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School crime costs victims more than \$600 million every year in the United States—more than \$13 billion over the past 20 years.

Can we afford not investing in school safety?

Why Calculate the Cost of Crime?

Prioritize
Prevention Efforts

Inform
Economic Evaluations of
Programs and Promote
Evidence-Based
Programs

Bring Critical Levels of Awareness

Background

Violence and other forms of crime continue to pose serious problems in U.S. schools in the 21st century. Although rates of nonfatal victimization in schools declined among students from years 2000 to 2016, 79% of public schools recorded one or more incidents of violence, theft, or other crime in the 2015–2016 school year.^{1–2}

School crime affects the quality and openness of the school environment, the hiring and retention of school staff, student attendance, learning and achievement, and perceptions of safety.^{3–7} It can also result in schools adopting crime prevention programs and strategies that often have unproven effectiveness but carry high financial and social costs for schools and their communities.⁸ In 2017, the revenue generated by companies that provide security equipment and services for schools was nearly \$3 billion.⁹

At the individual level, various forms of school victimization can have lifelong and pervasive effects, as they are associated with higher risks for depression, anxiety, suicidal ideation, poor academic performance, substance use, and sexual risk-taking for victims. $^{10-17}$

Victims of crimes ranging from school shootings to bullying experience pain and suffering from physical injuries, socio-emotional trauma, loss of time from school and work, and monetary losses due to property loss and damage, medical care, and legal remedies. 18–20

Given the volume of school crime and the devotion of resources toward prevention and safety, it is critical that we understand the financial costs of school crime for victims. These monetized estimates of impact can be used by school leaders and decision-makers to bring awareness of the magnitude of the problem and prioritize prevention efforts accordingly.

This report presents the direct annual costs of school crime for student and staff victims. It uses the best available data to examine victims' medical treatment, counseling, work loss, and property loss or damage costs due to fatal and nonfatal violence and theft occurring at schools. Data sources include a major national survey on crime victimization, a survey of crime and safety in schools, and records on violent deaths in schools. Discussion of the limitations of the data and need for further research to enable a more comprehensive examination of cost is included (see Methodology for more information).



Findings

- 4.3 million offenses (72%) committed against students or staff in schools each year are violent crimes, including fatal and nonfatal physical and sexual assaults. Another 1.7 million (28%) involve theft of personal property.
 Medical care and counseling expenses, property losses and damages, and missed time from work result in a total cost of \$616 million each year for these victims.
- Each year, \$134 million is spent on medical care and about \$22 million is spent on mental health care (i.e., counseling) as a result of crime in schools.
- Having property stolen or damaged during criminal incidents at school costs \$435 million annually.
- Victims of school crime also lose \$26 million each year due to missed work.

Costs experienced by students versus staff

- For students alone, the direct costs of school crime are nearly \$400 million each year.
- Student injuries result in \$94 million of the annual health care costs, while injuries to staff result in \$40 million.
- Student victims lose \$155 million each year from property stolen or damaged during school crime, while staff victims lose \$154 million.
- About 95% of the cost of missed work, \$25 million annually, is suffered by school staff victims.







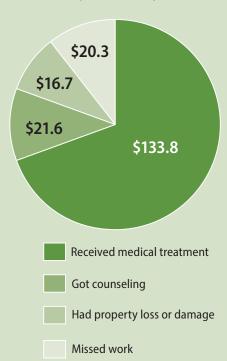
\$600 million.

Over \$155 million each year is spent on medical and mental health care due to crime in schools.



Lifetime medical, counseling, and work loss costs for student and staff victims total nearly \$3.5 billion.

Annual Costs of School-Based Nonfatal Violent Offenses Against Students and Staff (in Millions)





27,000 serious assaults at school cost students and staff nearly \$60 million annually.

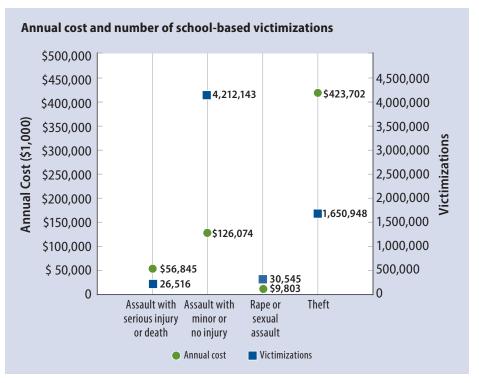


4.2 million assaults with minor or no injury cost student and staff victims nearly \$130 million each year.

- Of the 5.5 million school crimes involving students each year, the majority (73%) are assaults or bullying with minor or no injuries. Less than 1% are rape or sexual assault, assaults with serious injury, or acts leading to death or intended to cause death. Overall, these violent incidents cost students \$127 million each year.
- Of about 400,000 offenses involving school staff each year, almost half (45%) are assaults with minor or no injuries, and about 1.4% are rape or sexual assaults, assaults with serious injury, or acts leading to death or intended to cause death. These violent incidents cost school staff \$66 million each year.

Costs and consequences of specific types of school-based crimes

- About 27,000 assaults resulting in serious injury or death occur at schools each year, at a total cost to student and staff victims of \$57 million.
- Only about 72% of students and 54% of staff who experience assaults with serious injury receive medical treatment for their injuries.
- Even fewer receive counseling, with less than a quarter of these student victims and less than 1% of staff victims getting mental health care.
- Another 31,000 students and staff experience rape or sexual assault at school, costing them a total of \$9.8 million each year. Costs are lower among rape and sexual assault victims than serious assault victims because only about 12% get medical care.
- Four million students and 181,000 staff experience assaults or bullying resulting in minor or no injuries. These relatively minor incidents cost victims a total of \$126 million due to medical and mental health care, work loss, and property loss or damage; \$88 million annually for students and \$38 million for staff.



Sources: Bureau of Justice, Statistics National Crime Victimization Survey, 1993-2016; Centers for Disease Control and Prevention School-Associated Violent Death Surveillance System, 2016.

Costs for student victims, by demographic characteristics

- The total annual costs of crime against male students is \$229 million, compared to \$184 million for female students. The difference is largely driven by greater medical costs for male students, as well as higher levels of lost work.
- Each year, the 3.4 million nonfatal crimes against white students cost these victims about \$243 million. In comparison, 819,000 victimizations cost \$71 million annually for black student victims, and 859,000 victimizations cost \$68 million for Hispanic student victims.
- Students in households with an income under \$50,000 experience 2.5 million victimizations annually at a cost of \$210 million per year. Those in households with an income of \$50,000 or more experience 2.1 million victimizations at a cost of \$125 million annually.
- More than twice as many crimes occur in suburban than urban schools. However, the total cost of school crime is \$151 million in urban areas, compared to \$191 million for suburban students, suggesting that the average cost per victim is higher in urban areas.



Nonfatal gunshot injuries

on school campuses
cost the average student victim
an estimated
\$100,000 over their lifetime.
This includes about
\$25,000 in medical costs
and \$88,000 in lost wages
throughout the life course.





Research is sorely needed for our nation to have a more comprehensive understanding of the true and complete costs and consequences of school crime.

Implications

Despite the volume of school violence and the devotion of resources towards prevention and safety, there has been limited work to assess the financial costs and consequences of these incidents. Monetizing school crimes and harms brings awareness to the problem and highlights where resources and programs are needed and can have the greatest impact. While high profile incidents like mass shootings at school are widely understood to be highly consequential and costly, findings from this study also demonstrate the high costs for victims of less serious crimes.

Yet costs reported here of over \$600 million each year for direct victims of school crime reflects a floor rather than a ceiling. There are several limitations to the study due primarily to gaps in our national data collections. Specifically, these estimates do not include intangible costs like pain, suffering, and fear. They do not include long-term costs, like impacts to educational attainment and career potential. They do not include costs to indirect victims—the families and friends of victims, the students and staff who witness violence ("second-order costs"), and the first responders. And they do not include costs to the school or more broadly to the community.

Although there are a number of sources of data on victimization in the United States that offer a useful starting point for estimating the cost of school crime, new data collection efforts may be necessary to fully understand the scope of school victimization and the tangible and intangible victimization costs. Qualitative research in the form of focus groups and interviews with school administrators, staff, students, and other stakeholders could elaborate on



other types of crime that occur in schools but that have been neglected in the research (e.g., terrorism, fraud, cybercrime). It is also necessary to understand the full array of consequences that may result from school crime (e.g., mistrust of others, loss of job opportunities or quality of life, vulnerability to future victimization, substance use, damaged relationships with children or other family members).

Research efforts should also collect new information on under-explored areas around school victimization, such as how the timing of victimization during the life course can impact the type of harms experienced and the nature of harms experienced by those close to the victim (e.g., stress). They should also aim to catalog probable costs that are typically left out of cost of crime calculations due to limitations in available data, such as those related to legal aid, case management, or housing supports that may be necessary for physical or emotional recovery following victimization.²¹ At the same time, researchers must continue to develop innovative methods for quantifying the cost of intangible harms, beyond those used in prior research (e.g., jury awards; willingness to pay models). Finally, more data is needed to understand how the cost of crime, the nature of victimization, and the extent of harms differ across various subpopulations (e.g., LGBTQ youth, individuals with disabilities, individuals who have experienced poly-victimization, students and staff in tribal communities) or different types of schools. Supporting these areas of research are critical so that communities have the information they need to prioritize their investments in crime and violence prevention programs, policies, and strategies and ultimately to ensure the safety of our nation's schools.

Methodology

This report focuses primarily on direct or tangible harms to victims of school crime. These cost measures include medical costs due to injury, work loss, property loss and damage, and counseling. Estimates are presented as annual and lifetime costs to the victim. Due to limitations in the availability of data, it was not possible to capture indirect, long-term, or vicarious harms such as pain and suffering, fear, loss to education and work opportunities, cost to friends and families of victims, costs to persons not directly threatened or physically assaulted, or costs to the schools and communities.

The data for this report comes primarily from the National Crime Victimization Survey (NCVS), largely considered to be the nation's primary source of information on criminal victimization. Each year, the Bureau of Justice Statistics obtains information about criminal victimization from a nationally representative sample of approximately 160,000 individuals aged 12 or older from 95,000 households and via approximately 240,000 interviews. Interviewed persons provide information about their experiences with personal crimes (e.g., rape, sexual assault, robbery, assault, personal larceny) and household property crimes (e.g., burglary, motor vehicle theft) both reported and not reported to police. Additionally, respondents provide information about themselves (e.g., age, sex, race, ethnicity, marital status, education level, income).



The analysis relies primarily on 24 years of NCVS data, from 1993 through 2016. The study examined 20 crime types that fall within broad categories of offenses, adopted from the National Academies of Sciences, Engineering, and Medicine crime classification. Data on nonfatal violent and property crime victimizations and medical, work loss, and property loss and damage costs come from the NCVS. Counseling costs are estimated at \$298 per victimization based on data from the Office for Victims of Crime, which in 2014 paid \$39,837,416 for mental health benefits to 133,753 victims. Data on bullying and harassment (included under the classification of assaults involving no injury) are from the 2016 School Crime Supplement to the NCVS. Data on acts leading to death are from the 2015–16 National Center for Education Statistics *Indicators of School Crime and Safety* report. Data on the lifetime costs of crime are from the Centers for Disease Control and Prevention, WISQARS Fatal Injury and Average Lifetime Costs tool.

Student victims are defined using NCVS data as persons aged 12 to 19 for whom the location of the victimization was at a school or who reported that they were attending school or on the way to/from school at the time of the incident. Direct staff victims include persons aged 20 or older who were working at the time of the incident and the incident occurred at a school. This may include some staff who were at a post-secondary school.

The data have several key limitations that impact the interpretation and generalizability of the findings. First, the NCVS includes persons aged 12 or older, meaning that school crimes involving younger victims are not accounted for in the report. Second, the data are based on self-reported estimates of the costs associated with victimization, which, particularly among younger respondents, may be less reliable than cost data from administrative records. Third, victims who suffer the most serious injuries requiring extensive hospitalization may not be available to complete the NCVS interview and would not be included in the sample. Finally, as noted previously, these costs presented in this report include only direct harms and costs to victims and are not a complete enumeration of the total cost of school-based crime.



Appendix

Table 1. Direct annual and lifetime costs for victims of school crimes, by type of cost

| | Costs | | | |
|-----------------------------|-----------------|-----------------|---------------|--|
| | Total | Student victims | Staff victims | |
| Annual Costs ^a | | | | |
| Total | \$616,425,100 | \$395,223,400 | \$221,201,700 | |
| Medical costs | 134,141,400 | 93,786,600 | 40,354,800 | |
| Property loss or damage | 434,564,000 | 280,948,200 | 153,615,800 | |
| Counseling costs | 21,575,200 | 18,873,000 | 2,702,200 | |
| Work loss | 26,144,500 | 1,615,500 | 24,529,000 | |
| Lifetime Costs ^b | | | | |
| Total | \$3,480,795,600 | \$3,000,973,200 | \$479,822,400 | |
| Medical costs | 816,257,400 | 722,650,000 | 93,607,400 | |
| Property loss or damage | ~ | ~ | ~ | |
| Counseling costs | 302,121,500 | 264,400,000 | 37,721,500 | |
| Work loss | 2,362,416,800 | 2,013,923,300 | 348,493,500 | |

[~] Not applicable.

Table 2. Direct annual costs for victims of school crimes, by type of crime

| | Annual costs (in thousands) | | | |
|--|-----------------------------|-----------------|---------------|--|
| | Total | Student victims | Staff victims | |
| Total | \$ 616,425 | \$ 395,223 | \$ 221,202 | |
| Acts leading to death or intended to cause death | 383 | 205 | 177 | |
| Assault with serious injury | 56,463 | 28,985 | 27,478 | |
| Serious assault w/gun shot injury | 525 | 525 | / | |
| Serious assault w/stabbing injury | 11,384 | 4,857 | 6,527 | |
| Serious assault w/other serious injury | 28,611 | 21,469 | 7,142 | |
| Assault with minor or no injury | 126,074 | 87,729 | 38,345 | |
| Serious assault w/minor or no injury | 42,728 | 28,400 | 14,328 | |
| Simple assault w/injury | 79,834 | 65,081 | 14,753 | |
| Simple assault w/no injury | 19,111 | 8,512 | 10,599 | |
| Rape or sexual assault | 9,803 | 9,732 | 71 | |
| Rape | 8,039 | 8,039 | / | |
| Sexual assault | 518 | 447 | 71 | |
| Nonphysical sexual violations (e.g., nonconsentual sexting, threats) | / | / | / | |
| Theft | 423,702 | 268,572 | 155,130 | |

Note: Numbers may not sum to totals due to rounding and use of average losses for high-level crime categories. / Sample sizes too small to report.

 $Source: Bureau\ of\ Justice\ Statistics,\ National\ Crime\ Victimization\ Survey,\ 1993-2016.$



 $^{^{}a}\ Source: Bureau\ of\ Justice\ Statistics,\ National\ Crime\ Victimization\ Survey,\ 1993-2016.$

^b Source: Centers for Disease Control and Prevention, WISQARS Cost of Injury Reports, 2010.

Table 3. Average annual number of direct student and staff victimizations, by type of crime

| | Average annual number | | | |
|---|-----------------------|------------------------|----------------------|--|
| | Total | Student victimizations | Staff victimizations | |
| Total | 5,920,187 | 5,517,247 | 402,940 | |
| Acts leading to death or intended to cause death | 35 | 18 | 17 | |
| Assault with serious injury | 26,516 | 22,016 | 4,500 | |
| Serious assault w/gun shot injury | 207 | 207 | / | |
| Serious assault w/stabbing injury | 11,486 | 8,337 | 3,149 | |
| Serious assault w/other serious injury | 14,823 | 13,472 | 1,351 | |
| Assault with minor or no injury | 4,212,143 | 4,031,130 | 181,013 | |
| Serious assault w/minor or no injury | 217,737 | 189,815 | 27,921 | |
| Simple assault w/injury | 231,583 | 210,932 | 20,651 | |
| Simple assault w/no injury* | 907,012 | 774,571 | 132,441 | |
| Rape or sexual assault | 30,545 | 29,312 | 1,233 | |
| Rape | 7,655 | 7,374 | 281 | |
| Sexual assault | 17,754 | 17,307 | 447 | |
| Nonphysical sexual violations (e.g., nonconsentual sexting, threats) | 5,137 | 4,631 | 506 | |
| Theft | 1,650,948 | 1,434,772 | 216,177 | |

Note: Numbers may not sum to totals due to rounding and use of average losses for high-level crime categories. * Includes bullying and hate speech victimizations from the BJS School Crime Supplement to the NCVS.

Source: Bureau of Justice Statistics, National Crime Victimization Survey, 1993–2016.

Table 4. Average annual number of direct student and staff victimizations, by type of crime and type of costs experienced

| | Average annual number | | | | |
|--|-----------------------|----------------------------|---------------------|--------------------------------|----------------|
| | Total victimizations | Received medical treatment | Received counseling | Had property loss or damage | Missed work |
| Total | 5,920,187 | 111,037 | 72,400 | 1,577,294 | 34,227 |
| Acts leading to death or intended to cause death | 35 | ٨ | ٨ | ٨ | ٨ |
| Assault with serious injury | 26,516 | 18,392 | 5,329 | 3,000 | 2,253 |
| Serious assault w/gun shot injury | 207 | 207 | / | 106 | / |
| Serious assault w/stabbing injury | 11,486 | 5,514 | 4,439 | 1,148 | / |
| Serious assault w/other serious injury | 14,823 | 12,670 | 891 | 1,745 | 2,253 |
| Assault with minor or no injury | 4,212,143 | 89,070 | 64,618 | 67,063 | 20,287 |
| Serious assault w/minor or no injury | 217,737 | 21,343 | 17,890 | 53,638 | 6,902 |
| Simple assault w/injury | 231,583 | 67,727 | 14,228 | 7,818 | 7,303 |
| Simple assault w/no injury* | 907,012 | ~ | 32,500 | 5,607 | 6,082 |
| Rape or sexual assault | 30,545 | 3,575 | 2,453 | 206 | 250 |
| Rape | 7,655 | 1,539 | 2,453 | 206 | 116 |
| Sexual assault | 17,754 | 2,036 | / | / | 135 |
| Nonphysical sexual violations (e.g., nonconsentual sexting, threats) | 5,137 | ~ | / | / | / |
| Theft | 1,650,948 | ~ | 1 | 1,507,025 | 11,436 |

Note: Numbers may not sum to totals due to rounding and use of average losses for high-level crime categories.

[/] Sample sizes too small to report.

 $^{^{*}}$ Includes bullying and hate speech victimizations from the BJS School Crime Supplement to the NCVS.

 $^{^{\}wedge}$ Not collected in the NCVS; / Sample sizes too small to report; \sim Not applicable.

Source: Bureau of Justice Statistics, National Crime Victimization Survey, 1993–2016.

Table 5. Annual costs of violent offenses, by type of crime and type of cost

| | Average annual cost | | | | |
|--|---------------------|----------------------------|---------------------|--------------------------------|----------------|
| | Total cost | Received medical treatment | Received counseling | Had property loss or damage | Missed work |
| Total | \$ 192,340,200 | \$133,758,800 | \$21,575,200 | \$16,707,800 | \$20,298,400 |
| Assault with serious injury | 56,462,900 | 52,133,200 | 1,588,100 | 685,300 | 2,056,300 |
| Serious assault w/gun shot injury | 525,300 | 496,800 | / | 28,500 | / |
| Serious assault w/stabbing injury | 11,383,900 | 9,846,300 | 1,322,700 | 214,900 | / |
| Serious assault w/other serious injury | 28,610,900 | 26,277,700 | 265,400 | 401,900 | 1,665,900 |
| Assault with minor or no injury | 126,074,300 | 72,813,800 | 19,256,100 | 15,872,000 | 18,132,400 |
| Serious assault w/minor or no injury | 42,728,400 | 13,135,800 | 5,331,200 | 19,109,100 | 5,152,300 |
| Simple assault w/injury | 79,834,300 | 69,624,900 | 4,239,800 | 1,346,600 | 4,623,000 |
| Simple assault w/no injury* | 19,110,800 | ~ | 9,685,100 | 835,400 | 8,590,300 |
| Rape or sexual assault | 9,803,000 | 8,811,800 | 731,000 | 150,500 | 109,700 |
| Rape | 8,039,200 | 7,249,800 | 731,000 | 21,900 | 36,400 |
| Sexual assault | 518,100 | 447,500 | 1 | / | 70,600 |
| Nonphysical sexual violations (e.g., nonconsentual sexting, threats) | / | ~ | / | / | / |

Note: Details may not sum to totals due to rounding and use of average losses for high-level crime categories.

 $Source: Bureau\ of\ Justice\ Statistics,\ National\ Crime\ Victimization\ Survey,\ 1993-2016.$

Table 6. Average annual school-based nonfatal victimizations and costs for student victims, by victim demographics and location

| | Average annual | | |
|----------------------------|----------------|---------------------|--|
| | Victimizations | Cost (in thousands) | |
| Sex | | | |
| Male | 2,938,091 | \$229,333 | |
| Female | 2,579,138 | \$184,047 | |
| Race/Hispanic origin | | | |
| Whitea | 3,385,129 | \$243,191 | |
| Black ^a | 818,553 | \$70,731 | |
| Hispanic | 859,084 | \$68,155 | |
| Other race ^{a, b} | 454,465 | \$23,562 | |
| Income | | | |
| Less than \$25,000 | 1,130,380 | \$99,239 | |
| \$25,000-\$49,999t | 1,419,358 | \$110,283 | |
| \$50,000-\$74,999 | 902,838 | \$60,528 | |
| \$75,000 or higher | 1,244,462 | \$64,277 | |
| Unknown | 820,191 | \$52,207 | |

(continued)

| (continued) | Average annual | | |
|---------------------|----------------|---------------------|--|
| | Victimizations | Cost (in thousands) | |
| Urbanicity | | | |
| Urban | 1,444,822 | \$150,818 | |
| Suburban | 3,197,903 | \$190,710 | |
| Rural | 874,504 | \$55,211 | |
| Region ^c | | | |
| Northeast | 757,874 | \$40,952 | |
| Midwest | 1,227,789 | \$82,623 | |
| South | 1,855,269 | \$122,539 | |
| West | 1,148,910 | \$93,394 | |

Note: Excludes acts leading to death or intended to cause death.

Source: Bureau of Justice Statistics, National Crime Victimization Survey, 1993–2016.

^{*} Includes bullying and hate speech victimizations from the BJS School Crime Supplement to the NCVS.

[/] Sample sizes too small to report; ~ Not applicable

^a Excludes persons of Hispanic or Latino origin.

^b Includes American Indian and Alaskan Native, Asian, other Pacific Islander, and persons of two or more races.

c Includes data from 1995–2016.

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RTI 13158 R1 10 19

References

- 1 Carlton, M. (2017). Summary of School Safety Statistics. U.S. Department of Justice, Office of Justice Programs, National Institute of Justice. Retrieved from https://www.ncjrs.gov/pdffiles1/nij/250610.pdf
- 2 National Center for Education Statistics. (2019). Indicators of School Crime and Safety 2018. U.S. Department of Education, U.S. Department of Justice Office of Justice Programs. Retrieved from https://nces.ed.gov/pubs2019/2019047.pdf
- 3 Ardis, C. (2004). School Violence from the Classroom Teacher's Perspective. In W. L. Turk (Ed.), School Crime and Policing (pp. 131–150). Upper Saddle River, NJ: Pearson Education.
- 4 Bowen, N. K., & Bowen, G. L. (1999). Effects of Crime and Violence in Neighborhoods and Schools on the School Behavior and Performance of Adolescents. *Journal of Adolescent Research* 14(3): 319-342.
- 5 Chen, G. (2006). School Disorder and Student Achievement: A Study of New York City Elementary Schools. *Journal of School Violence* 6(1): 27-43.
- 6 Elliott, D. S., Hamburg, B., & Williams, K. R. (1998). Violence in American schools: An overview. In D. S. Elliott, B. Hamburg, & K. R. Williams (Eds.), *Violence in American Schools: A New Perspective* (pp. 3–28). New York: Cambridge University Press.
- 7 Newman, K. S., Fox, C., Harding, D. J., Mehta, J., & Roth, W. (2004). Rampage: The Social Roots of School Shootings. New York: Basic Books.
- 8 Borum, R., Cornell, D. G., Modzeleski, W., & Jimerson, S. R. (2010). What Can be Done about School Shootings?: A Review of the Evidence. *Educational Researcher* 39: 27-37.
- 9 IHS Markit Technology. (2018). School Security Systems Industry US Market Overview. Retrieved from https://technology.ihs.com/600401/school-security-systems-industry-us-market-overview
- 10 Glew, G. M., Fan, M. Y., Katon, W., Rivara, F. P., & Kernic, M. A. (2005). Bullying, Psychosocial Adjustment, and Academic Performance in Elementary School. Archives Pediatric and Adolescent Medicine 159(11): 1026-1031.
- 11 Hammig, B., & Jozkowski, K. (2013). Academic Achievement, Violent Victimization, and Bullying among U.S. High School Students. *Journal of Interpersonal Violence* 28(7): 1424-1436.
- 12 Holt, M.K., Finkelhor, D., & Kantor, G. K. (2007). Multiple Victimization Experiences of Urban Elementary School Students: Associations with Psychosocial Functioning and Academic Performance. *Child Abuse & Neglect 31*(5): 503-515.
- 13 Holt, M. K., Matjasko, J. L., Espelage, D. L., Reid, G., & Koenig, B. (2013). Sexual Risk Taking and Bullying among Adolescents. *Pediatrics* 132(6): 1481-1487.
- 14 Kaminski, J. W., & Fang, X. (2009). Victimization by Peers and Adolescent Suicide in Three US Samples. *The Journal of Pediatrics* 155(5): 683-688.
- 15 Klomek, A. B., Marocco, F., Kleinman, M., Schonfeld, I. S., & Gould, M. S. (2007). Bullying, Depression, and Suicidality in Adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry* 46(1): 40-49.
- 16 Nansel, T. R., Overpeck, M. D., Pilla, R. S., Ruan, J., Simons-Morton, B., & Scheidt, P. C. (2001). Bullying Behaviors among US Youth: Prevalence and Association with Psychosocial Adjustment. *Journal of the American Medical Association* 285(16): 2094-2100.
- 17 Radliff, K. K., Wheaton, J. E., Robinson, K., & Morris, J. (2012). Illuminating the Relationship between Bullying and Substance Use among Middle and High School Youth. *Addictive Behaviors* 37(4): 569-572.
- 18 Littleton, H. L., Kumpala, M., & Orcutt, H. (2011). Posttraumatic Symptoms Following a Campus Shooting: The Role of Psychosocial Resource Loss. *Violence and Victims* 26(4): 461-476.
- 19 Macmillan, R. (2001). Violence and the Life Course: The Consequences of Victimization for Personal and Social Development. *Annual Review of Sociology* 27: 1-22.
- 20 Menard, S. (2002, February). Short- and Long-term Consequences of Adolescent Victimization. Youth Violence Research Bulletin. Washington, DC: Office of Juvenile Justice and Delinquency Prevention and the Centers for Disease Control and Prevention.
- 21 Justice Research and Statistics Association. (2018). Estimating the Financial Costs of Crime Victimization: Executive Summary. Prepared for the National Institute of Justice.

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