools serving primarily African American youth. These youth had received the RIPP-6 in the 6th grade. Inclusion criteria: 7th graders Exclusion criteria: Special education students Moderating/mediating factors • Knowledge of the intervention • Attitudes towards violence and nonviolence Covariates • Gender and age **Outcome 1: violence** Measure: • Frequency of violent behaviors in past 30 days • Self-report scale by Problem Behavior Frequency Scales (6-point scale) Definition: includes weapons, fighting, and assaults. Type: undefined violent behavior Circumstance, Proactive/reactive Weapon used, Victim-offender relationship: Not reported **Outcome 2: Adverse health** **Outcome 3: Effectiveness** **Outcome 4: Safety** Not indicated	**Description of Program** Name of program Responding in Peaceful and Positive Ways – 7th grade (RIPP-7) Level: primary Kind of program Conflict resolution skills Mechanism of delivery Presented during elective classes Target population 7th grade Setting where intervention took place Middle School Setting where subjects were recruited Middle School Person delivering program 2 trained prevention specialists (1 per school) Time period/duration/frequency 12 weekly sessions focused on skill building (intervention group missed an average of 1.1 sessions (SD=1.4); 38% had perfect attendance and 93% missed 3 or fewer) Notes if any Both Schools also had a peer mediation program	RIPP 7 was designed to reinforce and extend the effects of RIPP-6 curriculum. They were testing the hypothesis that students who participated in RIPP-7 would have more positive changes in knowledge, attitudes and behaviors targeted by the intervention. **Adjusted Rates of violent behavior per 100 students (adjusted for pretest differences, age, and gender).** **Adjusted Rates** Rate Control RIPP Ratio 95% CI Posttest 3.7 2.9 1.3 0.4-4.0 12 month 23.1 11.2 2.1* 1.1-3.7 *p<.05 **Adjusted Means and effect size estimates for violence behavior frequency scales** **Adjusted means** Effect Control RIPP Size 95% CI Posttest 10.90 11.01 -0.11 -0.20-0.14 6-month FU 10.32 10.20 0.03 -0.21-0.27 12-month FU 11.16 10.57 0.10 -0.11-0.32 Notes: • No significant impact on disciplinary code violations • Significant intervention effect on disciplinary code violent offenses during the 8th grade year

Appendix C2: Evidence Table 10: Effectiveness of Prevention Interventions to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) and Sample Size	Time/Place Inclusion/Exclusion Criteria Outcome Definition	Prevention Intervention: Definition and Characteristic	Findings
2260 Foshee 1998 Am J Public Health	Study Design: Randomized controlled trial: • Randomized on schools • stratified by grade and matched on school size • treatment subjects exposed to school and community activities • control subjects exposed to community activities only Individual Study Quality Score • Retention rate: 81% • No blinding • No intent-to-treat analysis Sample size (initial and actual): School: • 14 schools: 7 treatment and 7 matched control schools Adolescents (Total): • 2344 eligible adolescents • 1886 (81%) completed baseline questionnaire • 1547 (82% of 1886) completed questionnaire at 1 mo post used in analysis • **862 - never a victim/perpetrator** • **438 - vicim of dating violence** • **247 - perpetrator of violence** Of the 1700 cohort: Age: 11 to 17 years Gender: 49% male; 51% female Race: 77% white; 19% black No breakdown by groups.	Time (begin, end): Nov 1994 through Mar 1995 Place (city, state): A predominantly rural county in eastern North Carolina Mediating variables: 1. dating violence norms 2. gender stereotyping 3. belief in need for help 4. awareness of services 5. help seeking 6. conflict management 7. response to anger **Outcome 1: violence** Measures 4 measures on perpetration: 1. psychological abuse 2. nonsexual violence 3. sexual violence 4. use of physical force in current relationship Type Sexual assault Circumstance Intimate partners Proactive/reactive Not specified Weapon used Other Victim-offender relationship Intimate partner **Outcome 2: Adverse health** None addressed **Outcome 3: Effectiveness** Change in the 4 outcome measures at 1 month **Outcome 4: Safety** None addressed	**Description of Program** Name of program: Safe Dates program Level: Primary and secondary Kind of program 1. Behavioral/Cognitive (Dating violence norms, gender stereotyping) 2. Conflict management skills Mechanism of delivery School Component: 1. A theater production performed by peers 2. A 10-session curriculum by teachers who had 20 hrs training 3. A poster contest Community Component: 1. Special services (crisis line, support groups, materials for parents) for adolescents in abusive relationships 2. Community service provider training Target population School Component: 8th & 9th graders Community Component: workers in social & health services. Setting where intervention took place School and community Setting where subjects were recruited School Person delivering program • Peer for the theater production • Teacher for the 10-session curriculum Time period/duration/Frequency • Curriculum: 10, 45-min/session • 20 workshops for community service providers	**Mean Perpetrator Outcome Score - School as the unit of analysis (n=14)** **(A) Primary Prevention** **On 862 adolescents reported not a victim or perpetrator of dating violence at baseline** Sexual violence — Treated — Control — p Baseline ---- ---- ---- 1-month post 0.01 0.04 ns Violence in current relationship Baseline ---- ---- ---- 1-month post 0.01 0.03 ns **Assessment of the mediating factors on outcomes – Adolescent as unit of analysis** **On 862 adolescents** No significant association found. **(B) Secondary Prevention** **On 247 Perpetrators at baseline** Sexual violence — Treated — Control — p Baseline 0.25 0.21 ns 1-month post 0.07 0.18 p<.10 Violence in current relationship Baseline 0.31 0.20 ns 1-month post 0.17 0.16 ns **Assessment of the mediating factors on outcomes – Adolescent as unit of analysis** **On 247 Perpetrators** Treatment condition was associated with sexual violent perpetration (b= -.14, p=.026). This association was mediated by changes in a) perceived negative consequences for using dating violence and b) awareness of perpetrator services.

Appendix C2: Evidence Table 11: Effectiveness of Prevention Interventions to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) and Sample Size	Time/Place Inclusion/Exclusion Criteria Outcome Definition	Prevention Intervention: Definition and Characteristic	Findings
2261 Foshee 2000 Am J Public Health NOTE: This is the one-year follow-up study of #2260.	Study Design: Randomized control trial Individual study quality score 1. RCT: Poor (no intent-to-treat analysis; attrition >20%) Sample size (initial and actual): School •14 schools: 7 treatment and 7 matched control schools Adolescents (Total) •2344 elgible adolescents •1886 (80.5%) completed baseline questionnaires •1700 (90% of 1886) completed questionnaires at 1 month •1439 (76% of 1886) completed questionnaires at 1 year used in analysis • **816 - never a victim/perpetrator** • **398 - vicim of dating violence** • **225 - perpetrator of violence** Of the 1439 cohort: Gender: 51% female, 49% male Race: 20% black No breakdown by groups.	Time (begin, end): Nov 1994-March 1995; questionnaires completed in May 1996 Place (city, state): Predominantly rural county in eastern N. Carolina Study Population: Eight and 9th graders Inclusion criteria: Enrolled in 8th or 9th grade on September 10, 1994 with assent and parental consent Exclusion criteria: none Moderating/mediating factors Dating violence norms Gender stereotyping Conflict management skills Beliefs about need for help Awareness of community services Help-seeking behaviors **Outcome 1: violence** 1. Measure 2. Psychological abuse 3. Physical violence 4. Sexual violence 5. Perpetrator in current relationship Type: Dating violence Circumstance: Dating Proactive/reactive: Not specified Weapon used: Not specified Victim-offender relationship: dates **Outcome 2: Adverse health** Not addressed **Outcome 3: Effectiveness** Change in the 4 outcome measures at 1 year **Outcome 4: Safety** Not addressed	**Description of Program** Name of program Safe Dates Program Level Primary and secondary Kind of program 1. Behavioral/Cognitive 2. Conflict management skills Mechanism of delivery School activities: 1. Theater production 2. 10-session curriculum 3. Poster contest Community activities 1. Services for adolescents in abusive relationships 2. Service provider training Target population School: eighth and ninth graders Community: service providers Setting where intervention took place School and community Setting where subjects were recruited School Person delivering program Peers for theater production Teacher for curriculum Time period/duration/frequency Curriculum: 10 45-minute sessions No other details provided in this article (see #2260) Notes if any	**To determine whether the positive short-term effects of the Safe Dates program were maintained at 1-year follow-up.** **Mean Perpetrator Outcome Score - School as the unit of analysis (n=14)** **(A) Primary Prevention** **On 816 adolescents reported not a victim or perpetrator of dating violence at baseline** Sexual violence — Treated — Control — p Baseline ---- ---- ---- 1-year post 0.05 0.07 ns Violence in current relationship Baseline ---- ---- ---- 1-year post 0.05 0.08 ns **Assessment of the mediating factors on outcomes – Adolescent as unit of analysis** **On 862 adolescents** No significant association found. **(B) Secondary Prevention** **Of 225 perpetrators at baseline** Sexual violence — Treated — Control — p Baseline 0.22 0.23 ns 1-year 0.15 0.12 ns Violence in current relationship Baseline 0.31 0.20 ns 1-year 0.15 0.12 ns **Assessment of the mediating factors on outcomes – Adolescent as unit of analysis** **Of the 225 perpetrators,** Treatment group adolescents in the perpetrator subsample, compared with control group adolescents, reported using less destructive responses to anger (p=.02) and were more aware of perpetrator services (p=.06).

Appendix C2: Evidence Table 12: Effectiveness of Prevention Interventions to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) and Sample Size	Time/Place Inclusion/Exclusion Criteria Outcome Definition	Prevention Intervention: Definition and Characteristic	Findings
5995 Friedman 2002 J Child and Adolescent Substance Abuse Page 1	Study Design: Randomized controlled trial with post assessment at time of discharge from facility, at 9 months after admission, and at 6 months post discharge from facility. Individual study quality score • no intent-to-treat analysis Sample size (initial and actual): Actual Total: 201 (84% of original) Intervention Group (Grp A): 110 Cntrol Group (Grp C): 91 Age, gender & race groups: All GrpA GrpC Mean **Age** 15.5 15.5 15.5 SD 1.1 1.1 **Gender 100% male** **Race** **%** **%** Black 76.4 69.3 White 13.6 16.7 Puerto Rican 7.3 8.8 Asian 1.8 2.7 **Attrition Analysis** showed for Group A that more white youth were retrieved for follow up. The retrieved group had a lesser degree of school problems. For Group C, more retrieved youth grew up in intact families, more youth had part-time employment, and the retrieved youth reported less illegal behavior at baseline.	Time (begin, end): Not specified Place (city, state): Philadelphia, PA Study Population: Inner city, low SES, court-adjudicated male adolescents in a residential treatment center Inclusion criteria: • New admission • Male • 13 – 18 years of old • Committed by Family Court Exclusion criteria: • Youth went AWOL from the residential facility • Youth were considered unmanageable in the classroom setting • Youth were removed from the facility and committed elsewhere • Youths' parent failed to consent Moderating/mediating factors • Age • years of education • being African-American • being Caucasian • occupational head of household • growing up with biological parents • having been physically abused • problem behavior and attitudes **Outcome 1: violence** Measure: Violent Behavior measured at 15 months follow-up using a score based on a formula developed by Turner and Rutledge (1987). It was derived by assigning various weights to 8 of the 20 illegal offenses included in the "Legal" problem section of the ADAD (Adolescent Drug Abuse Diagnosis) ***Continued***	**Description of Program** Triple modality social learning program in a classroom, designed as a drug prevention/early intervention program Name of program Intervention uses 3 programs 1) Botvin Life Skills Training Model (LST) 2) The Prothrow-Stith Anti - Violence Program (AV) 3) Values Clarification (VC) Level: secondary Kind of program 1) Cognitive behavioral social learning model for understanding the effects of drugs on health and behavior 2) Social learning model for controlling tendencies toward violence 3) Social learning model for clarifying values and developing new values Mechanism of delivery 55 classroom sessions scheduled; average of 34.2 classroom sessions attended Target population Adolescents who had been convicted of at least one illegal offense of sufficient seriousness to warrant a court procedure, and may have had early involvement in the use of "gateway" drugs or other illicit substances. The majority had ben subject, before admission, to multiple risk factors. ***Continued***	The main hypothesis was that program participants (A) would be found at the follow up assessment (15 months after admission to the project) to have made significantly more positive changes compared to the controls in: drug use, illegal offenses, violent illegal offenses, selling drugs, school problems **Comparison of program participants with control subjects on degree of reduction in problem behavior, time of follow up evaluation, using multiple regression analysis (dependent variable is degree of violent offenses, covariates listed under moderating/mediating factors):** t- value comparing Group A and Group C based on 201 subjects was 0.44. (For an N of 200, a t value of 1.97 or better is significant at the .05 level of confidence Conclusion: • The AV program has the potential to be effective in reducing violent behavior. • Triple-modality classroom program that was utilized did not show a significant advantage for reducing the degree of illegal or violent behavior.

Appendix C2: Evidence Table 12: Effectiveness of Prevention Interventions to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) and Sample Size	Time/Place Inclusion/Exclusion Criteria Outcome Definition	Prevention Intervention: Definition and Characteristic	Findings
5995 Friedman 2002 J Child and Adolescent Substance Abuse Page 2		Definition: points determined by system looking at: • assault or gang fighting (1 pt) • weapons offenses (1.5 pt) • robbery (2 pts) • arson or rape or reckless endangerment (3 pts) • homicide/manslaughter (5 pts) Type: assault, gang fighting, weapon offense, robbery, arson, rape, reckless endangerment, and homicide. Circumstance, Proactive/reactive: Not report Weapon used Weapon offenses included in point system. Victim-offender relationship Not reported **Outcome 2: Adverse health** Not reported **Outcome 3: Effectiveness** As compared to Group C, Group A at 15 months assessment after admission to the project would have made significantly more positive change, to 6 key outcomes: drug use, alcohol use, illegal offenses committed, violent illegal offenses committed, selling of drugs, school problems. **Outcome 4: Safety** Not reported	Setting where intervention took place Residential facility and classroom Setting where subjects were recruited Residential Treatment Program Person delivering program Teacher, not specified Time period/duration/frequency 20 sessions of LST during a 4 week period. 20 sessions of AV. 15 of VC Intervention group attended an average of 34.2 classroom sessions of 55 sessions that were scheduled. Notes if any 16% attrition rate between the post assessment and the follow up assessment in the community. Those who attended more of the AV sessions and who also were rated as showing more critical thinking about problems, were found at follow up to report significantly less violent behavior. On the other hand, those who were rated as "offering more comments" during these sessions were found at follow up to report significantly more violent behavior.	

Appendix C2: Evidence Table 13: Effectiveness of Prevention Interventions to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) and Sample Size	Time/Place Inclusion/Exclusion Criteria Outcome Definition	Prevention Intervention: Definition and Characteristic	Findings
4048 Ginsberg 1993 MMWR	Study Design: Cross-sectional study Individual study quality score Poor (potential confounders no controlled for). Sample size (actual only): Overall: 1399 students 15 schools Intervention: 243 students 3 schools Control: 1156 students 12 schools Age, gender & race groups: not specified	Time (begin, end): 1991-1992 school year Place (city, state): New York, NY Study Population: Sample of 9th-12th grade students of all NYC public high schools Inclusion criteria: None Exclusion criteria: None Moderating/mediating factors None **Outcome 1: violence** Measure/Definition: Involved in a physical fight at least once during the school-year. How measured: Self-reported All other characteristics: Not specified **Outcome 2: Effectiveness** Prevalence of violent behaviors **Outcome 3: Adverse Health** Not studied **Outcome 4: Safety** Not studied	**Description of Program** Name of program School-based metal detector program Level: Primary Kind of program Random, weekly scans using hand-held metal detectors Mechanism of delivery On entry to school building Target population New York City youth Setting where intervention took place High schools Setting where subjects were recruited High schools Person delivering program Security officers Time period/duration/frequency Weekly, for one school year Notes if any Students were scanned at random	**To evaluate whether school-based metal detector programs reduce violence behaviors in schools and to and from schools.** **Outcome 1 Violence behaviors: Involved in a physical fight at least once during the 1991-92 school year.** (A) by Site Factor — % (95% CI) To/from School 9.2 (6.3-12.1) Inside School 7.7 (5.0-10.4) Anywhere 24.7 (21.5-28.0) (B) by Metal detector program Behavior — Metal detector program % (95%CI) — No program % (95%CI) Anywhere 26.2 (14.4-38.0) 24.4 (21.5-27.3) To/From school 9.4 (6.4-12.3) 9.1 (5.6-12.6) Inside school 7.5 (0.4-14.5) 7.8 (4.9-10.7)

Appendix C2: Evidence Table 14: Effectiveness of Prevention Interventions to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) and Sample Size	Time/Place Inclusion/Exclusion Criteria Outcome Definition	Prevention Intervention: Definition and Characteristic	Findings
6187 Hagan 1994 Int J Offender Therapy & Compara-tive Crimino-logy	Study Design: Retrospective single group study-before and after time series. Individual study quality score Poor (no control group). Sample size (initial and actual): 50 Age, gender & race groups: Age: Not specified Gender: 100% males Race: Not specified	Time (begin, end): 1984-1989 Place (city, state): Wales, Wisconsin Study Population: Adolescent male convicted of a serious sexual assault and perpetrated crimes of sexual assault against members of the opposite sex. All had a conduct disorder of an aggressive type. Inclusion criteria: See above Exclusion criteria: Not specified Moderating/mediating factors Not specified **Outcome 1: violence** Measure: recidivism rate of sexual assaults and criminal activities during 2-year post discharge Definition: Crime perpetrated against a person included robbery, battery, disorderly conduct, and sexual assault **Outcome 2: Adverse health** Not specified **Outcome 3: Effectiveness** Failure rate in terms of reincarceration or success rate of avoiding reincarceration. **Outcome 4: Safety** Not specified	**Description of Program** The program used group process as the cornerstone. Most treatment occurred in groups; most issues related to being a delinquent and sex offender, using techniques that were both confrontational and supportive. Name of program Stout Cottage Serious Sex Offenders Program (SSOP) Level: Tertiary Kind of program Group therapy process Mechanism of delivery Group therapy, open entrance open exit. Average of 8 youth present in each group. Target population Convicted adolescent male rapists Setting where intervention took place Ethan Allen School-secure residential facility for male juvenile offenders Setting where subjects were recruited Ethan Allen School, part of the Department of Health and Social Services, Division of Youth Services. Person delivering program A social worker, a consulting psychologist, and non-degreed youth counselors Time period/duration/frequency Group therapy was for 3 one-hour sessions per week. On average, it took subjects 8 months to complete the group process.	The purpose of the study was to examine recidivism rates of adolescent rapists incarcerated at a state juvenile correctional facility This study examined the effectiveness of a treatment program for serious sex offenders. **Number and percent during 2-year post-discharge** N % Committed additional sexual assault 5/50 10% Convicted of another crime perpetrated against a person 14/50 28% The 10% and 28% can be considered as failure rates of the program.

Appendix C2: Evidence Table 15: Effectiveness of Prevention Interventions to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	**Study Quality Group(s) and Sample Size**	**Time/Place Inclusion/Exclusion Criteria Outcome Definition**	**Prevention Intervention: Definition and Characteristic**	**Findings**
2563 Hammond 1991 J Health Care for the Poor and Under-served	Study Design: Nonrandomized control trial Individual study quality score Poor (potential confounders not controlled) Sample size (initial and actual): Overall: 28 Intervention Group (Grp 1): 15 Control Group (Grp 2): 13 Age, gender & race groups: Age: Middle School students Gender: Not specified **Intervention Group** African-American: 93% (14) White: 6% (1) (The white student was excluded in analysis.) **Control Group** Race: Not specified	Time (begin, end): 1989-1990 school year Place (city, state): Dayton, Ohio Study Population: Selected high risk African American middle school students Inclusion criteria: Youth were selected by teachers on the basis of such criteria as deficiencies in skills needed to interact with peers, behavior problems (particularly aggression), or history of victimization by violence. Exclusion criteria: Not specified Moderating/mediating factors Not specified **Outcome 1: violence** Measure: Suspension attributed to violence Definition: Not specified Type: Not specified Circumstance: Not specified Proactive/reactive: Not specified Weapon used: Not specified Victim-offender relationship: Not specified **Outcome 2: Adverse health** Not studied **Outcome 3: Effectiveness** Reduction in suspension attributed to violence **Outcome 4: Safety** Not studied	**Description of Program** Name of program Positive Adolescents Choices Training (PACT) Level: Secondary Kind of program Social skills training-behavioral component Mechanism of delivery Small-group training-composed of 10-12 youths Target population Selected high risk African American middle school students Setting where intervention took place School Setting where subjects were recruited School Person delivering program Two African-American doctoral-level clinical psychology students Time period/duration/frequency Each group had 37 or 38 training sessions lasting a class period (about 50 minutes) Notes if any	Reports preliminary findings of a program to train African-American adolescents in social skills, an approach which shows promise as a means of preventing violence. **School Suspensions Attributed to Violence*** **Groups** / **Beginning of Training** / **End of Training** Intervention 2/15 (13%) 0/15 (0%) Partially trained 2/ 6 (33%) 1/ 6 (16%) Control 3/13 (23%) 7/13 (54%) P-value 0.57 0.003 P (Int vs Con) 0.64 0.001 *Time period of data not specified.

Appendix C2: Evidence Table 16: Effectiveness of Prevention Interventions to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) and Sample Size	Time/Place Inclusion/Exclusion Criteria Outcome Definition	Prevention Intervention: Definition and Characteristic	Findings
6221 Hanlon 2002 J Youth and Adoles-cence Page 1 of 2	Study Design: Randomized controlled trial (Two youth bureaus were randomly assigned, one to treatment one to control) Individual study quality score • attrition rate not reported • validity of instrument not addressed Sample size (initial and actual): Total: 428 Intervention Group: 235 Control Group: 193 Age Intv / Con / Total Range: 9-17 Mean: 13.0 / 13.6 / 13.3 SD: 1.91 Gender # Male: 125 / 126 / 251 %Male: 53 / 65 / 59 P=0.012 Race # (%) AfrAm: 417(97.4) # (%) White: 11(2.6)	Time (begin, end): Not stated Place (city, state): Baltimore, Maryland Study Population: Inner-city youth at high risk of adopting a deviant lifestyle. **Inclusion criteria:** Informed consent of youth and caregiver that met any 1 or more of the 3 criteria: 1. Known or admitted early experimentation with alcohol or drugs 2. History of delinquency or other deviant behavior, including criminal activity, incorrigibility and precocious sexual behavior 3. Expulsion from school or other indication of problematic school behavior. Exclusion criteria: Primary Problem of Substance abuse Moderating/mediating factors • Welfare involvement • Parental separation • Parental history of incarceration • Deviant behavior of peers • School attendance *continued*	**Description of Program** Individual counseling, mentoring, and help with school problems, basic learning and study skills, refinement of social and life coping skills, cultural heritage, enhancement of self esteem, conflict resolution, avoidance of substance abuse, HIV/AIDS education and prevention, community health and recreational resources. Field trips, holiday celebrations Informal discussions with parents and parent child social events. Name of program: An early community-based intervention for the prevention of substance abuse and other delinquent behavior. Level: Secondary Kind of program Behavioral cognitive and skill building Mechanism of delivery Individual counseling and group mentoring Target population Inner-city youth at high risk of adopting a deviant lifestyle. Setting where intervention took place Community-based "Youth Bureaus" clinic Setting where subjects were recruited Youth were referred by family (50%), school (26%), community service agencies (17%) or Maryland Dept of Juvenile Justice (6%).	The principal aim of this study was to determine the effectiveness of a data-based, early intervention strategy designed to interrupt the development of deviance, including substance abuse in youth from largely African American inner-city neighborhoods who were considered to be at high risk for progression in deviance on the basis of early signs of aberrant behavior. . Violence was one of the outcomes evaluated as a section of a comprehensive youth questionnaire. **Poisson regression analysis in which the dependent variable is violent behavior**: Risk Factor / χ^2 / p 1 Prior instance of violence: 13.0 / 0.0003 2 Peer deviance: 0.0045 3 School problematic behavior: 0.0067 4 age by clinic effect: 0.0016 Note: χ^2 values were not provided for other effects. Peer deviance includes peer expulsion from school, close friends arrested, convicted, paroled and /or incarcerated *continued*

Appendix C2: Evidence Table 16: Effectiveness of Prevention Interventions to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) and Sample Size	Time/Place Inclusion/Exclusion Criteria Outcome Definition	Prevention Intervention: Definition and Characteristic	Findings
6221 Hanlon 2002 J Youth and Adoles-cence Page 2 of 2		Moderating/mediating factors • School related problems • Crime related deviant behavior • Arrest history • Weapon carrying • Sexual activity **Outcome 1: violence** **Measure** Self report physical violence behavior through "Youth Questionnaire" developed by researchers on vulnerability to substance abuse and family background and early development of methadone maintenance clients and children. At 1-year follow-up, only past 6-months' self-report information was obtained. **Definition** Physical assault, mugging, robbery with a weapon, arson, participating in a gang fight and shooting at someone Type: aggravated assault, non aggravated assault, robbery, gang fight Circumstance, Proactive/reactive Weapon used, Victim-offender relationship: not specified **Outcome 2: Effectiveness** See outcome measure **Outcome 3: Adverse Health** Not stated. **Outcome 4: Safety** Not stated.	Person delivering program • Existing clinic personnel who were trained in a case management approach involving needs assessment, planning and review of mutually agreed upon treatment goals and advocacy referral procedures. • Counselor: Clinic staff trained as case manager • Mentor: :young African American college students • Part time teachers Time period/duration/frequency 4-5 days per week after school and weekends over about 1 year or more	The study states that: 1. Age was also a highly relevant characteristic for most outcome measures – older subjects reporting relatively greater substance abuse, sexual behavior, and delinquent activity, *including violent activity*, along with a greater incidence of arrest at follow up. 2 The finding that poor parenting practices tended to be related to involvement in *violent activity* at follow up is consistent with the observation of others that poor parenting is one of the most important risk factors for violence. 3. in the present study peer deviance was a prominent predictor of both marijuana use and number of types of delinquent and violent activity engaged in at follow-up However there is no quantification of the conclusions above except as noted in the initial chart with p values related to peer deviance

Appendix C2: Evidence Table 17: Effectiveness of Prevention Interventions to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) and Sample Size	Time/Place Inclusion/Exclusion Criteria Outcome Definition	Prevention Intervention: Definition and Characteristic	Findings
2588 Harrington 2001 Health Education and Behavior	Study Design: Partially randomized controlled study. 14 middles schools: 8 schools received treatment (5 by specialists and 3 by school teachers); 6 schools did not received treatment. Individual study quality score Poor (improper randomization scheme; attrition >20%) Sample size (initial and actual): Initial pre test: 2289 students Completed all posttest –1655 (72%) Gp 1: Intervention: 629 Gp 2: Control: 739 Pattern of attrition did not result in a smaple markedly different from the population of interest. Age, gender & race groups: Total sample at baseline: Age: Mode: 12 years Gender: Female 55% Race: White 69% Afr Am 25% Hisp 6%	Time (begin, end): Year not specified (program was piloted tested in spring of 1995) T1 Pretest – Sept/Oct T2 Post test- May T3 Follow up – 1 year later Place (city, state): Largest cities in Midwestern state Study Population: Sixth or 7th grade students Inclusion criteria: Consent signed Exclusion criteria: None identified Moderating/mediating factors • Positive ideals • Beliefs in conventional norms • Commitments not to use substances • Bonding to school **Outcome 1: violence** Measure: mean of 10 items selected from extant delinquency scales. Definition: violence towards other persons **Type, Circumstance, Proactive/ reactive, Weapon used** **Victim-offender relationship**, not specified **Outcome 2: Effectiveness** changes in four targeted mediators and sexual activity, substance use, and violent behavior **Outcome 3: Adverse health** Not adddressed **Outcome 4: Safety** Not specified	**Description of Program** Name of program All Stars character education and problem behavior prevention program Level: primary Kind of program Seeks to modify targeted mediating variables based on Hansen's review of risk and protective factors found to predict alcohol, tobacco, and drug use. Mechanism of delivery • Whole classroom debates, games, and general discussion • Small group sessions outside of class • One on one sessions between instructor and student • Homework to promote interaction between students and parents Target population Middle school students Setting where intervention took place School Setting where subjects were recruited School Person delivering program Program specialists or classroom teachers Time period/duration/frequency Program implemented from about October – May. No total hours / sessions specified.	The All Stars character education and problem prevention program seeks to impact on mediating variables in order to impact on sexual activity, substance use, and violent behavior of middle school students. **Mean Violence as a function of Time, Condition, and Ethnicity** **African American** **Condition** T1 T2 T3 Control 1.35 1.40 1.59 Specialist 1.41 1.38 1.54 Teacher 1.35 1.32 1.27 **White** **Condition** T1 T2 T3 Control 1.25 1.27 1.37 Specialist 1.26 1.31 1.40 Teacher 1.28 1.27 1.42 **Hispanic** **Condition** T1 T2 T3 Control 1.19 1.18 1.34 Specialist 1.28 1.34 2.07 Teacher 1.24 1.22 1.22 • Only the time effect was significant for violence $F(2, 1651)=14.68$, $p<.001$ • Mean violence did not differ from pretest to posttest but evidenced a clear increase across all conditions from posttest to follow-up. • Time, condition and ethnicity interaction was significant, $F(8, 3290)=3.12$, $p<0.001$ • African American, Hispanic and White students showed no change in violence from pre to post test. From post test to follow-up, Hispanic students remained stable, while African Americans decreased slightly and Whites increased somewhat.

Appendix C2: Evidence Table 18: Effectiveness of Prevention Interventions to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) and Sample Size	Time/Place Inclusion/Exclusion Criteria Outcome Definition	Prevention Intervention: Definition and Characteristic	Findings
117 Hawkins 1999 Arch Pediatr Adolesc Med	Study Design: Nonrandomized control trial (Seattle Social Development Project Intervention) Individual study quality score Fair (questionable comparability of study and control groups) Baseline sample size (group that received intervention) Total: 643 Full intervention: 156 Late intervention: 267 Control: 220 Analysis sample size (group on which outcomes were measured) Total: 598 Full intervention: 149 Late intervention: 243 Control: 206 Age, gender & race characteristics of Baseline sample Age: 5th graders Gender: Full intervention 50.6% male Late intervention 48.7% male Control group 53.6% male Race: Full intervention 46.8% white Late intervention: 42.7% white Control group: 44.5% white	Time (begin, end): 1981-1993 Place (city, state): Seattle, WA Study Population: Elementary school students Inclusion criteria: Fifth grade students enrolled in participating schools who had written parental consent to participate in the longitudinal study Exclusion criteria: None specified Moderating/mediating factors Not specified **Outcome 1: violence** Measure: reduction in lifetime violent behavior reported at age 18 Definition: Self-reported violent acts with follow-up 6 years after intervention Type;Circumstance;Proactive/reactive;Weapon used;Victim-offender relationship: Not specified **Outcome 2: Adverse health** Definition of outcome measure(s) Not specified **Outcome 3: Effectiveness** Definition of outcome measure(s) Reduction in violent behavior at age 18 yrs **Outcome 4: Safety** Definition of outcome measure(s) Not specified	**Description of Program** Name of program Not specified Level: Primary Kind of program Package of 3 interventions: 1. Classroom instruction and management to provide teachers skills in proactive classroom management, interactive teaching, and cooperative learning 2. Child skill development in alternative solutions to problems with peers 3. Parent intervention to train parents in child behavior management skills Mechanism of delivery All components of intervention package delivered in group setting using a curriculum Target population Elementary school students, their parents, and their teachers (enrolled in grade 1, intervention provided in grades 1-6) Setting where intervention took place School Setting where subjects were recruited School Person delivering program 1. Classroom instruction and management: Not specified 2. Child skill development: teachers 3. Parent intervention: not specified Time frequency/duration 1. Classroom instruction and management: 5 days of inservice training 2. Child skill development: Not specified for grades 1-5; in grade 6, 4 hours of training 3. Parent intervention: 7-session curriculum in grade 1, 5-session curriculum in grades 2 and 3, 5-session curriculum in grades 5 and 6.	**To examine the long-term effects of an intervention combining teacher training, parent education, and social competence training for children during the elementary school grades on adolescent violent behavior at age 18 years** Full=full intervention (received intervention from grades 1-6) Late=late intervention (received intervention only in grades 5-6) **Prevalence of lifetime violence** Control Late Full 59.7 56.4 48.3 **Control vs. Full** Difference (95% CI) p-value -11.4 (-21.3 to –0.4) .04 **Control vs Late** Difference (95% CI) p-value -3.3 (-12.0 to 6.3) .54

Appendix C2: Evidence Table 19: Effectiveness of Prevention Interventions to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) and Sample Size	Time/Place Inclusion/Exclusion Criteria Outcome Definition	Prevention Intervention: Definition and Characteristic	Findings
2644 Henggeler 2002 J Am Acad of Child and Adol Psychiatry	Study Design: Randomized Controlled Trial with 4-year follow-up outcome. Individual study quality score • Retention rate <80%) • no intent-to-treat analysis Sample size (actual): Initial (T1) 118 Actual (T5) 80 (68%) Intervention Group (Grp 1): 43 Control Group (Grp 2): 37 Age, gender & race groups: Time 1 Time 5 N 118 80 Age 15.7 19.6 Male 79% 76% Race Af Am 50% 60% White 47% 40% Other 3% 0% Research dropouts did not differ from research completers.	Time (begin, end): Mid 1990's Place (city, state): Not stated Study Population: Juvenile offenders with substance abuse and dependence. The families were economically disadvantaged. Inclusion criteria: offenders meeting DSM III-R criteria for substance abuse or dependence Exclusion criteria: None Moderating/mediating factors Demographic characteristics Comorbid psychopathology Initial T1 levels of illicit drug use Initial T1 levels of criminal behavior **Outcome 1: Criminal Behavior** Measure: 4-year aggressive crimes score - aggregate of items measured in the Self-Report Delinquency (SRD recoded into 3-point Likert scales (0=none, 1=1-3 times, 2=more than 3 times in the past year) and summed to form total Aggressive Crimes score. Definition: Major assaults, minor assaults, and strong-armed robbery. Circumstance, Proactive/reactive, Weapon used, Victim-offender relationship, Adverse health effects and Safety Outcomes: Not noted	**Description of Program** Name of program Multi-systemic therapy (MST) vs. usual community services. Level: Tertiary – focused on youth offenders Kind of program MST- includes multiple interventions including family therapy, parenting, cognitive behavioral therapies, and medication, as indicated Mechanism of delivery Strategic family therapy, structural family therapy, behavioral parent training, and cognitive-behavioral therapies. Target population Juvenile offenders meeting DSM III R criteria for substance abuse or dependence and their families Setting where intervention took place Home-based Setting where subjects were recruited Not stated Person delivering program Master's level clinicians supervised by a child/adolescent psychiatrist. Time period/duration/frequency Average of 46 hours of contact per family over an average of 130 days of treatment. 24/7 availability of therapists.	**Purpose**: To address the gap in the adolescent substance abuse treatment literature by implementing a randomized clinical trial using MST with adolescent substance abusers and collecting long term follow up assessments. Aggressive Crimes / MST Mean±SD / Usual Mean±SD / p Aggression scale 0.61±0.90 1.36±2.21 <.05 Annualized Conviction rate 0.15±0.43 0.57±1.80 <.05 Multivariate analysis using youth age and T1 marijuana use as covariate showed statistically significant (p<.05) lower recidivism rate in the MST group. Moderator effects: No significant moderator effects were obtained. Thus the impact of treatment did not vary as a function of demographic characteristics, comorbid psychopathology, or initial (T1) levels of illicit drug use and criminal behavior.

Appendix C2: Evidence Table 20: Effectiveness of Prevention Interventions to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) and Sample Size	Time/Place Inclusion/Exclusion Criteria Outcome Definition	Prevention Intervention: Definition and Characteristic	Findings
10598 Ludwig 2001 Quarterly J Economics	Study Design: Randomized controlled trial - community based trial. Families were randomized into 3 groups: *Experimental group*: families receive housing subsidies, counseling, and search assistance to move to private-market housing in low-poverty census tracts; *Section-8 only comparison group*: families receive private-market housing subsidies with no program constraints on relocation choices; *Control group*: families received no special assistance under MTO. Individual study quality score • retention rate not reported • no blinding of assessments Sample size: Total sample: n=336 Experimental: n=148 Section-8: n=92 Control group: n=96 Age, gender & race groups: Total Sample Age: Range 11 – 15 years Gender: 157 (46.7%) male Race: 327 (97.3%) Af-Am. Grp-1 Grp-2 Grp-3 Age: 11 19.7% 15.7% 21.9% 12 21.4% 23.4% 19.8% 13 19.7% 22.7% 24.0% 14 22.0% 19.4% 15.6% 15 17.3% 18.8% 18.8% Gender: Male 43.8% 52.0% 45.8% Race: Af-Am 96.9% 96.8% 98.4%	Time (begin, end): Identification of families: July-Dec 1997 Outcomes collected through March 1999 Place (city, state): Baltimore, Maryland Study Population: Teens from families enrolled in the HUD MTO experiment in Baltimore who are considered "at risk" for criminal involvement in postprogram period Inclusion criteria: • Eligibility to MTO was restricted to low-income families with children who lived in public housing in one of the five poorest census tracts in the city • For this study, teens must be at least 11 years old but less than 16 years old at time of random assignment into experimental, section-8, or control group Exclusion criteria: Children under 11 years old or older than 15 years old Moderating/mediating factors Household characteristics • African-American • Female householder • Householder age • Number of children • Householder w/high school or GED • AFDC at baseline • Past 6 months, someone victim of crime • Reason(s) in MTO program Study subject characteristics • Teen • Male • Age • Crime arrests preprogram *Continued*	**Description of Program** Name of program The Moving to Opportunity (MTO) demonstration is based in 5 cities: Baltimore, Boston, Chicago, Los Angeles, and New York. The study uses data from the Baltimore site. Level: Secondary Kind of program Housing-mobility experiment Mechanism of delivery Physical environment change Target population Teens living in high-poverty neighborhoods who are "at risk" for criminal involvement Setting where intervention took place Community Setting where subjects were recruited Community Person delivering program Housing Authority of Baltimore (HAB) and the Community Assistance Network (CAN) *Continued*	**To examine the effects of relocating families from high- to low-poverty neighborhoods on juvenile violent crime using data gathered by a randomized housing-mobility experiment.** I. Preprogram arrests percents # of arrests / Total (n=336) / Exp. (n=148) / Section-8 (n=92) / Control (n=96) One 9.0% 9.5% 9.8% 7.3% Two 2.1% 3.1% 0.6% 2.1% 3 or more 1.2% 1.0% 1.6% 1.0% II. EFFECTS OF MTO ON JUVENILE VIOLENT CRIME ARRESTS (*p<0.1**p<0.05 Intent-to-treat effects (coefficient estimates) for **incidence** of violent crime (number of violent crime arrests per 100 teens per quarter): Risk Group of Interest / Control Mean / Exp vs. control Coef (SE) / Section-8 vs. control Coef (SE) Total sample (n=336) Unadjusted 3.0 -1.0 (0.8) -1.4 (0.8)* Regression-adjusted 3.0 -1.6 (0.8)** -1.4 (0.8)* Regression-adjusted coefficient (SE): Teens with no preprogram arrests (n=256) 2.2 -1.0 (0.7) -1.4 (0.8)* Males (n=162) 4.3 -2.9 (1.4)** -1.9 (1.2) Females (n=174) 1.8 -0.7 (0.7) -0.4 (0.9) Intent-to-treat effects (coefficient estimates) for **prevalence** of violent crime (percent of teens arrested per quarter during postprogram period): Risk Group of Interest / Control Mean / Exp vs. control Coef (SE) / Section-8 vs. control Coef (SE) Total sample (n=336) Unadjusted 2.7 -0.8 (0.7) -1.2 (0.8) Adjusted 2.7 -1.3 (0.7)* -1.2 (0.8) Teens with no preprogram arrests (n=256) 2.2 -1.0 (0.7) -1.4 (0.8)* Males (n=162) 3.8 -2.1 (1.2)* -1.3 (1.0) Females (n=174) 1.8 -0.7 (0.7) -0.4 (0.9) The experimental and section-8 only groups experience a reduction in violent-crime arrests relative to controls, starting 4 to 6 quarters after randomization *Continued*

Appendix C2: Evidence Table 20: Effectiveness of Prevention Interventions to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) and Sample Size	Time/Place Inclusion/Exclusion Criteria Outcome Definition	Prevention Intervention: Definition and Characteristic	Findings
10598 Ludwig 2001 Quarterly J Economics Page 2		**Outcome 1: violence** Measures: Over an average of 3.7 years post-program • Incidence: Regression-adjusted violent-crime arrest rates per quarter per 100 teens • Prevalence: Regression-adjusted proportion of teens arrested per quarter during the postprogram period Definition: Violent crime included assault, robbery, attempted murder, etc.** How measured: from juvenile arrest records. Type: Assault, robbery, attempted murder, other Circumstance, Proactive/reactive, Weapon used, and Victim-offender relationship: Unspecified **Outcome 2: Effectiveness** Reduction in the number of violent crime arrests from baseline to the postprogram. **Outcome 3: Adverse health** Not studied **Outcome 4: Safety** Not studied	Time period/ duration/frequency Families had up to 180 days to identify a suitable rental unit and sign a lease. Relocators were required to sign leases for 1 year. Notes if any **See Ludwig, Duncan, Hirschfield (2000) for detailed definition of violent crime.	III. EFFECTS OF TREATMENT-ON-THE-TREATED (TOT) ON THE PREVALENCE AND INCIDENCE OF VIOLENT-CRIME ARRESTS (*p<0.1 **p<0.05) (A) Experimental Treatment — Prevalence(%) — Incidence Exp families who moved (1) — 2.4 — 2.5 Exp families who did not move (2) — 1.5 — 1.6 Arrest rate for controls who would have moved if assigned to exp gp (3) — 5.0 — 5.7 Effects of TOT (1) – (3) — -2.6 (1.4)* — -3.2 (1.5)** (B) Section-8 Only Treatment — Prevalence(%) — Incidence Section-8 families who moved (4) — 1.9 — 1.9 Section-8 families who did not move (5) — 0.7 — 0.7 Arrest rate for controls who would have moved if assigned to Section-8 gp (6) — 3.9 — 4.3 Effects of TOT (4) – (6) — -2.0 (1.1)* — -2.4 (1.2)** The experimental and section-8 only groups experience a reduction in violent-crime arrests relative to controls, starting 4 to 6 quarters after randomization

Appendix C2: Evidence Table 21: Effectiveness of Prevention Interventions to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) and Sample Size	Time/Place Inclusion/Exclusion Criteria Outcome Definition	Prevention Intervention: Definition and Characteristic	Findings
7158 Moore 1998 Child Maltreat-ment	Study Design: Randomized controlled trial Individual study quality score • retention rate <80% • no adjustment of confounding factors. • no intent-to-treat analysis Sample size (initial and actual): Overall 61- original sample Treatment (TX)=32 Control CX=29 T4 sample-42 (69%) TX=21 CX=14 Age: T1- range= 1-24 months T4- range=12-14 (M=13 (SD=0.8) TX: 13.0 (0.8) CX: 13.4 (0.8)	Time (begin, end): T1- 1980 began enrollment/ T4 -1992 follow-up evaluation Place (city, state): Seattle, Washington Study Population: Abused, neglected, and at risk infants and toddlers (ages 1 month through 5 years of age) Inclusion criteria: • Children expected to remain with their families if treatment was provided Exclusion criteria: children with • severe intellectual impairment • severe developmental disorder • in immediate life-threatening situations Moderating/mediating factors Non-specified **Outcome 1: violence** **Measures/Definition:** 1. Violent crimes (assault) from juvenile court and school files 2. Incidence of "Fighting" from school files 3. reported violent behavior, 6 items from the Problem Behavior Scale (PBS). Youths categorized as 'violent' if they received a frequency rating of 3 or greater on any of the 3 PBS violence items. Circumstance, Proactive/reactive, Weapon used, Victim-offender relationship: Not reported **Outcome 2: Adverse health** **Outcome 3: Effectiveness** **Outcome 4: Safety** Not reported.	**Description of Program** Name of program Childhaven's therapeutic child-care program (formerly Seattle Day Nursery) Level: Secondary Kind of program • Therapeutic child-care program • Parent education • Support groups • Counseling • Linkages to other professional services Mechanism of delivery Individualize programs of concrete services—may include individual and family interventions for children and parents. Target population Abused, neglected, and at risk infants and toddlers 12 years after intervention. Parents and siblings also received intervention. Parent participation is voluntary Setting where intervention took place: Child care center. Setting where subjects were recruited: CPS or Child welfare Services Medical and social service network provided referrals of children at risk. Person delivering program Not described Time period/duration/frequency Treatment children remained in the program on average of 23 mnths (SD=11). 62% of TX parents had "major" participation. 25% of TX parents had no participation.	A twelve-year follow-up study of maltreated and at-risk children who received early therapeutic child care, examining the psychosocial functioning and home environment in early adolescence. 1. Violent Crime from Juvenile Court files Serious/Violent crime record: #/total (%) TX: 1/27 (4%) CX: 5/21 (24%) p: <0.08 Serious/violent arrests: M ± SD TX: 0.04±0.20 CX: 0.3±0.7 p: <.05 2. Incidence of fighting from school files TX CX p % 2/17 (12%) 4/11 (36%) <.05 M±SD 0.2 ± 0.7 0.8 ± 1.4 ns 3. The findings for violent behavior were not reported separated, thus could not be abstracted. Study suggests that early intervention can support an enhanced trajectory of child and family development. TX youths were less prone to violent delinquency, clinical aggression, and anger. CX youth experienced a significant increase in disciplinary actions from middle to late childhood. Significant differences between follow up treatment and control groups include: • Tx group held higher proportion of African American youths (also true at enrollment) • Higher percentage of treatment children's fathers had an arrest record • No children in follow up control group had been classified as "at risk" • Limited statistical power of the study due to small sample sizes

Appendix C2: Evidence Table 22: Effectiveness of Prevention Interventions to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) and Sample Size	Time/Place Inclusion/Exclusion Criteria Outcome Definition	Prevention Intervention: Definition and Characteristic	Findings
10786 Morrissey 1997 J Offender Rehabilita -tion	Study Design: Nonrandomized controlled trial - Comparison of a change of the orientation of a program Individual study quality score Poor (no concurrent control group, no control of potential confounders) Sample size (initial and actual): Overall: 77 Group A Treated Group: 36 Group B Treated Group: 41 Age, gender & race groups: Average age of participants: 16 years 4 months (age not provided for each group) Both groups were 100% male. Group A: Black 41.6% White 33.4% Hispanic 22.2% Cape Verdian 2.7% Group B: Black 26.7% White 51.2% Hispanic 19.5% Cape Verdian 2.4%	Time (begin, end): April 1987-August 1990 Group A: Apr 87 - Mar 88 Group B: Sep 89 - Aug 90 Place (city, state): Worcester, MA Study Population: Incarcerated male juvenile offenders Inclusion criteria: Not specified Exclusion criteria: Not specified Moderating/mediating factors None addressed **Outcome 1: violence** •Measure: incident reports filed by staff and Program Director's monthly reports •Definition: violent incidents; assaults on staff, assaults on residents, restraint required due to violent behavior, and room isolation due to violent behavior •Type: assault •Circumstance;Proactive/reactive; Weapon used: not specified •Victim-offender relationship: Peers and facility staff **Outcome 2: Adverse health** Not addressed **Outcome 3: Effectiveness** Decrease in level of violence and incidences of assaultive behavior in Group B **Outcome 4: Safety** Not addressed	**Description of Program** A multimodal treatment approach that utilizes a range of behavioral, cognitive-behavioral, and psychological skills training methods. Many aspects of the program were improved from the Group A intervention to Group B intervention. Name of program: Not named Level: Tertiary Kind of program 1. Behavioral 2. Cognitive-behavioral 3. Psychological skills training Mechanism of delivery 1. Staff dealt with aggressive or disruptive behavior using room confinement <2 hrs, behavioral contracts, extension of time in program 2. Individual and group counseling Target population Incarcerated male juvenile offenders Setting where intervention took place Secure treatment unit of juvenile facility Setting where subjects were recruited Secure treatment unit of juvenile facility Person delivering program 1. Facility staff delivered behavioral component 2. Master's level clinicians provided individual and group counseling Time period/duration/frequency: Weekdays from 9am – 2:30pm: Group A: between 4/87 – 3/88 Group B: between 9/89 – 8/90	**To compare the behavioral changes that occurred in two treatment groups that were served with two orientations of a multimodal treatment approach in incarcerated male juvenile offenders** Grp A Mean / Grp B Mean / P Violent incidents 7.1 1.5 * Assaults on Residents 1.8 0.0 * Assaults on staff 1.8 0.0 * Restraint of resident 3.8 0.5 * Room time for Violent Behaviors 72.1 0.8 * *Significant at p=.05

Appendix C2: Evidence Table 23: Effectiveness of Prevention Interventions to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) and Sample Size	Time/Place Inclusion/Exclusion Criteria Outcome Definition	Prevention Intervention: Definition and Characteristic	Findings
692 Myers 2000 J Am Acad Child Adolesc Psychiatry	Study Design: Nonrandomized control trial Individual study quality score Poor (comparability of groups not maintained, key confounders were given little or no attention) Sample size: Program participatns: 30 Control group: 30 Description of cohort(s) by age, gender, & race/ethnicity **Program Participants** Age: 9 to 17 years old (M=14.2, SD=1.9) Gender: 63% females African-American: 63.3% White: 33.3% Hispanic: 3.3% **Control group** Mean age: 14.9(SD=1.7) Gender: matched program participants Race: matched program participants	Study Period (begin, end): Between July 1997 and July 1998 Place (city, state): Not specified Study Setting: Child and adolescent psychiatry outpatient clinic setting Study Population: Early career juvenile offenders Inclusion criteria: Youths referred for violent offenses and met criteria for conduct disorder Exclusion criteria: Not specified Moderating/mediating factors Not specified **Outcome 1: violence** Measure: number of violent crime committed at 12 month follow-up Definition: Not specified Type: Not specified Circumstance: Not specified Proactive/reactive: Not specified Weapon used: Not specified Victim-offender relationship: Not specified **Outcome 2: Effectiveness** Reduction in violent crime **Outcome 3: Adverse health** Not studied **Outcome 4: Safety** Not studied	**Description of Program** Name of program Project Back-on-Track Level Tertiary Kind of program Family therapies, parent groups, educational sessions, community service projects, and empathy-building exercises Mechanism of delivery **Child-specific intervention included**: anger management, community service projects, communication skills, self-esteem groups, assertiveness skills training, stress management, diversity awareness, and alcohol/drug education. **Parent-specific intervention included:** Parenting groups, combined parent-child interventions multifamily groups, family life and stress management skills. Target population Youths referred for violent offenses and met criteria for conduct disorder and their parents Setting where intervention took place Child and adolescent psychiatry outpatient clinic setting Setting where subjects were recruited Referred by the District State Attorney's Office and the State Department of Children and Families and surrounding area mental health professionals.	This study assessed the effectiveness of Project Back-on-Track, an after school diversion program that uses a multimodal approach for the treatment of early-career juvenile offenders. Number of violent crimes committed at 12-month follow-up Crimes — Program (n=30) # — Control (n=30) # Assault/battery: 0 — 4 Aggravated assault/battery: 2 — 1 Attempted aggravated assault/battery: 0 — 1 p=ns.

Appendix C2: Evidence Table 23: Effectiveness of Prevention Interventions to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) and Sample Size	Time/Place Inclusion/Exclusion Criteria Outcome Definition	Prevention Intervention: Definition and Characteristic	Findings
692 Myers 2000 J Am Acad Child Adolesc Psychiatry Page 2		**<u>Outcome 3: Effectiveness</u>** Those participating in the treatment program will have a greater reduction in criminal recidivism than those in the control group. The program would be cost-effective by reducing criminal recidivism costs in the treated groups compared with the untreated group. **<u>Outcome 4: Safety</u>** Not studied	<u>Person delivering program</u> **Anger management**: social work provider and recreational therapist **Community service projects**: Program/family coordinator and recreational therapist **Communication skills**: social work provider, recreational therapist, psychologist, and psychiatrist **Self-esteem groups**: social work provider and recreational therapist **Assertiveness skills training**: social work provider, psychologist, and psychiatrist **Stress management**: recreational therapist **Diversity awareness**: recreational therapist **Alcohol/drug education**: psychiatrist and community drug education provider **Parenting groups:** occupational therapist **Combined parent-child interventions multifamily groups:** social work provider and psychologist **Family life and stress management skills:** recreational therapist and occupational therapist <u>Time period/duration/frequency</u> Youth attended the program 2 hours per day, 4 days a week for 4 weeks. Parents attended the program for 15 hours. 2-hour community service projects over 4 weeks.	

Appendix C2: Evidence Table 24: Effectiveness of Prevention Interventions to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) and Sample Size	Time/Place Inclusion/Exclusion Criteria Outcome Definition	Prevention Intervention: Definition and Characteristic	Findings
3680 O'Donnell 1999 J Adolesc Health	Study Design: Nonrandomized control trial. Assignment of school to program or control was not random. Assignment of class within the intervention school to one of the two curricula was random. Individual study quality score Fair (Nonrandomized study, unsure of comparability of cohorts) Sample size (initial and actual): Overall Baseline: 1055 Follow-up: 972 (92%) Curriculum (Gp1): 13 classrooms; 189 students Curriculum+Service (Gp2) 10 classooms; 230 students Control (Gp3): 28 classrooms; 553 students Age (mean): 7th grade 12.2 8th grade 13.2 Gender: 445 (45.8%) male Race: n (%) Latino/Hisp: 150 (15.4) NonHisp Black: 776 (79.8) Other/Missing: 46 (4.7)	Time (begin, end): 1994-1995 Place (city, state): New York, NY Study Population: 7th and 8th grade regular education students from 2 school sites Inclusion criteria: Completion of both baseline and follow-up surveys Exclusion criteria: Students without written informed parental consent and student consent Moderating/mediating factors •Gender •Grade •Ethnicity •Social desirability **Outcome 1: violence** Measure/Definition: mean of 7 items: •Threatening others in 3 mos •Fighting in 3 mos •Weapon carrying in 1 yr •Weapon use in 1 yr How measured: Self-report questionnaire Type: Threats, fights, weapon use Other characteristics: not specified. **Outcome 2: Effectiveness** Violence risk behavior at 6-month follow-up **Outcome 3: Adverse Health** Not studied **Outcome 4: Safety** Not studied	**Description of Program** 2 components: 1. curriculum 2. curriculum plus service training **Name of program** Reach for Health Community Youth Service program. Level Primary Kind of program •community youth service •comprehensive risk-reduction curriculum Mechanism of delivery School curriculum Target population Inner-city adolescents Setting where intervention took place Schools & community sites Setting where subjects were recruited Urban middle schools Person delivering program Teachers and/or staff Time period/duration/ frequency • Curriculum: 35 lessons in 4 main units in 6 months • Community youth service – 3hr/week at community site	**Outcome 1 Baseline violence behavior** Percent reporting behavior Behavior / Cont / Gp 1 / Gp 2 / Total / p Past 3 months: n=553 / n=189 / n=230 / n=972 Threaten to beat: 49.1 / 44.8 / 44.5 / 47.1 / ns Threaten to cut/stab/shot: 16.3 / 12.7 / 11.7 / 14.5 / ns In physical fight: 47.2 / 39.2 / 40.8 / 44.1 / ns Past year Cut/stab someone: 9.5 / 7.7 / 8.6 / 9.0 / ns Shot at someone: 5.4 / 5.5 / 6.3 / 5.6 / ns Violence scale (mean): 1.90 / 1.81 / 1.85 / 1.87 / ns **Outcome 2 Violent Behavior at 6-month follow-up** **Linear regressions** (Comparing both Intervention groups to Control group) **Models w/ or w/o interaction** No interactions / With interactions Factor / Coeff (SD) / p-value / Coeff (SD) / p-value Baseline violence: 0.565 (0.028) / <0.0001 / 0.561 (0.028) / <0.0001 2 Programs: -0.037 (0.061) / ns / 0.092 (0.083) / ns 1 Program: -0.016 (0.068) / ns / -0.011 (0.087) / ns Male: 0.186 (0.051) / <0.001 / 0.189 (0.051) / <0.001 8th grade: -0.023 (0.050) / ns / 0.045 (0.066) / ns Hispanic v Black: -0.055 (0.071) / ns / -0.041 (0.071) / ns Oth race v Black: 0.044 (0.118) / ns / 0.040 (0.118) / ns Soc desirability: -0.104 (0.087) / ns / -0.096 (0.086) / ns Grade x Progr 2: -0.279 (0.121) / <0.05 Grade x Progr 1: 0.004 (0.133) / ns Intercept: 0.927 (0.138) / <0.0001 / 0.887 (0.141) / <0.0001 **Models by grade** 7th Grade / 8th Grade Factor / Coeff (SD) / p-value / Coeff (SD) / p-value Baseline violence: 0.564 (0.044) / <0.0001 / 0.557 (0.037) / <0.0001 2 Programs: 0.102 (0.079) / ns / -0.206 (0.096) / <0.05 1 Program: 0.010 (0.083) / ns / -0.036 (0.113) / ns Male: 0.180 (0.067) / <0.01 / 0.211 (0.078) / <0.01 Hispanic v Black: -0.121 (0.089) / ns / 0.058 (0.113) / ns Oth race v Black: -0.221 (0.155) / ns / 0.322 (0.179) / <0.10 Soc desirability: -0.075 (0.114) / ns / -0.108 (0.130) / ns Intercept: 0.873 (0.186) / <0.0001 / 0.929 (0.200) / <0.0001

Appendix C2: Evidence Table 25: Effectiveness of Prevention Interventions to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) and Sample Size	Time/Place Inclusion/Exclusion Criteria Outcome Definition	Prevention Intervention: Definition and Characteristic	Findings
739 Orpinas 2000 Health Education Research	Study Design: Randomized Control Trial Eight middle schools (6-8th grades) were divided into matched pairs and then one of each pair was randomly assigned to either intervention or control conditions. Individual study quality score • Randomization not adequate • Retention rate <80% Sample size (initial and actual): Overall 2,246; Follow-up rate: 69% all 3 evalations 75% at least one follow-up eval Intervention: (Grp 1): 1,020 Control: (Grp 2): 1,226 Age, gender & race groups: (for the whole sample only) Age (only grade mentioned) 2,246 6th graders at baseline 2,090 at one-year followup 1,745 at two-year followup Gender 1,132 males (50.4%) 1,114 females (49.6%) Race Hispanic: 1,537 (68.4%) African-American: 382 (17.0%) Caucasian: 180 (8.0%) Asian: 79 (3.5%) Native American: 12 (0.5%) other/biracial: 56 (2.5%)	Time (begin, end): Spring 1994-Spring 1996 Place (city, state): Urban school district in Texas Inclusion criteria: School had not participated in any other violence-prevention study. Exclusion criteria: Those who did not complete at least one follow-up evaluation. Moderating/mediating factors race/ethnicity academic performance analyses stratified by gender **Outcome 1: violence** Measure: 1. frequency of fights in school 2. frequency of injuries due to fights Definition: CDC and Preventions' Youth Risk Behavior Survey: 1. frequency of fights at school ranged from 0 to 10+ in prior year. 2. frequency of injuries due to fighting ranged from 0 to 6+ in prior year. None of these are specified below: Type, Circumstance, Proactive/reactive, Weapon used Victim-offender relationship **Outcome 2: Adverse health** Past year frequency of injuries due to fights. **Outcome 3: Effectiveness** aggression and safety **Outcome 4: Safety** Past year frequency of injuries due to fights.	**Description of Program** Multi-component violence-prevention program Name of program Students for Peace Level: Primary Kind of program Social cognitive program designed to influence both environmental and personal factors. Components: • Curriculum presenting information about violence, • Student training on empathy, conflict resolution, and anger management, • Parent education Mechanism of delivery • classroom curriculum • One-on-one 'Peer Mediation' and 'Peers Helping Peers' program for student training • Newsletters to parents for parent education. Target population Middle school students and their parents Setting where intervention took place: School classroom and newsletters to home Setting where subjects were recruited: School classroom Person delivering program Teachers and trained students. Time period/duration/frequency • Semester curriculum • Monthly newsletters to parents	Primary objective was to examine intervention effects at 1-year and 2-year follow-up. **Adjusted difference between intervention and control conditions on outcome variables (adjusted for academic performance and race). Negative scores reflect lower scores for controls, indicating that intervention has higher violence scores.** BOYS, 1-YEAR FOLLOWUP (95% CI) *Fighting (%):* -1.2 (-8.5, 6.2) Fighting injuries (%): -2.7 (-7.0, 1.5) Threatened to hurt (%): -8.8 (-18.9, 1.3) BOYS, 2-YEAR FOLLOWUP (95% CI) *Fighting (%):* -6.3 (-14.1, 1.6) Fighting injuries (%): -6.7 (-11.3, 2.1) Threatened to hurt (%): -0.3 (-10.9, 10.4) GIRLS, 1-YEAR FOLLOWUP (95% CI) *Fighting (%):* -2.1 (-8.5, 4.6) Fighting injuries (%): 0.9 (-3.6, 5.3) Threatened to hurt (%): 1.9 (-5.5, 9.3) GIRLS, 2-YEAR FOLLOWUP (95% CI) *Fighting (%):* 0.1 (-6.9, 7.1) Fighting injuries (%): -0.7 (-5.3, 3.9) Threatened to hurt (%): -0.6 (-7.2, 8.3) **Overall finding: There is a lack of intervention effect.** Theory on which intervention was based: Social Cognitive Theory.

Appendix C2: Evidence Table 26: Effectiveness of Prevention Interventions to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) and Sample Size	Time/Place Inclusion/Exclusion Criteria Outcome Definition	Prevention Intervention: Definition and Characteristic	Findings
9 Perry 2003 Arch Pediatr Adolesc Med	Study Design: Randomized control trial (School) Individual study quality score 1. Fair based on RCT criteria (no masking of treatment allocation or outcome assessment) Sample size (initial): Total eligible: 6728 Baseline survey: 6238 DARE only (1a): 2226 DARE Plus (1b): 2221 DelayedControl (2): 1790 Total (completed at least one survey) 7353 After excluding loss to follow-up 7261 Age and ethnicity for total: Age: 7th and 8th graders Gender Male Female All 51.6% 48.4% Grp 1a 1,269 1,249 Grp 1b 1,381 1,254 Grp 2 1,093 1,015 Ethnicity: White: 67.3% African American 7.5% Asian American 12.7% Hispanic 3.6% American Indian 4.0% Mixed/Other 4.9%	Time (begin, end): Academic year 1999-2001 Place (city, state): Minneapolis-St. Paul Study Population: Seventh and eighth grade students in 24 schools (8 each study group) Inclusion criteria: No additional inclusion criteria. Exclusion criteria: None noted. Moderating/mediating factors Psychosocial constructs related to violence including demographic variables; normative estimates and expectations concerning violence; and outcomes expectations concerning violence **Outcome 1: violence** Measure: Violent behavior and intentions as measured on a 5-items, scale range: 5-23. How measured self-administered questionnaire (Kelder and Flay, 1995 and 1994) Definition, Type, Circumstance, Proactive/reactive, Weapon used, Victim-offender relationship: Not specified **Outcome 2: Adverse health** Not studied. **Outcome 3: Effectiveness** Definition of outcome measure(s): Difference between increase of score per year (growth rate) for each measure. **Outcome 4: Safety** Not studied	**Description of Program** Name of program Drug Abuse Resistance Education (D.A.R.E.) Level: Primary Kind of program: • Behavioral/cognitive • Vocational/technical skill building • self-efficacy building Mechanism of delivery • Group setting • Peer mediation • School curriculum • Distribution of material • Community action Target population • DARE: 7th & 8th graders • DARE Plus: 7th & 8th graders and their parents Setting where intervention took place • DARE: School • DARE Plus: School and community Setting where subjects were recruited: School Person delivering program • DARE: Police officers • DARE Plus: officers+peer leaders+community organizers Time period/duration/frequency • DARE: 10 weeks • DARE Plus: 10 weeks curriculum + 4 week parental involvement program + unspecified time for extracurricular activities and community action teams.	**To evaluate the effect of D.A.R.E. curriculum and supplemental components in reducing tobacco, alcohol and marijuana use and violent behavior.** **Violent behavior and Intentions: Mean (SE)** **Boys** **Control** **DARE** **P** (n=1093) (n=1269) Baseline score 7.92 (0.17) 7.67 (0.17) .15 Growth rate 0.54 (0.09) 0.57 (0.09) .41 **Boys** **Control** **DARE Plus** **P** (n=1093) (n=1381) Baseline score 7.92 (0.17) 7.82 (0.16) .35 Growth rate 0.54 (0.09) 0.35 (0.08) .06 **Boys** **DARE** **DARE Plus** **P** (n=1269) (n=1381) Baseline score 7.67 (0.17) 7.82 (0.16) .26 Growth rate 0.57 (0.09) 0.35 (0.08) .04 **Girls** **Control** **DARE** **P** (n=1015) (n=1249) Baseline score 6.66 (0.16) 6.75 (0.15) .34 Growth rate 0.30 (0.07) 0.26 (0.07) .34 **Girls** **Control** **DARE Plus** **P** (n=1015) (n=1254) Baseline score 6.66 (0.16) 6.67 (0.15) .49 Growth rate 0.30 (0.07) 0.23 (0.07) .24 **Girls** **DARE** **DARE Plus** **P** (n=1249) (n=1254) Baseline score 6.75 (0.15) 6.67 (0.15) .35 Growth rate 0.26 (0.07) 0.23 (0.07) .38

Appendix C2: Evidence Table 27: Effectiveness of Prevention Interventions to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) and Sample Size	Time/Place Inclusion/Exclusion Criteria Outcome Definition	Prevention Intervention: Definition and Characteristic	Findings
3965 Reynolds 2001 JAMA	Study Design: Nonrandomized prospective comparative cohort design. Individual study quality score Fair (nonranomized study-unsure of comparability of cohorts) Sample size (initial & actual): Overall: Initial 1539 Actual 1404 (91%) Intervention Group (Grp 1): Initial 989 Actual 911 (92%) Control Group (Grp 2): Initial 550 Actual 493 (90%) Age, gender & race groups: Age: Not specified Gender: Not specified Race: Initial sample only Black 1431 (93%) Hispanic 108 (7%)	Time (begin, end): 1985-2000 Place (city, state): Chicago, IL Study Population: Children who attended early childhood programs in 25 sites in 1985-1986 Inclusion criteria: Still residing in Chicago at age 10 or older Exclusion criteria: None Moderating/mediating factors •Sex •Race/ethnicity •Risk index •Earlier/later program participation •Program Site (local influences) **Outcome 1: violence** Measure: arrests for violent offenses occurring between ages 10 and 18 years: •Any arrest •2 or more arrests •Total number of arrests Definition: Formal petitions for youth who are arrested on criminal charges and go before a judge for violent offenses, such as assault or robbery Type: Assault, robbery Other characteristics: unspecified **Outcome 2: Effectiveness** See Outcome 1 **Outcome 3: Adverse Health** Not studied **Outcome 4: Safety** Not studied	**Description of Program** Features central to the program: • structured set of learning activities • low children to teacher ratios in preschool and kindergarten • multifaceted parent program • outreach activities • ongoing staff development • health and nutrition services • comprehensive school-age services Name of program Chicago Child-Parent Center (CPC) Program Level: Primary Kind of program • Educational component • Family support component Mechanism of delivery Multi-components - see features listed above Target population Low-income minority children Setting intervention took place Preschools, kindergarten, neighborhood centers Setting where subjects recruited Poor communities in Chicago Person delivering program Educators Time period/duration/frequency •Extended: Full-day or part-day during pre-school and kindergarten, with additional services available through 2nd or 3rd grade •Nonextended: Participation at CPC's at any level less than extended participants	**To determine long-term effectiveness of a preschool and school-based intervention program on juvenile arrest.** **Outcome 2 Juvenile violent arrests: Adjusted mean and differences*** Preschool children Group 1 Group 2 Outcome n=911 n=493 Difference p Any arrest (%) 9.0 15.3 -6.3 0.002 >= 2 arrests (%) 4.7 7.6 -2.9 0.008 Mean arrests 0.22 0.35 -0.13 0.02 School-age children Group 1 Group 2 Outcome n=811 n=593 Difference p Any arrest (%) 10.8 11.8 -1.0 0.58 >= 2 arrests (%) 5.9 5.4 0.5 0.60 Mean arrests 0.28 0.25 0.03 0.64 Intervention Group Extended Nonext. Outcome n=540 n=527 Difference p Any arrest (%) 9.3 12.4 -3.1 0.09 >= 2 arrests (%) 4.9 6.2 -1.3 0.19 Mean arrests 0.21 0.30 -0.09 0.40 * Adjusted for factors listed under Moderating/mediating factors. The p value is the probability level of the adjusted mean difference based on probit and negative binomial regression analysis transformed to marginal effects. Sample sizes are for juvenile arrests, larger than that for educational attainment and school remedial services.

Appendix C2: Evidence Table 28: Effectiveness of Prevention Interventions to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) and Sample Size	Time/Place Inclusion/Exclusion Criteria Outcome Definition	Prevention Intervention: Definition and Characteristic	Findings
7615 Risler 1998 Research on Social Work Practice .	Study Design: Cross-sectional study. Secondary data analysis comparing arrest rates before and after the implementation of the law Individual study quality score Poor (confounding factors not accounted) Sample size (initial and actual): No population sizes provided. Age, gender & race groups: No breakdown of population size by age, gender or race subgroups.	Time (begin, end): Before period: 1992 to 1993 After period: 1994 to 1995 Place (city, state): State of Georgia Inclusion criteria: not specified Exclusion criteria: not specified Moderating/mediating factors: not specified **Outcome 1: violence** Measure/Definition/Type: Mean arrest rates for aggravated assault, robbery, sex offense, rape, murder. Data were obtained from the Georgia Uniform Crime Reporting Program. Circumstance, Proactive/reactive, Weapon used, Victim-offender relationship: Not specified **Outcome 2: Adverse health** Not specified **Outcome 3: Effectiveness** A statistically significant decrease in the mean arrest rates for the offenses was considered a measure of deterrence. **Outcome 4: Safety** Not studied	**Description of Program** Mandates children age 13-17 arrested for murder, voluntary manslaughter, rape, aggravated sexual battery, aggravated child molestation; aggravated sodomy, or firearm robbery be tried as adult Name of program Juvenile Justice Reform Act 1994 of Georgia Level: primary Kind of program: Legislative Mechanism of delivery: Legislative Target population: Juvenile population of the state of Georgia Setting where intervention took place State of Georgia Setting where subjects were recruited State of Georgia Person delivering program Legislature Time period/duration/frequency Legislature throughout the post statute period. Notes if any • Data gathered from Uniform Crime Reporting Program (FBI 1993, Georgia Bureau of Investigation 1997). • This study did not report the size of the study population and did not provide a definition of the arrest rate in terms of per x number of population	This study compared arrest numbers for violent crimes among juveniles for two years before and two years after implementation of the Georgia's Juvenile Justice Reform Act (1994) **Mean Arrest Rates (unit not provided)** After Before % p Aggravated Assault 1726.5 1833 -6.16 0.482 Armed Robbery 857 749 14.41 0.238 Sex Offense 426.5 393.5 8.38 0.457 Rape 118 121.5 - 2.94 0.423 Murder 83 82 1.21 0.973 Total of Violent Index Offenses 3211 3179 1.00 0.909 **Mean Arrest Rates for Violent Index Offenses** After Before % p White 638 556 14.5 0.240 Black 2556 2608 - 1.9 0.834 Other 18 14 20.6 0.606 The analysis suggests that there were no significant reductions in the mean arrest rates for the offenses specified by the law.

Appendix C2: Evidence Table 29: Effectiveness of Prevention Interventions to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) and Sample Size	Time/Place Inclusion/Exclusion Criteria Outcome Definition	Prevention Intervention: Definition and Characteristic	Findings
40 Scott 2002 J Trauma	Study Design: Randomized control trial. Individual study quality score • validity of outcome not addressed Sample size (initial and actual): Total: 76 Intervention Group: 38 Control Group: 38 Age, gender & race groups: Mean age Intervention group: 15.32 Control group: 16.08 Males: 76 (100%) Race Intervention group # African-american: 24 Caucasian: 13 Other: 1 Control group African-american: 24 Caucasian: 13 Other: 1	Time (begin, end): Not specified Place (city, state): Jacksonville, FL Study Population: First-time juvenile male offenders of a violent crime Inclusion criteria: First time offender of a violent crime, male ages 13-18 years, residing in Jacksonville area, and screened for "psychological appropriateness" for program Exclusion criteria: Not specified Moderating/mediating factors None specified **Outcome 1: violence** Measure: Violence recidivism Definition: Conviction for violent offense within one year after the first violent conviction and completion of court sanctions Type: Not specified Circumstance: Not specified Proactive/reactive: Not specified Weapon used: Not specified Victim-offender relationship: Not specified **Outcome 2: Adverse health** None specified **Outcome 3: Effectiveness** Lower recidivism rate and shorter overall time investment. **Outcome 4: Safety** Definition of outcome measure(s) Not specified.	**Description of Program** Name of program Turning Point: Rethinking Violence (TPRV) Level Tertiary Kind of program Component 1: Trauma experience Component 2: Victim Impact panel Component 3: Group Process Component 4: Community Networking Mechanism of delivery Group setting Target population First-time juvenile male offenders of a violent crime and their parents Setting where intervention took place Shands Jacksonville Medical Center Setting where subjects were recruited Intervention group: referred by juvenile judge Control group: random selection from juvenile records Person delivering program Component 1: health care providers Component 2: Victims' families Components 3 & 4: Not specified Time period/duration/frequency 6 weeks, 14 hours of face-to-face contact hours Notes: Intervention group received the experimental program. Control group received standard court sentencing options, usually 100 hours of community service.	**To determine whether TPRV results in lower rates of violence recidivism when compared with standard court sentencing options (100 hours of community service) for first-time violent offenders** Violence Recidivism Rate Intervention 0.05 Control 0.33 p-value ≤ .05 Note: The lower recidivism in the study group occurred with a shorter overall time investment (14 core contact hours vs 100 community services hours.

Appendix C2: Evidence Table 30: Effectiveness of Prevention Interventions to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) and Sample Size	Time/Place Inclusion/Exclusion Criteria Outcome Definition	Prevention Intervention: Definition and Characteristic	Findings
4315 Simon 2002 Am J Health Behav	Study Design: Randomized control trial (group); 29 school districts were recruited with a procedure approximating random selection. 21 continuation high schools were selected based on school size. Schools were blocked by characteristics such as substance-abuse prevalence, ethnicity, size, and test scores and were randomly assigned by block to 1 of 3 experimental conditions: Grp 1: TND curricula Grp 2: TND plus supplemental program Grp 3: Control Individual study quality score • attrition rate > 20% • validity of instruments not reported • no intent-to-treat analysis Sample size (initial and actual): Overall Baseline 1587 1-yr follow-up 1074 Complete data 850 (Size by group: not specified) Age, gender & race groups: Age: 16.8 mean; 14-19 range Gender: 55% male Race: African American 9% Asian American 4% Latino 49% Native American 3% White 34% Other 1%	Time (begin, end): Not specified (1-year duration) Place (city, state): CA (southern) Study Population: Students from 21 continuation high schools from 5 counties Inclusion criteria: None Exclusion criteria: Students in independent study, completing final credits, or not taking the core classes within which TND was delivered Moderating/mediating factors •Gender •Race/ethnicity •Survey procedure •Baseline violence **Outcome 1: violence** Measure: Perpetration of violence Definition: Number of times in the past 12 months, • slapped, punched, kicked, or beat up someone • used a weapon to threaten a person • used a weapon to injure someone How measured: In-person or telephone survey; 6-response choices per item Other characteristics: not specified **Outcome 2: Effectiveness** •TND exposure association with risk for violence **Outcome 3: Adverse Health** Not studied **Outcome 4: Safety** Not studied	**Description of Program** The program was designed specifically to meet the needs of youth in continuation high schools, the alternative school system in CA. Name of program Project Towards No Drug Abuse (TND) Level: Secondary Kind of program: Behavioral, cognitive Motivation, skills, decision-making Mechanism of delivery School curriculum Target population Youth in continuation high schools Setting where intervention took place Continuation high schools Setting where subjects were recruited Continuation high schools Person delivering program Trained health educator Time period/duration/frequency Nine 40-minute lessons or complete classroom periods over a period of 3 weeks	**To test the impact of a school-based substance-abuse-prevention program on risk for violence** **Outcome 1 Perpetration of violence at 1 year follow-up** % reporting any perpetration TND Control Males 60.1 67.9 Females 55.9 54.8 **Outcome 2 TND Association with Violence** Multivariate logistic regressions by sex: (adjusted for baseline violence, survey procedure, and race/ethnicity) Adjusted Odds Ratios for Perpetration of Violence aOR (95% CI) Control TND Males 1.23 (0.79-1.90) 1.00 Females 0.90 (0.56-1.45) 1.00 Note: The 2 intervention conditions did not differ on follow-up reports of perpetration (p=0.65). As a results, the 2 intervention conditions were combined in analysis.

Appendix C2: Evidence Table 31: Effectiveness of Prevention Interventions to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) and Sample Size	Time/Place Inclusion/Exclusion Criteria Outcome Definition	Prevention Intervention: Definition and Characteristic	Findings
7973 Stein 1999 Aggressive Behavior	Study Design: Single group time series study Individual study quality score Poor (no control group) Sample size (initial and actual): n=16 Age, gender & race groups: Age: Range 13–17 years Gender: Male: 13 (81%) Female: 3 (19%) Race: Unspecified	Time (begin, end): Exact date unspecified Total study period = 5 years (Each subject studied for 1 year) Place (city, state): Farmville, Virginia Study Population: Adolescents referred for outpatient treatment to a private psychological clinic for behavioral patterns diagnosed as oppositional-defiant disorder with aggression Inclusion criteria: See above Exclusion criteria: Unspecified Moderating/mediating factors Unspecified **Outcome 1: violence** Measure: Aggressive behavior Definition: Actual violent contact with either hands or feet or using or throwing an object at parents, siblings, or any other person in the home or any other setting. Type: Physical aggression Circumstance: Unspecified Proactive/reactive: Unspecified Weapon used: Hands, feet, other object Victim-offender relationship: family or other **Outcome 2:Adverse health &safety** Not studied **Outcome 3: Effectiveness** A decrease in the number of aggressive acts performed by subjects during intervention and one-year after intervention completed **Outcome 4: Safety** Not studied	**Description of Program** PRETHERAPY ASSESSMENT *Baseline Phase: 4 weeks* *Cognitive/Rest Phase: 8 weeks* *Cognitive/Rest+Response Cost Phase: 8 wkss* POSTTHERAPY ASSESSMENT *REST + Response Cost Phase:* After aggression stopped, programs remained in effect at home FOLLOW-UP PHASE: One year later, parents recorded observations for two weeks Name of program Three programs combined: 1) Cognitive therapy 2) REST (Real Economy System for Teens) program 3) Response cost program Level: Tertiary Kind of program :Cognitive/behavioral Mechanism of delivery • One-on-one (cognitive therapy) • Other two programs delivered at home by parents (parents underwent training) Target population Adolescents with oppositional-defiant disorder and aggressive behaviors Setting where intervention took place Outpatient psychological health clinic, Home Setting where subjects were recruited Outpatient psychological health clinic (3 referred by police or courts, 13 initiated by parental concern/frustration) Person delivering program Therapist, Parents Time period/duration • Duration of intervention ≈ 25 weeks • Follow up = 2 weeks (1 year after completion of intervention) • Total time period ≈ 1 year , 27 weeks	**To report the effectiveness of an outpatient behavioral management program in reducing aggressive behaviors among adolescents diagnosed as oppositional-defiant with aggressive behavior.** Weekly mean rate of aggressive acts for all 16 participants and program phase: BASELINE Week 1 2 3 4 Mean rate 4 3 2 4 COGNITIVE/REST Week 5 6 7 8 9 10 11 12 Mean rate 3 4 3 3 4 3 5 3 COGNITIVE/REST + RESPONSE COST Week 13 14 15 16 17 18 19 20 Mean rate 2 2 3 1 1 0 0 0 REST + RESPONSE COST Week 21 22 23 24 Mean rate 0 0 0 0 FOLLOW-UP FU # 1 2 Mean rate 0 0 Notes: • Range of aggressive acts was highly variable during baseline • Variability increased during the Cognitive/REST phase, even though averages remained fairly consistent • Aggression declined to “0” during the cognitive/REST + Response Cost Phase (by week 18). All participants were at “0” by week 19.

Appendix C2: Evidence Table 32: Effectiveness of Prevention Interventions to Violent Behavior and Adverse Health Outcome

Record # Author Year, Jnl	Study Quality Group(s) and Sample Size	Time/Place Inclusion/Exclusion Criteria Outcome Definition	Prevention Intervention: Definition and Characteristic	Findings
4962 Zivin 2001 Adolescence [Prior related studies: Delva-Tauiliili, 1995; Edelman, 1994; Glanz 1994; Smith et al 1999]	Study Design: Partially randomized controlled study with a cross-over design, profiled matched, and wait-list controlled Individual study quality score Poor (Lost to follow-up >20%; potential confounders not controlled for). Sample size (initial and actual): Overall: 60 Group A: Treatment group N=32 in semester 1; N=19 crossed-over to no treatment in semester 2. Group B: Wait-list control gp N=28 in semester 1; N=17 crossed-over to treatment group in semester 2. Age, gender & race groups: Age: 22 6th graders (M=12.1, SD=.46); 28 7th graders (M=13.11, SD=.43); 10 8th graders (M=14.3, SD=.52) Gender: 100% males Race: Not specified	Time (begin, end): Not specified Place (city, state): Not specified. School was located in a working-class and welfare-receiving neighborhood that had the 3rd highest juvenile arrate in the city. Study Population: 6th and 7th grade students in an urban public middle school with 870 students. Inclusion criteria: Administrative staff and/or teachers selected 64 boys who they deemed to be at high risk for violence and delinquency Exclusion criteria: Not specified Moderating/mediating factors Not specified **Outcome 1: violence** Measure: Violence was based on 9 items selected from the Sutter-Eyberg Student Behavior Inventory at 4 month follow-up measured on a 7-point Likert scale Definition: Not specified **Outcome 2: Adverse health** Not specified **Outcome 3: Effectiveness** Not specified **Outcome 4: Safety** Not specified	**Description of Program** A traditional martial arts training program that is aimed at developing a respectful attitude, physical skill, spiritual clarity, and an understanding of the body and the physics of action. Name of program Koga Ha Kosho Shorei Ryu Kempo Level: Primary Kind of program: traditional martial arts training Mechanism of delivery Large class room setting with moveable seats Target population 6th and 7th grade students Setting where intervention took place School Setting where subjects were recruited School Person delivering program Martial arts master and his adult assistant Time period/duration/frequency Three times/week for 30 sessions, 45 minutes each	The purpose of this study was to assess whether a martial arts course reduce the rate of violence among middle school students. **Comparison of Groups A and B post course** Violent score: Group A (n=31) M(SD) 3.20(1.46); Group B (n=17) M(SD) 3.34(1.05) Not statistically significant at p=0.05.

Appendix D1: Technical Expert Group

Technical Expert	Affiliation/Location
Sonia Chessen	DHHS Washington DC
Sandra Graham, Ph.D	University of California Los Angeles, CA
Nancy Guerra, EdD	University of California Riverside, CA
Ron Haskins, PhD	Brookings Institute Washington, DC
Darnell Hawkins, JD, PhD	University of Illinois Chicago, IL
Doug Kirby, PhD	ETR Associates Scotts Valley, CA
Georgine Pion, PhD	Vanderbilt University Nashville, TN
Cathy Widom, PhD	New Jersey School of Medicine Newark, NJ
Franklin E. Zimring, JD	University of California Berkeley, CA

Appendix D2. Peer reviewers

Peer Reviewer	Affiliation/Location
Paula M. Duncan, MD	Vermont Child Health Improvement Program Burlington, VT
Kathy Grasso, J.D.	US Dept. of Justice Washington, D.C.
Lynne Haverkos, MD,MPH	National Institute on Child Health & Human Development, Rockville, MD
Joan Sera Hoffman, PhD	Centers for Disease Control and Prevention Atlanta, Georgia
Patrick J. Kanary	Center for Innovative Practices Stark County Community Mental Health Board
Danielle Laraque, MD	Mount Sinai School of Medicine New York, NY

Appendix E
Coding system for risk factors

Level I Domain	Level II Construct	Level III Risk Factors	WHEN				
			<0	0-3	4-8	9-11	12-17
77			<0	0-3	4-8	9-11	12-17
0Individual	**Biological**	1101=Male gender 1102=In-utero exposure to alcohol, tobacco and drug (ATOD) 1103=In-utero exposure to prescribed drug 1104=In-utero exposure to lead 1105=In-utero exposure to other environmental toxin, specify 1106=Birth trauma/complication 1107=age 1108=sex hormone levels 1188=other biological, specify 1199=biological factor not specified					
	Ethnicity	1201=American Indian 1202=Asian Pacific Islander 1203=Black, Non Hispanic 1204=Hispanic 1205=White, Non Hispanic 1288=other ethnicity, specify 1299= Ethnicity not specified					
	Physical Development	1301=Minor physical anomalies 1302=Small size 1303=Dyssynchronous maturation 1304=Early maturation 1388=other physical development, specify 1399=physical development factor not specified (somatic symptoms)					
	Neurological/ Cognitive Development	1401=Head/brain injury 1402=Epilepsy 1403=Mental retardation 1405=Low IQ 1406=Poor motor-skill 1407=Learning disability 1408=Language disability 1409=Attention deficit hyperactivity disorder/hyperactive/impulsive-attention deficit (HIA) 1410=Low level of problem solving skills 1411=Impulsivity 1412=Emotion dysregulation 1413=Aberrant social information processing 1414=poor communication skills 1488=other neurological development, specify 1499=neurological factor not specified					

Appendix E
Coding system for risk factors

Level I Domain	Level II Construct	Level III Risk Factors	WHEN				
			<0	0-3	4-8	9-11	12-17
	Psychological condition	1501=Temperament, specify 1502=Favorable attitude toward problem behavior 1503=Depression 1504=Bipolar disorder 1505=Other affective disorder, specify 1506=Schizophrenia 1507=psychopathy 1508=Suicidal ideation 1509=Self-esteem/perceived life chances 1510=destructive response to anger 1588=other psychological condition, specify 1588.1=mental health treatment 1588.2=perceived risk of untimely death 1588.3=poor perceived general health 1588.4=fear of violence in school/home 1588.5=perceived racism 1588.6=emotional well-being 1588.7=positive attitude toward problem behavior/lack of guilt/pro-violence attitude 1599=psychological factor not specified					
	School Functioning	1601=Dropped out 1602=Truancy 1603=Misbehaving 1604=Poor academic performance 1605=repeating a grade 1606=low school motivation/commitment 1607=School transitions 1688=other school functioning, specify 1699=school functioning factor not specified					

Appendix E
Coding system for risk factors

Level I Domain	Level II Construct	Level III Risk Factors	WHEN				
			<0	0-3	4-8	9-11	12-17
	Behavioral Development	Antisocial behavior 1701=Alienation 1702=Isolation/withdrawal 1703=Lack of other interest/activities 1708=other antisocial behavior, specify 1709=antisocial behavior, unspecified Problem behavior 1711=Defiant/rebellious behavior, specify 1712=High daring/Risk-taking propensity 1713=Discipline problem at home/school 1718=other problem behavior, specify Health related problem behavior 1721=Using drugs/alcohol 1722=Early initiation of sexual activity 1723=Pregnancy 1724=Sexually transmitted infection 1725=smoking 1728=other health related problem, specify Aggressive behavior 1731=Verbal aggression 1732=Physical aggression 1733=Bullying 1734=Animal abuse 1738=other aggressive behavior, specify Delinquent behavior 1741=Truancy 1742=Prostitution 1743=Illicit drug use 1744=Selling drugs 1745=Carrying a weapon 1746=Member of a gang 1747=Criminal activity 1748=other delinquent behavior, specify nonviolent felony offenses 1749=delinquent behavior not specified Violent behavior 1751=Murder/homicide 1752=Aggravated assault 1753=Non-aggravated assault 1754=Rape/sexual assault 1755=Robbery 1756=Gang fight 1757=Fighting 1758=Serious injury or harm to others 1759=violent behavior, specify physical fight with same gender 1798=early violence, not specified 1799=behavioral developmental factor not specified					

Appendix E
Coding system for risk factors

Level I Domain	Level II Construct	Level III Risk Factors	WHEN				
			<0	0-3	4-8	9-11	12-17
	Social Ties	Peer Involvement 1801=Associate with antisocial peers 1802=Associate with gangs 1803=Associate with delinquent/violent peers 1804=Rejected by conventional peers/peers disconnectedness 1805=Peer victimization 1806=Peer(s) drug use 1807=Nonconventional peers 1808=other peer involvement, specify 1809=Bad friends, type not specified Other Involvement 1811=Lack of hobbies 1812=Lack of religious belief and related activities 1813=Lack of family commitments 1814=Lack of school commitments and activities/school disconnectedness 1815=Lack of community involvement 1818=other involvement, specify 1819=suicidal behavior of friends 1820=same sex attraction 1821=acceptance of prescribed social norms 1822=negative sanctions 1823=perceived normalcy 1824=gender sterotyping 1899=social ties factor not specified					
	Life experience	1901=Victim of abuse 1902=Victim of domestic violence 1903=Victim of community violence 1904=Witness of domestic violence 1905=Witness of community violence 1906=High exposure to stressful events 1907=Unemployment/employment 1908=victim of violence not specified 1909=death of parent(s) 1988=other life experiences, specify 1999=life experience factor not specified					

Appendix E
Coding system for risk factors

Level I Domain	Level II Construct	Level III Risk Factors	WHEN				
			<0	0-3	4-8	9-11	12-17
FAMILY/ HOME	**Home environment**	2101=Large family size 2102=Overcrowding 2103=Poverty/economic deprivation/low SES 2104=Homelessness 2105=Access to weapons/gun in homes 2106=History of violence in home, specify 2107=Exposure to violence in media 2108=Relocation/high mobility 2109=Lack of support network 2110=Divorce/separation 2111=Adoptive home 2112=Foster home 2188=other home environment, specify 2199=home environment factor not specified					
	Family/parents Characteristics	2201=Single parent 2202=Female head 2203=Young parent(s) 2204=Parent unemployment/unstable financial base 2205=Low parental education 2206=Low parental IQ 2207=Inadequate problem-solving skills 2208=Mental illness/parental depression or stress 2209=Family criminal behavior 2210=Antisocial parents (Parental social isolation) 2211=Lack of spirituality/religiosity 2212=Favorable attitudes concerning violence/crime and involvement in violence/crime 2213=suicide behavior of family member 2214=parent(s) drug use 2215=mother's education 2216=family beliefs 2217=family structure 2218=parental violence 2219=poor family management 2220=sibling delinquency 2288=other family/parent characteristics, specify 2299=family/parents factor not specified					
	Family Harmony	2301=Family conflict 2302=Lack of communication 2303=Immigrant/acculturation conflicts 2304=Physical hitting between parents 2305=Family cohesion 2388=other family conflict, specify 2399=family conflict not specified					

Appendix E
Coding system for risk factors

Level I Domain	Level II Construct	Level III Risk Factors	WHEN				
			<0	0-3	4-8	9-11	12-17
	Care-Givers Treatment Toward Children	2401=Child emotional abuse 2402=Emotional neglect 2403=Physical abuse 2404=Physical neglect 2405=Sexual abuse 2488=Other child maltreatment, specified 2499=caregiver's treatment factor not specified					
	Parent-Child Relationship	2501=Low parental supervision 2502=Rejection by parent (negative attitude toward child) 2503=Lack of parental involvement 2504=Poor communication patterns 2505=Harsh or inconsistent discipline 2506=Neglectful parenting style 2507=Overinvolved/overprotective parenting 2508=Abnormal attachment style 2509=Child lack of involvement 2510=Positive interaction 2511=Negative interaction 2588=other parent-child relationship, specify 2599=parent-child relationship factor not specified					
SCHOOL	**Characteristics**	3101=Located in poor area 3102=High minority makeup 3103=Low teacher to student ratio 3104=High dropout rate 3105=High absenteeism/truancy rate 3106=High delinquency, violent, crime rate 3107=Low academic performance - test score 3108=Lack after-school programs 3109=Lack parental involvement 3188=other characteristic, specify 3199=school characteristic not specified					
	Policy	3201=Low academic expectation 3202=Tolerance of ATOD use 3203=Tolerance of weapon/firearms 3288=other policy, specify 3299=school policy factor not specified					

Appendix E
Coding system for risk factors

Level I Domain	Level II Construct	Level III Risk Factors	WHEN				
			<0	0-3	4-8	9-11	12-17
COMMUNITY	**Poverty Environmental Stressors**	4101=High proportion on welfare 4102=High level of unemployment 4103=High density and overcrowding 4104=Paucity of youth activities/programs 4105=Social deprivation 4106=Lack of community resources 4107=High transient population 4108=Community disorganization 4109=Economic deprivation 4110=Low neighborhood attachment 4188=other poverty stressor, specify 4199=poverty environmental stressor not specified					
	Other Environmental Stressor	4201=High levels of low birth weight infants 4201=High crime rate 4203=High minority population 4204=High level of residential segregation 4205=Pervasive gang activity 4206=High level of crimes 4207=High level of violence/violence exposure 4208=Exposure to violent media 4209=Exposure to youth-oriented advertising 4210=Easy access to alcohol and drugs 4211=Easy access to firearms 4212=Absence of positive role model 4213=Law enforcement against crime 4288=other environmental stressor, specify 4299=other environmental stressor not specified					
MACRO-LEVEL ENVIRON-MENT (POLITICAL REALITIES)		5001=Poverty/macrolevel economics 5002=Racism 5003=Sexism 5004=Culture and history of violence 5005=Capitalistic economy 5006=Media glamorization of violence 5007=Declining public support for families 5008=Easy access to alcohol and drugs 5009=Legal access to firearms 5010=Ineffective youth laws/policies 5011=Ineffective criminal justice system 5012=Legitimacy of violent behavior 5088=other macro stressor, specify 5099=macro environmental factor not specified					