## Role of Bullying in School Shootings<sup>1</sup>

This list presents publications from our literature review in which the role of bullying in school shootings or threat assessment was a primary topic (e.g., a research question, a primary analysis/interpretation, an emphasized topic with an entire section labeled discussing the topic). Included are peer-reviewed, published articles, government/organization reports, books and book chapters. The role of bullying in school violence is included in 12/52 publications related to school shootings (23%) and 12/87 publications related to threat assessment (14%).

There is consensus that bullying plays a prominent role in targeted school shootings (Leary et al., 2003; NTAC, 2019; Verlinden, Hersen & Thomas, 2000; Vossekuil et al., 2004; Wike & Fraser, 2009). Bullying can be distinguished from other forms of peer conflict and relationship problems, which were also prevalent. However, the NTAC study of 41 school shootings found that the majority of the attackers had experienced a persistent pattern of bullying by classmates that lasted for weeks, months, or years prior to the attack (NTAC, 2019). These observations have generated recommendations that schools have antibullying programs. There is also some evidence that schools using threat assessment experience a decrease in bullying (Cornell et al., 2009, Cornell et al., 2011; Nevkasil & Cornell, 2015).<sup>2</sup>

Page	Alphabetical List of Citations
4	Brock, M., Kriger, N., & Miro, R. (2018). <i>School Safety Policies and Programs Administered by the U.S. Federal Government 1990-2016</i> . National Institute of Justice, U.S. Department of Justice. <a href="https://www.ncjrs.gov/pdffiles1/nij/grants/251517.pdf">https://www.ncjrs.gov/pdffiles1/nij/grants/251517.pdf</a>
4	Bushman, B. J., Newman, K., Calvert, S. L., Downey, G., Dredze, M., Gottfredson, M., Jablonski, N. G., Masten, A. S., Morrill, C., Neill, D. B., Romer, D., & Webster, D. W. (2016). Youth violence: What we know and what we need to know. <i>American Psychologist</i> , 71(1), 17–39. <a href="https://doi.org/10.1037/a0039687">https://doi.org/10.1037/a0039687</a>
4	Cornell, D. G. (2006). <i>School violence: Fears versus facts</i> . Lawrence Erlbaum Associates Publishers.
5	Cornell, D. G., Gregory, A., & Fan, X. (2011). Reductions in long-term suspensions following adoption of the Virginia Student Threat Assessment Guidelines. <i>NASSP Bulletin</i> , 95(3), 175–194. <a href="https://doi.org/10.1177/0192636511415255">https://doi.org/10.1177/0192636511415255</a>
5	Cornell, D.G., Sheras, P., Gregory, A., & Fan, X. (2009). A retrospective study of school safety conditions in high schools using the Virginia threat assessment guidelines versus alternative approaches. <i>School Psychology Quarterly</i> , 24(2), 119–129. <a href="https://doi.org/10.1037/a0016182">https://doi.org/10.1037/a0016182</a>
6	Cornell, D. G., & Stohlman, S. (2020). Violence in Schools. In R. Geffner, V. Vieth, V. Vaughan-Eden, A. Rosenbaum, L. K. Hamberger, & J. White (Eds.), <i>Handbook of Interpersonal Violence Across the Lifespan</i> (pp. 1–21). Springer International Publishing. <a href="https://doi.org/10.1007/978-3-319-62122-7">https://doi.org/10.1007/978-3-319-62122-7</a> 40-1

6	Federal Commission on School Safety (2018). Final report of the Federal Commission on School Safety. Washington, DC: U.S. Department of Education, U.S. Department of Justice, U.S. Department of Health and Human Services, U.S. Department of Homeland Security. Retrieved from <a href="https://www2.ed.gov/documents/school-safety/school-safety-report.pdf">https://www2.ed.gov/documents/school-safety/school-safety-report.pdf</a>
6	JeeHae H. L. (2013). School shootings in the U.S. public schools: Analysis through the eyes of an educator. <i>Review of Higher Education &amp; Self-Learning</i> , 6(22), 88–119.
7	Kalish, R. & Kimmel, M. (2010). Suicide by mass murder: Masculinity, aggrieved entitlement, and rampage school shootings. <i>Health Sociology Review</i> , 19(4), 451-464. https://doi.org/10.5172/hesr.2010.19.4.451
8	Kelly, M. & McBride, A. (Eds). (2020). Safe passage: A guide for addressing school violence. APA Publishing. <a href="https://www.appi.org/Safe_Passage">https://www.appi.org/Safe_Passage</a>
8	Kiilakoski, T., & Oksanen, A. (2011). Cultural and peer influences on homicidal violence: A Finnish perspective. <i>New Directions for Youth Development, 129</i> . https://doi.org/10.1002/yd.385
8	Leary, M.R., Kowalski, R.M., Smith, L. and Phillips, S. (2003). Teasing, rejection, and violence: Case studies of the school shootings. <i>Aggressive Behavior</i> , 29, 202-214. https://doi.org/10.1002/ab.10061
9	Lindberg, N., Sailas, E., & Kaltiala-Heino, R. (2012). The copycat phenomenon after two Finnish school shootings: An adolescent psychiatric perspective. <i>BMC Psychiatry</i> , 12(1), 91–101. <a href="https://doi.org/10.1186/1471-244X-12-91">https://doi.org/10.1186/1471-244X-12-91</a>
9	Millspaugh, S. B., Cornell, D. G., Huang, F. L., & Datta, P. (2015). Prevalence of aggressive attitudes and willingness to report threats in middle school. <i>Journal of Threat Assessment and Management</i> , 2(1), 11–22. <a href="https://doi.org/10.1037/tam0000031">https://doi.org/10.1037/tam0000031</a>
10	Musu, L., Zhang, A., Wang, K., Zhang, J., & Oudekerk, B.A. (2019). <i>Indicators of School Crime and Safety: 2018</i> (NCES 2019-047/NCJ 252571). National Center for Education Statistics, U.S. Department of Education, and Bureau of Justice Statistics, Office of Justice Programs, U.S. Department of Justice. Washington, DC. <a href="https://nces.ed.gov/pubs2019/2019047.pdf">https://nces.ed.gov/pubs2019/2019047.pdf</a>
10	National Research Council. (2003). <i>Deadly Lessons: Understanding lethal school violence</i> . Washington, DC: The National Academies Press. <a href="https://doi.org/10.17226/10370">https://doi.org/10.17226/10370</a>
11	National School Safety Center. (2010). The National School Safety Center's Report on School Associated Violent Deaths. <a href="http://www.schoolsafety.us">http://www.schoolsafety.us</a>
11	National Threat Assessment Center. (2019). <i>Protecting America's Schools: A U.S. Secret Service Analysis of Targeted School Violence</i> . U.S. Secret Service, Department of Homeland Security. <a href="https://www.secretservice.gov/data/protection/ntac/usss-analysis-of-targeted-school-violence.pdf">https://www.secretservice.gov/data/protection/ntac/usss-analysis-of-targeted-school-violence.pdf</a>

12	Nekvasil, E. K., & Cornell, D. G. (2015). Student threat assessment associated with safety in middle schools. <i>Journal of Threat Assessment and Management</i> , 2(2), 98–113. https://doi.org/10.1037/tam0000038
12	Twemlow, S. W., Fonagy, P., Sacco, F. C., O'Toole, M. E., & Vernberg, E. (2002). Premeditated mass shootings in schools: Threat assessment. <i>Journal of the American Academy of Child &amp; Adolescent Psychiatry</i> , 41(4), 475–477. <a href="https://doi.org/10.1097/00004583-200204000-00021">https://doi.org/10.1097/00004583-200204000-00021</a>
13	Van Dreal, J. (Ed.) (2016). Assessing student threats: Implementing the Salem-Keizer system, 2 <sup>nd</sup> Edition. Rowman and Littlefield Publishers.
13	Vossekuil, B., Fein, R., Reddy, M., Borum, R., & Modzeleski, W. (2004). <i>The final report and findings of the Safe School Initiative: Implications for the prevention of school attacks in the United States</i> . Washington, DC: U.S. Secret Service and U.S. Department of Education. <a href="https://www2.ed.gov/admins/lead/safety/preventingattacksreport.pdf">https://www2.ed.gov/admins/lead/safety/preventingattacksreport.pdf</a>
13	Wang, K., Chen, Y., Zhang, J., and Oudekerk, B.A. (2020). <i>Indicators of School Crime and Safety:</i> 2019 (NCES 2020-063/NCJ 254485). National Center for Education Statistics, U.S. Department of Education, and Bureau of Justice Statistics, Office of Justice Programs, U.S. Department of Justice. Washington, DC. <a href="https://nces.ed.gov/pubs2020/2020063.pdf">https://nces.ed.gov/pubs2020/2020063.pdf</a>
14	Wike, T. L. & Fraser, M. W. (2009). School shooting: Making sense of the senseless. <i>Aggression and Violent Behavior</i> , 14, 162-169. <a href="https://doi.org/10.1016/j.avb.2009.01.005">https://doi.org/10.1016/j.avb.2009.01.005</a>

<sup>&</sup>lt;sup>1</sup> This project was supported by Cooperative Agreement No. 2019-YSBX-K001 awarded by the Bureau of Justice Assistance. The Bureau of Justice Assistance is a component of the U.S. Department of Justice's Office of Justice Programs, which also includes the Bureau of Justice Statistics, the National Institute of Justice, the Office of Juvenile Justice and Delinquency Prevention, the Office for Victims of Crime, and the Office of Sex Offender Sentencing, Monitoring, Apprehending, Registering, and Tracking. Points of view or opinions in this document are those of the author and do not necessarily represent the official position or policies of the U.S. Department of Justice. Dewey Cornell discloses that he is the principal developer of the Comprehensive School Threat Assessment Guidelines.

<sup>2</sup> This research was conducted by researchers at the University of Virginia, the authors of this document.

## References

Brock, M., Kriger, N., & Miro, R. (2018). *School Safety Policies and Programs Administered by the U.S. Federal Government 1990-2016*. National Institute of Justice, U.S. Department of Justice. <a href="https://www.ncjrs.gov/pdffiles1/nij/grants/251517.pdf">https://www.ncjrs.gov/pdffiles1/nij/grants/251517.pdf</a>

The following chapters discuss in greater detail the federal school safety programs, policies, research, and technical assistance resources for K–12 public schools—including public charter schools—administered by ED, the DOJ, and HHS since the early 1990s. Major interagency collaborations on school safety are described separately. For each program, the legislative background and the intent of the program's congressional and executive branch architects are discussed. A brief implementation history of the program, including official statistics on the appropriations and grant awards since its inception, is also provided.

Bushman, B. J., Newman, K., Calvert, S. L., Downey, G., Dredze, M., Gottfredson, M., Jablonski, N. G., Masten, A. S., Morrill, C., Neill, D. B., Romer, D., & Webster, D. W. (2016). Youth violence: What we know and what we need to know. *American Psychologist*, 71(1), 17–39. <a href="https://doi.org/10.1037/a0039687">https://doi.org/10.1037/a0039687</a>

School shootings tear the fabric of society. In the wake of a school shooting, parents, pediatricians, policymakers, politicians, and the public search for "the" cause of the shooting. But there is no single cause. The causes of school shootings are extremely complex. After the Sandy Hook Elementary School rampage shooting in Newtown, Connecticut, we wrote a report for the National Science Foundation on what is known and not known about youth violence. This article summarizes and updates that report. After distinguishing violent behavior from aggressive behavior, we describe the prevalence of gun violence in the United States and age-related risks for violence. We delineate important differences between violence in the context of rare rampage school shootings, and much more common urban street violence. Acts of violence are influenced by multiple factors, often acting together. We summarize evidence on some major risk factors and protective factors for youth violence, highlighting individual and contextual factors, which often interact. We consider new quantitative "data mining" procedures that can be used to predict youth violence perpetrated by groups and individuals, recognizing critical issues of privacy and ethical concerns that arise in the prediction of violence. We also discuss implications of the current evidence for reducing youth violence, and we offer suggestions for future research. We conclude by arguing that the prevention of youth violence should be a national priority.

Cornell, D. G. (2006). *School violence: Fears versus facts*. Lawrence Erlbaum Associates Publishers.

Illustrated with numerous case studies--many drawn from the author's work as a forensic psychologist--this book identifies 19 myths and misconceptions about youth violence, from ordinary bullying to rampage shootings. Using a contrarian approach, the author demonstrates how fear of school violence has resulted in misguided, counterproductive educational policies and

practices ranging from boot camps to zero tolerance. He reviews evidence from hundreds of controlled studies showing that well-tested, school-based violence prevention programs and mental health services are often overlooked in favor of politically popular yet ineffective programs such as school uniforms, Drug Abuse Resistance Education, and Scared Straight. He concludes by reviewing research on student threat assessment as a more flexible and less punitive alternative to zero tolerance, and presents recommendations for improving and expanding the use of school-based violence prevention programs and mental health services for troubled students. The book's mission is to translate scientific research into language that educators, students, parents, law enforcement officers, and policy makers can readily understand and to show what can be done to improve things. It is appropriate for courses or seminars dealing wholly or partly with school violence and school safety. It is also indispensable reading for school administrators and safety officers, policy makers at all levels, and for parents concerned about school violence and safety.

Cornell, D. G., Gregory, A., & Fan, X. (2011). Reductions in long-term suspensions following adoption of the Virginia Student Threat Assessment Guidelines. *NASSP Bulletin*, 95(3), 175–194. https://doi.org/10.1177/0192636511415255

This quasi-experimental study examined the adoption of the Virginia Student Threat Assessment Guidelines in 23 high schools. After training, school administrators and other staff members demonstrated substantial increases in knowledge of threat assessment principles and decreased commitment to zero tolerance approaches. Schools using the guidelines showed a 52% reduction in long-term suspensions and a 79% reduction in bullying infractions from the pretraining year to the posttraining year, in contrast to a control group of 26 schools not using the guidelines.

Cornell, D.G., Sheras, P., Gregory, A., & Fan, X. (2009). A retrospective study of school safety conditions in high schools using the Virginia threat assessment guidelines versus alternative approaches. *School Psychology Quarterly*, 24(2), 119–129. https://doi.org/10.1037/a0016182

Threat assessment has been widely recommended as a violence prevention approach for schools, but there are few empirical studies of its use. This nonexperimental study of 280 Virginia public high schools compared 95 high schools using the Virginia threat assessment guidelines (Cornell & Sheras, 2006), 131 following other (i.e., locally developed) threat assessment procedures, and 54 not using a threat assessment approach. A survey of 9th grade students in each school obtained measures of student victimization, willingness to seek help for bullying and threats of violence, and perceptions of the school climate as caring and supportive. Students in schools using the Virginia threat assessment guidelines reported less bullying, greater willingness to seek help, and more positive perceptions of the school climate than students in either of the other 2 groups of schools. In addition, schools using the Virginia guidelines had fewer long-term suspensions than schools using other threat assessment approaches. These group differences could not be attributed to school size, minority composition or socioeconomic status of the student body, neighborhood violent crime, or the extent of security measures in the schools. Implications for threat assessment practice and research are discussed.

Cornell, D. G., & Stohlman, S. (2020). Violence in Schools. In R. Geffner, V. Vieth, V. Vaughan-Eden, A. Rosenbaum, L. K. Hamberger, & J. White (Eds.), *Handbook of Interpersonal Violence Across the Lifespan* (pp. 1–21). Springer International Publishing. <a href="https://doi.org/10.1007/978-3-319-62122-7\_40-1">https://doi.org/10.1007/978-3-319-62122-7\_40-1</a>

This chapter examines the nature and scope of violence in schools ranging from school shootings to bullying and harassment. Although school shootings have understandably aroused great public concern, an examination of school safety statistics from multiple sources shows that students are much safer from serious violent crime in schools than in other locations. The fear of school shootings has led many schools to adopt policies and practices such as excessive security measures and widespread use of zero tolerance discipline that have deleterious effects. However, students are subjected to high levels of peer aggression at school in the form of bullying and harassment that can have negative effects on their mental health and well-being. The chapter reviews major strategies to prevent violence and aggression in schools, noting the lack of supporting evidence for reactive approaches such as security measures and the substantial body of evidence supporting proactive approaches such as anti-bullying and social-emotional learning programs and the use of school threat assessment. The chapter concludes with policy recommendations for preventing school violence drawn from a widely endorsed eight-point plan to prevent gun violence in schools and communities. These recommendations emphasize implementing proactive, rather than reactive, intervention strategies to prevent violence and aggression in schools.

Federal Commission on School Safety (2018). Final report of the Federal Commission on School Safety. Washington, DC: U.S. Department of Education, U.S. Department of Justice, U.S. Department of Health and Human Services, U.S. Department of Homeland Security. Retrieved from <a href="https://www2.ed.gov/documents/school-safety/school-safety-report.pdf">https://www2.ed.gov/documents/school-safety/school-safety-report.pdf</a>

The efforts of the Federal Commission on School Safety have been guided by the need to promote state and local solutions to school violence. To that end, the Commission conducted field visits, listening sessions, and meetings with hundreds of Americans all across the country. The input of these individuals—state and local policymakers, administrators, principals and teachers, law enforcement and healthcare professionals, students and their families—was critical in identifying best practices and the recommendations contained in this Report. As set forth in the pages that follow, the work of the Commission falls into three broad categories: a) Prevent—preventing school violence; b) Protect and Mitigate—protecting students and teachers and mitigating the effects of violence; and c) Respond and Recover—responding to and recovering from attacks.

JeeHae H. L. (2013). School shootings in the U.S. public schools: Analysis through the eyes of an educator. *Review of Higher Education & Self-Learning*, 6(22), 88–119.

School shooting is a topic of intense interest in the United States. Since the year 2010, there have been approximately 54 school shooting incidents in the United States. Naturally parents, educators, and students are concerned about their school's safety, especially the safety against the school shooting. Interestingly, however, there has not been enough research conducted in the area of school shootings. Although there are a lot of news articles about them, there is a lack of scholarly work that attempts to analyze the school shootings in the United States, especially in the perspective of an

educator. Therefore, the purpose of this research study is to find trends and patterns of school shootings in the United States from an educator's perspective. In order to do so, the researcher examines the school shootings that occurred from the 1760s to 2013 and analyzes the total of 593 school shootings in the eyes of an educator. The frequency of school shootings has gradually increased since the 1760s and drastically increased after the 1980s. The researcher poses a research question, "What are the trends and patterns of the U.S. school shootings?" By answering this question, the researcher attempts to discuss what the trends and patterns mean in the field of education. The significance of this study is that the findings and discussions of this research will, first, increase the awareness of the danger of school shootings among teachers, parents, students, school administrators and teacher educators; second, will answer some questions that the aforementioned individuals may have regarding school shootings; and third, will help them understand the roles they can play in order to keep the schools safe from school shootings. This study is a literature-based research and uses an inductive analysis. In the beginning of the study, the researcher examines the total 593 school shootings in the United States. From this examination, the researcher attempts to look for trends and patterns of the U.S. school shootings, such as characteristics of perpetrators (e.g., characterization, identification, age, gender, and interest in violence), conceptualization of the attack, cause (e.g., bullying and psychiatric drugs), history of the U.S. school shootings, weapons (e.g., access to weapon and most commonly used weapon), characteristics of target and victim, time of school shooting, duration of the attack, and resolving the attack. Identifying various trends and patterns serves as basis for the inductive analysis. After identifying trends and patterns of U.S. school shootings, the researcher makes a general statement about the U.S. school shootings summarizing the overall trends and patterns of the U.S. school shootings. Based on this inductive analysis of data collected from various literatures, the researcher, then, carefully discusses what the findings mean to educators in the U.S. public school systems under the discussions and the implications of these findings. The researcher would like to emphasize that this analysis of the U.S. school shootings is conducted in an educator's perspective. Thus the discussions and implications target Grades K-12 teachers, parents, students, school administrators, teacher educators, and other supportive faculty and staff in the educational field. The researcher explores possibilities of what parents, students and educators can do to change the pattern of the U.S. school shootings and what roles they can play in order to keep the U.S. public schools safer for teaching and learning. Furthermore, the researcher discusses about the need of teachers' self-defense training as a new addition to the professional development for teachers. She also discusses the possibility of partnership between the school and the church in order to be more responsive and attentive to the emotional needs of students. In addition, developing threat assessment, gun control issues, parental control of movies with gun violence are discussed as well.

Kalish, R. & Kimmel, M. (2010). Suicide by mass murder: Masculinity, aggrieved entitlement, and rampage school shootings. *Health Sociology Review*, *19*(4), 451-464. https://doi.org/10.5172/hesr.2010.19.4.451

School shootings have become more common in the United States in recent years. Yet, as media portrayals of these 'rampages' shock the public, the characterisation of this violence obscures an important point: many of these crimes culminate in suicide, and they are almost universally committed by males. We examine three recent American cases, which involve suicide, to elucidate how the culture of hegemonic masculinity in the US creates a sense of aggrieved entitlement conducive to violence. This sense of entitlement simultaneously frames suicide as an appropriate, instrumental behaviour for these males to underscore their violent enactment of masculinity.

Kelly, M. & McBride, A. (Eds). (2020). *Safe passage: A guide for addressing school violence*. APA Publishing. <a href="https://www.appi.org/Safe\_Passage">https://www.appi.org/Safe\_Passage</a>

Safe Passage: A Guide to Addressing School Violence offers expert perspectives and guidance in understanding, assessing, and addressing school violence. Although the book is designed for child and adolescent forensic psychiatrists and psychologists seeking proficiency in youth violence risk assessment, educators, school administrators, mental health clinicians, other health care professionals who work with children, and interested laypersons will also find the book both practical and illuminating. The editors' approach to school violence is informed by their educational, scholarly, clinical, and forensic work with children and adults who have been disenfranchised through the cumulative effects of poverty, trauma, untreated mental illness, and inadequate access to education. This background has fostered a sensitivity to and understanding of critically important developmental factors that can be passed on generationally, which are explored in depth in the volume. Case vignettes and follow-ups are used liberally to illustrate and illuminate the range of violent situations (e.g., bullying, cyberbullying, gang violence, sexual violence) likely to be encountered, as well as the advantages and disadvantages inherent in various interventions. The authors stress that threat assessment must take individual, school, and community variables into account, a complex but necessary task for mental health professionals and educators who wish to safeguard individuals and society from harm.

Kiilakoski, T., & Oksanen, A. (2011). Cultural and peer influences on homicidal violence: A Finnish perspective. *New Directions for Youth Development, 129*. <a href="https://doi.org/10.1002/yd.385">https://doi.org/10.1002/yd.385</a>

In this article, we consider the cultural and peer influences on homicidal violence by closely examining the Jokela and Kauhajoki school shootings. We also make some references to the earlier Raumanmeri case. Pre-investigation reports by the Finnish police and the reports by the government commissions created to investigate the shootings provided background material. The police reports include descriptions of the events, previous behavior by the offender that can be linked to the shootings, and transcribed inter- views of the eyewitnesses and other people involved.

Leary, M.R., Kowalski, R.M., Smith, L. and Phillips, S. (2003). Teasing, rejection, and violence: Case studies of the school shootings. *Aggressive Behavior*, 29, 202-214. https://doi.org/10.1002/ab.10061

Media commentators have suggested that recent school shootings were precipitated by social rejection, but no empirical research has examined this claim. Case studies were conducted of 15 school shootings between 1995 and 2001 to examine the possible role of social rejection in school violence. Acute or chronic rejection—in the form of ostracism, bullying, and/or romantic rejection—was present in all but two of the incidents. In addition, the shooters tended to be characterized by one or more of three other risk factors—an interest in firearms or bombs, a fascination with death or Satanism, or psychological problems involving depression, impulse control, or sadistic tendencies. Implications for understanding and preventing school violence are discussed.

Lindberg, N., Sailas, E., & Kaltiala-Heino, R. (2012). The copycat phenomenon after two Finnish school shootings: An adolescent psychiatric perspective. *BMC Psychiatry*, *12*(1), 91–101. https://doi.org/10.1186/1471-244X-12-91

**Background:** Two school shootings with altogether 18 victims took place in Finland in November 2007 and September 2008. Homicides and suicides are both associated with the copycat phenomenon. The aim of the present study was to characterize adolescent copycats who had threatened to carry out a school massacre.

**Methods:** The nation-wide study evaluated 77 13- to 18-year-old adolescents who were sent for adolescent psychiatric evaluations between 8.11.2007 and 30.6.2009, one of the reasons for evaluation being a threat of massacre at school. The medical files of the copycats were retrospectively analysed using a special data collection form. Data on demographics, family- and school-related issues, previous psychiatric treatment and previous delinquency, current symptoms, family adversities and psychiatric diagnoses were collected. The severity of the threat expressed and the risk posed by the adolescent in question were evaluated. The Psychopathy Checklist Youth Version was used to assess psychopathic traits.

**Results:** All of the copycats were native Finns with a mean age of 15.0 years. Almost two thirds of them had a history of previous mental health treatment before the index threat. Almost two thirds of the copycats suffered from anxiety and depressive symptoms, and almost half of the sample expressed either suicidal ideation or suicidal plans. Behavioural problems including impulse control problems, aggressive outbursts, the destruction of property as well as non-physical and physical violence against other persons were common. The diagnosis groups highlighted were behavioural and emotional disorders, mood disorders as well as schizophrenia-related disorders. The prevalence of pervasive developmental disorders was high. Only one of the copycats was assessed as expressing high traits of psychopathy.

**Conclusion:** The copycats with school massacre threats were characterized with a high prevalence of mental and behavioural disorders. Like actual school shooters, they showed psychotic symptoms and traumatic experiences, but unlike the shooters, the copycats were not psychopathic.

Millspaugh, S. B., Cornell, D. G., Huang, F. L., & Datta, P. (2015). Prevalence of aggressive attitudes and willingness to report threats in middle school. *Journal of Threat Assessment and Management*, 2(1), 11–22. <a href="https://doi.org/10.1037/tam0000031">https://doi.org/10.1037/tam0000031</a>

Violence prevention strategies such as threat assessment rely on information from students; however, students are often unwilling to report threats of violence to school authorities. The current study investigated the hypothesis that middle school students are less likely to report threats of violence when they perceive aggressive behavior as a source of status and popularity among their peers. Our statewide sample consisted of 39,364 7th and 8th graders who completed school climate surveys in 423 schools. Students completed a measure of aggressive attitudes and were asked how much they agreed or disagreed with 2 statements concerning threats of violence: (a) "If another student brought a gun to school, I would tell one of the teachers or staff at school," and (b) "If another student talked about killing someone, I would tell one of the teachers or staff at school." Multilevel logistic regression analyses, which controlled for student and school demographics, found that higher levels of aggressive attitudes at both the school and student level were associated with a lower likelihood of reporting threat behavior.

Musu, L., Zhang, A., Wang, K., Zhang, J., & Oudekerk, B.A. (2019). *Indicators of School Crime and Safety: 2018* (NCES 2019-047/NCJ 252571). National Center for Education Statistics, U.S. Department of Education, and Bureau of Justice Statistics, Office of Justice Programs, U.S. Department of Justice. Washington, DC. <a href="https://nces.ed.gov/pubs2019/2019047.pdf">https://nces.ed.gov/pubs2019/2019047.pdf</a>

This report is the 21st in a series of annual publications produced jointly by the National Center for Education Statistics (NCES), Institute of Education Sciences (IES), in the U.S. Department of Education, and the Bureau of Justice Statistics (BJS) in the U.S. Department of Justice. This report presents the most recent data available on school crime and student safety. The indicators in this report are based on information drawn from a variety of data sources, including national surveys of students, teachers, principals, and postsecondary institutions. Sources include results from the School-Associated Violent Death Surveillance System, sponsored by the U.S. Department of Education, the U.S. Department of Justice, and the Centers for Disease Control and Prevention (CDC); the National Vital Statistics System, sponsored by CDC; the National Crime Victimization Survey and School Crime Supplement to that survey, sponsored by BJS and NCES, respectively; the Youth Risk Behavior Survey, sponsored by CDC; the Schools and Staffing Survey, National Teacher and Principal Survey, School Survey on Crime and Safety, Fast Response Survey System, and EDFacts, all sponsored by NCES; the Studies of Active Shooter Incidents, sponsored by the Federal Bureau of Investigation; the Campus Safety and Security Survey, sponsored by the U.S. Department of Education; and the Monitoring the Future Survey, sponsored by the National Institute on Drug Abuse of the U.S. Department of Health and Human Services.

This report covers topics such as victimization, teacher injury, bullying and electronic bullying, school conditions, fights, weapons, availability and student use of drugs and alcohol, student perceptions of personal safety at school, and criminal incidents at postsecondary institutions. Indicators of crime and safety are compared across different population subgroups and over time. Data on crimes that occur away from school are offered as a point of comparison where available.

National Research Council. (2003). *Deadly Lessons: Understanding lethal school violence*. Washington, DC: The National Academies Press. <a href="https://doi.org/10.17226/10370">https://doi.org/10.17226/10370</a>

The shooting at Columbine High School riveted national attention on violence in the nation's schools. This dramatic example signaled an implicit and growing fear that these events would continue to occur—and even escalate in scale and severity. How do we make sense of the tragedy of a school shooting or even draw objective conclusions from these incidents? Deadly Lessons is the outcome of the National Research Council's unique effort to glean lessons from six case studies of lethal student violence. These are powerful stories of parents and teachers and troubled youths, presenting the tragic complexity of the young shooter's social and personal circumstances in rich detail. The cases point to possible causes of violence and suggest where interventions may be most effective. Readers will come away with a better understanding of the potential threat, how violence might be prevented, and how healing might be promoted in affected communities.

National School Safety Center. (2010). The National School Safety Center's Report on School Associated Violent Deaths. <a href="http://www.schoolsafety.us">http://www.schoolsafety.us</a>

A school-associated violent death is any homicide, suicide, or weapons-related violent death in the United States in which the fatal injury occurred: (1) on the property of a functioning public, private or parochial elementary or secondary school, Kindergarten through grade 12, (including alternative schools); (2) on the way to or from regular sessions at such a school; (3) while person was attending or was on the way to or from an official school-sponsored event; and (4) as an obvious direct result of school incident/s, function/s or activities, whether on or off school bus/vehicle or school property. Newspaper accounts, on which the National School Safety Center (NSSC) bases this report, frequently do not list names and ages of those who are charged with the deaths of others. Such omissions were in some cases because the person charged was a minor. In some instances, persons were killed in drive-by shootings, gang encounters or during melees in which the killer was not identified, and the killers were either never apprehended or were caught days or months after the crime was first reported. As a result, more is known about victims than about perpetrators and therefore information in this report relates more to victims than to perpetrators. This report covers all reported school associated violent deaths that the National School Safety Center knows of from the 1992-1993 School year to present. For purposes of this study, the new school year begins on August 1st.

National Threat Assessment Center. (2019). *Protecting America's Schools: A U.S. Secret Service Analysis of Targeted School Violence*. U.S. Secret Service, Department of Homeland Security. <a href="https://www.secretservice.gov/data/protection/ntac/usss-analysis-of-targeted-school-violence.pdf">https://www.secretservice.gov/data/protection/ntac/usss-analysis-of-targeted-school-violence.pdf</a>

Ensuring the safety of children at school is a responsibility that belongs to everyone, including law enforcement, school staff, mental health practitioners, government officials, and members of the general public. To aid in these efforts, the U.S. Secret Service National Threat Assessment Center (NTAC) studied 41 incidents of targeted school violence that occurred at K-12 schools in the United States from 2008 to 2017. This report builds on 20 years of NTAC research and guidance in the field of threat assessment by offering an in-depth analysis of the motives, behaviors, and situational factors of the attackers, as well as the tactics, resolutions, and other operationally-relevant details of the attacks. The analysis suggests that many of these tragedies could have been prevented, and supports the importance of schools establishing comprehensive targeted violence prevention programs as recommended by the Secret Service in Enhancing School Safety Using a Threat Assessment Model: An Operational Guide for Preventing Targeted School Violence.1 This approach is intended to identify students of concern, assess their risk for engaging in violence or other harmful activities, and implement intervention strategies to manage that risk. The threshold for intervention should be low, so that schools can identify students in distress before their behavior escalates to the level of eliciting concerns about safety.

Nekvasil, E. K., & Cornell, D. G. (2015). Student threat assessment associated with safety in middle schools. *Journal of Threat Assessment and Management*, 2(2), 98–113. https://doi.org/10.1037/tam0000038

Authorities in law enforcement and education have recommended the use of threat assessment to prevent violence, but few studies have examined its usefulness in middle schools. This retrospective, quasi-experimental study compared middle schools that use the Virginia Student Threat Assessment Guidelines (Cornell & Sheras, 2006; N = 166) with schools that either do not use threat assessment (N = 119) or use an alternative model of threat assessment (school- or districtdeveloped; N = 47). Based on school records, schools using the Virginia Guidelines reported lower short-term suspension rates than both groups of schools. According to a statewide school climate survey, schools using the Virginia Guidelines also had fairer discipline and lower levels of student aggressive behaviors, as reported by students. Finally, teachers reported feeling safer in schools using the Virginia Guidelines, as opposed to both groups of schools. Additional analyses of school records found that the number of years a school used the Virginia Guidelines was associated with lower long-term suspension rates, student reports of fairer discipline, and lower levels of student aggressive behaviors. All analyses controlled for school size, minority composition, and socioeconomic status of the student body. These findings suggest that use of a threat assessment approach to violence prevention is associated with lower levels of student aggression and a more positive school climate.

Twemlow, S. W., Fonagy, P., Sacco, F. C., O'Toole, M. E., & Vernberg, E. (2002). Premeditated mass shootings in schools: Threat assessment. *Journal of the American Academy of Child & Adolescent Psychiatry*, 41(4), 475–477. <a href="https://doi.org/10.1097/00004583-200204000-00021">https://doi.org/10.1097/00004583-200204000-00021</a>

Premeditated mass shootings by students in suburban and rural secondary schools have surprised and even terrified our country. Although school violence overall has decreased measurably since 1993 (U.S. Departments of Education and Justice, 1999), multiple-victim homicides and woundings highlight an emerging problem for schools previously thought to be safe from acts of extreme violence. In the past 5 years, premeditated mass shootings in schools all occurred in rural or suburban communities. The assailant was not the stereotypical angry, poor, minority teen abusing drugs and failing academically. The schools were not overtly violent with gangs in control; Columbine High School prided itself in 82% college placement and 95% daily attendance rates. Psychiatrists are often asked to help after there has been a tragedy, when school shootings create a pressing need for trauma interventions and long-term follow-up. However, child and adolescent psychiatrists can be helpful in preventing such tragedies as well, by dealing realistically with the inexactness of all available techniques for assessing children who threaten homicide in schools, and by careful psychiatric assessment of individual children, family dynamics, the school climate, and factors in the social milieu that have an impact on the child's development. Part of this work might include helping schools develop school threat assessment procedures and select suitable antiviolence programs (Twemlow et al., 2001).

Van Dreal, J. (Ed.) (2016). Assessing student threats: Implementing the Salem-Keizer system, 2<sup>nd</sup> Edition. Rowman and Littlefield Publishers.

Assessing Student Threats: Implementing the Salem-Keizer System, 2<sup>nd</sup> Edition is a manual for the application of a threat assessment system that follows the recommendations of the Safe Schools Initiative and the prescriptive outline provided by the FBI. Written from an educator's perspective with contributing authors from Law Enforcement, Public Mental Health, and the District Attorney's office, it contains an introduction to the basic concepts of threat assessment, a review of the research, and an outlined process for the application of a comprehensive, yet expeditious multi-disciplinary system. The book also includes the forms and protocols needed to assess threats, document concerns and interventions, and track the progress of supervision. As extra features, chapters on site security, community safety, domestic violence and teen dating violence, communicating with potential victims, training school resource officers, adult threat assessment, and an adaptation of the system for higher education are included.

Vossekuil, B., Fein, R., Reddy, M., Borum, R., & Modzeleski, W. (2004). *The final report and findings of the Safe School Initiative: Implications for the prevention of school attacks in the United States*. Washington, DC: U.S. Secret Service and U.S. Department of Education. <a href="https://www2.ed.gov/admins/lead/safety/preventingattacksreport.pdf">https://www2.ed.gov/admins/lead/safety/preventingattacksreport.pdf</a>

Littleton, CO; Springfield, OR; West Paducah, KY; Jonesboro, AR. These communities have become familiar to many Americans as among the locations of those schools where shootings have occurred nationwide in recent years. In the aftermath of these tragic events, educators, law enforcement officials, mental health professionals and parents have pressed for answers to two central questions: "Could we have known that these attacks were being planned?" and, if so, "What could we have done to prevent these attacks from occurring?"

Wang, K., Chen, Y., Zhang, J., and Oudekerk, B.A. (2020). *Indicators of School Crime and Safety:* 2019 (NCES 2020-063/NCJ 254485). National Center for Education Statistics, U.S. Department of Education, and Bureau of Justice Statistics, Office of Justice Programs, U.S. Department of Justice. Washington, DC. https://nces.ed.gov/pubs2020/2020063.pdf

This report is the 22nd in a series of annual publications produced jointly by the National Center for Education Statistics (NCES), Institute of Education Sciences (IES), in the U.S. Department of Education, and the Bureau of Justice Statistics (BJS) in the U.S. Department of Justice. This report is released primarily as a web-based report, and contents of the report can be viewed at https://nces.ed.gov/ programs/crimeindicators/index.asp. This report presents the most recent data available on school crime and student safety. The indicators in this report are based on information drawn from a variety of data sources, including national and international surveys of students, teachers, principals, and postsecondary institutions. Sources include results from the SchoolAssociated Violent Death Surveillance System, sponsored by the U.S. Department of Education, the U.S. Department of Justice, and the Centers for Disease Control and Prevention (CDC); the National Vital Statistics System, sponsored by CDC; the K-12 School Shooting Database, sponsored by the U.S. Department of Defense; the National Crime Victimization Survey and School Crime Supplement to that survey, sponsored by BJS and NCES, respectively; the Youth Risk Behavior Survey, sponsored by CDC; the School Survey on Crime and Safety, Fast Response

Survey System, EDFacts, and Early Childhood Longitudinal Study, Kindergarten Class of 2010–11, all sponsored by NCES; the Teaching and Learning International Survey, sponsored by the Organization for Economic Cooperation and Development; and the Campus Safety and Security Survey, sponsored by the U.S. Department of Education. The most recent data collection for each indicator varied by survey, from 2016 to 2019. Each data source has an independent sample design, data collection method, and questionnaire design, or is the result of a universe data collection. Findings described in this report with comparative language (e.g., higher, lower, increase, and decrease) are statistically significant at the .05 level. This report covers topics such as victimization, bullying and electronic bullying, school conditions, fights, weapons, availability and student use of drugs and alcohol, student perceptions of personal safety at school, and criminal incidents at postsecondary institutions. Indicators of crime and safety are compared across different population subgroups and over time. Data on crimes that occur away from school are offered as a point of comparison where available.

Wike, T. L. & Fraser, M. W. (2009). School shooting: Making sense of the senseless. *Aggression and Violent Behavior*, 14, 162-169. <a href="https://doi.org/10.1016/j.avb.2009.01.005">https://doi.org/10.1016/j.avb.2009.01.005</a>

School shootings have altered the patina of seclusion and safety that once characterized public and higher education. Callous and brutal, school shootings seem to make no sense. However, case comparisons and anecdotal reports are beginning to show patterns that provide clues for understanding both the individual factors motivating shooting events and the characteristics of schools where shootings have occurred. We describe these factors and characteristics as the bases for six prevention strategies: (a) strengthening school attachment, (b) reducing social aggression, (c) breaking down codes of silence, (d) establishing screening and intervention protocols for troubled and rejected students, (e) bolstering human and physical security, and (f) increasing communication within educational facilities and between educational facilities and local resources.