EXPLORING SCHOOL VIOLENCE AND SAFETY CONCERNS

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Abstract: Although school violence is not a new phenomenon, school safety continues to be a leading public health concern, particularly following high-profile school shootings. In response to these events, many schools have quickly implemented strategies to enhance safety, but research indicates certain responses may actually worsen student well-being. This literature review is the first in a two-part series providing an overview of factors that can affect school safety, including school climate, bullying, and school violence.

Introduction

Ensuring a healthy learning environment for youth is a top priority for educational institutions, families, health agencies, policymakers, and other stakeholders.[1] Although overall rates of school violence in the United States have considerably decreased,[2] the threat of violence remains a problem for today's students. In 2017, a national survey revealed approximately 6% of students[3] had been threatened or injured with a weapon in the 12 months prior to taking the survey, and 6.7% of students skipped school due to feeling unsafe in the prior 30 days.[4] In addition, school shootings have contributed to the perception that schools are becoming increasingly dangerous; thus, parents and public officials have placed increased focus on enhancing school safety.[5]

School safety includes programs, behaviors, and risk reduction efforts that serve to improve students' well-being and help them succeed within a safe environment.[6] Some schools have adopted deterrence-based approaches for improving safety, such as zero-tolerance policies, while others have invested in technology, such as metal detectors and security cameras.[7] Others have taken preventative approaches, such as school- or community-based violence prevention programs.[8] Schools may also combine multiple approaches. Though the overall evidence base for what works in school safety is somewhat limited, research has found that addressing and improving school climate, targeting bullying behavior, and using research and evidence to guide violence prevention are some of the critical steps for creating and maintaining a safe learning environment for students.[9]

School Climate

School climate includes the overall feelings and attitudes that comprise a school's environment.[10] While there are many factors that affect school climate, they are often encompassed within five major categories:[11]

- Safety (e.g., physical safety, social-emotional safety)
- Relationships (e.g., respect for diversity, social support)
- Teaching and learning (e.g., social, emotional, ethical, or civic learning)
- Institutional environment (e.g., physical surroundings, resources)
- School improvement process (e.g., continuous improvement, action planning)

A positive school climate embraces respect between students, teachers, and administration; offers ample opportunities for student engagement; emphasizes strong values of equality and inclusion; and communicates shared norms and goals.[12] Payne (2018) argued that ultimately the most fundamental component of a positive school climate is trusting and supportive relationships between the members of a school's community, as those relationships affect all other dimensions of the climate.[13] Prior research has found students who perceive a positive school climate are more likely to report fewer negative behaviors (e.g., skipping school, getting into fights) than students who perceive a negative school climate.[14] Other studies have found that negative school climate is associated with increased bullying behavior and student misconduct.[15] A 2016 report from the RAND Corporation found school climate had the strongest association with school violence after controlling for other school characteristics.[16]

Research indicates student perceptions of school climate can vary based on gender identity, race or ethnicity, grade level, and sexual orientation.[17] Specifically, students with emotional or behavioral disorders, those who identify as gender non-conforming or LGBTQ+, and people of color may perceive a more negative school climate related to experiencing discrimination, bullying, or harassment.[18] Researchers have emphasized that strategies to improve school safety must consider school climate, student demographics, and individual school factors when pursuing safety interventions.[19]

Developing a consensus on the definition of school climate may provide more concrete guidance to schools on how it can be improved and narrow the gap between school climate research and practice.[20] School climate data collection via surveys, interviews, focus groups, and other methods could inform school improvements and help formulate short-, intermediate-, and long-term goals that target specific issues.[21]

Bullying

The most common definition of bullying is "unwanted, aggressive behavior among school aged children that involves a real or perceived power imbalance."[22] In many definitions, the behavior must be repetitive or ongoing and not one-time arguments or fights,[23] but other researchers have suggested that since singular incidents of bullying behavior can be immensely harmful, redefining the concept to include intensity, as well as frequency, may be important.[24] Research studies measure bullying via self-report, parent or teacher reports, and peer assessments, though bullying behavior is often hidden from adult supervision, creating challenges in measuring its actual prevalence.[25]

According to self-report surveys collected by the World Health Organization (WHO), bullying prevalence varies between countries. Surveys indicated between 0.3% and 30% of students reported perpetration during the 2017-2018 school year, while between 0.5% and 32% reported victimization. The WHO also found bullying victimization decreased with age and that boys were more likely to report physical bullying behavior. Finally, boys and girls reported equal physical victimization, while girls reported increased cyberbullying victimization.[26]

According to the U.S. Bureau of Justice Statistics' National Crime Victimization Survey, approximately 20% of U.S. students ages 12 to 18 reported being bullied during the 2017 school year, a decrease from 29% in 2005.[27] In the U.S. Centers for Disease Control and Prevention Youth Risk Behavior Survey, 15% of students reported being cyberbullied.[28]

Many believe bullying is a normal part of growing up,[29] but research has shown that when bullying is unaddressed or normalized, it can have a significant impact on students' mental health and their relationships with their peers.[30] Students who are being bullied may be more likely to skip or dropout of school and suffer lowered self-esteem.[31] Being cyberbullied can lead to real-world consequences, including increased mental health concerns and suicidal ideation in youth.[32] Bullying victimization has also been associated with increased likelihood of youth substance use.[33]

Bullying can reinforce a negative school climate and decrease students' feelings of safety and belonging.[34] Previous research has also linked bullying and violent behavior;[35] bullies may be more likely to perpetrate teen dating violence[36] and may be at increased risk of developing social problems and displaying aggression toward others.[37] While bullied students do not always demonstrate violent behavior, a portion of those who have been victimized may engage in aggressive or retaliatory behavior[38] and may be at higher risk for mental health disorders, such as depression[39] and anxiety.[40] One study that examined the effects of bullying on a large birth cohort of 9,242 participants found those who were bullied as children were more likely to access mental health services throughout their lives, demonstrating the long-term effects of bullying on mental health.[41]

School Violence

School violence is a broad category encompassed by physical violence between students and/or teachers, violence involving parents or administrators, invisible violence involving threats, coercion and fear,[42] and harms committed by institutions, such as discriminatory teaching practices or accommodating racism and homophobia.[43] School violence is not limited to the school building; it can occur anywhere on school property, during travel to or from school, and at school-sponsored events.[44]

Though the rate of school violence fluctuates year to year, total student victimization has declined significantly since the 1990s.[45] Nonetheless, during the 2017-2018 school year, 71% of U.S. public schools reported at least one violent incident,[46] and 21% reported experiencing a serious violent incident.[47] Middle schools were impacted by violence more often than primary and high schools (Figure 1).[48] Estimates of school violence can vary between studies, however, as other researchers sometimes include bullying, carrying a weapon to school, and property damage in their measures.[49]

Figure 1
Rate of Violent and Serious Violent Incidents in U.S. Public Schools per 1,000 Students[50]
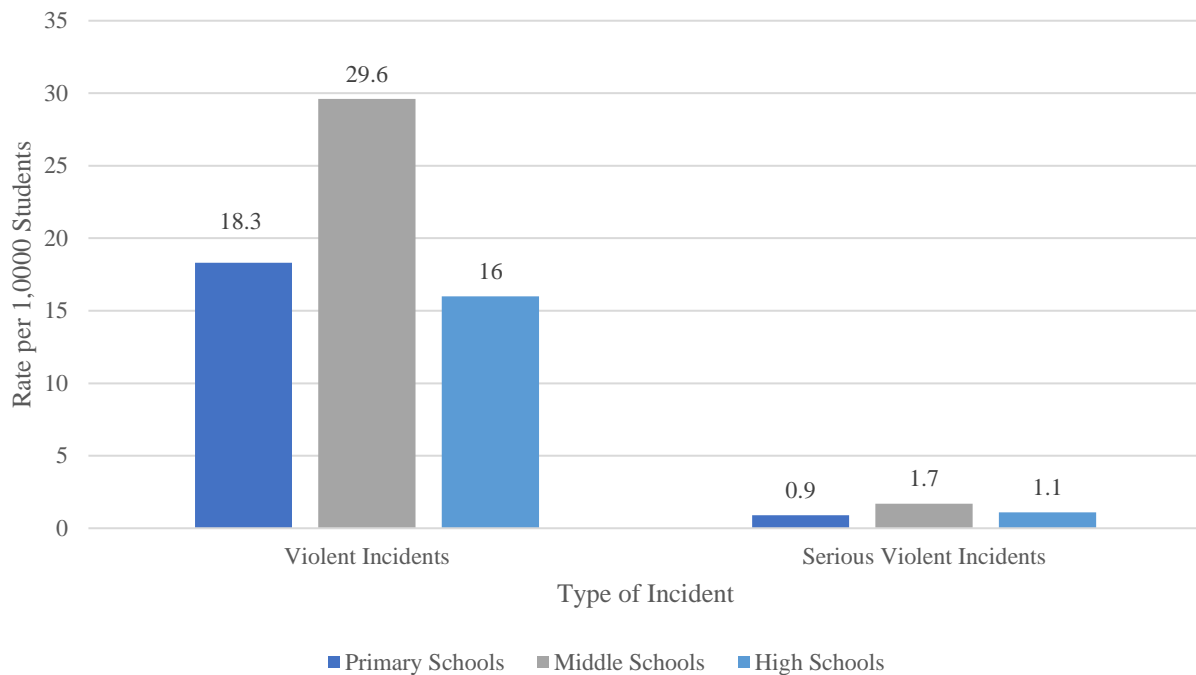
Source: Diliberti, M., Jackson, M., Correa, S., & Padgett, Z. (2019). *Crime, violence, discipline, and safety in U.S. public schools. Findings from the school survey on crime and safety: 2017-2018.* National Center for Education Statistics.

School-based homicides are rare. Over the past decade, less than 2% of youth homicides (ages 5 to 18) have occurred at a school (Figure 2).[51] According to Borum et al. (2010), this indicates that the average school can expect a student homicide every 6,000 years.[52] Researchers have found that schools are one of the safest locations for youth,[53] as young people are more often killed in their home or out in their community.[54]

Figure 2
Estimated Number of Youth Homicides by Location[55]
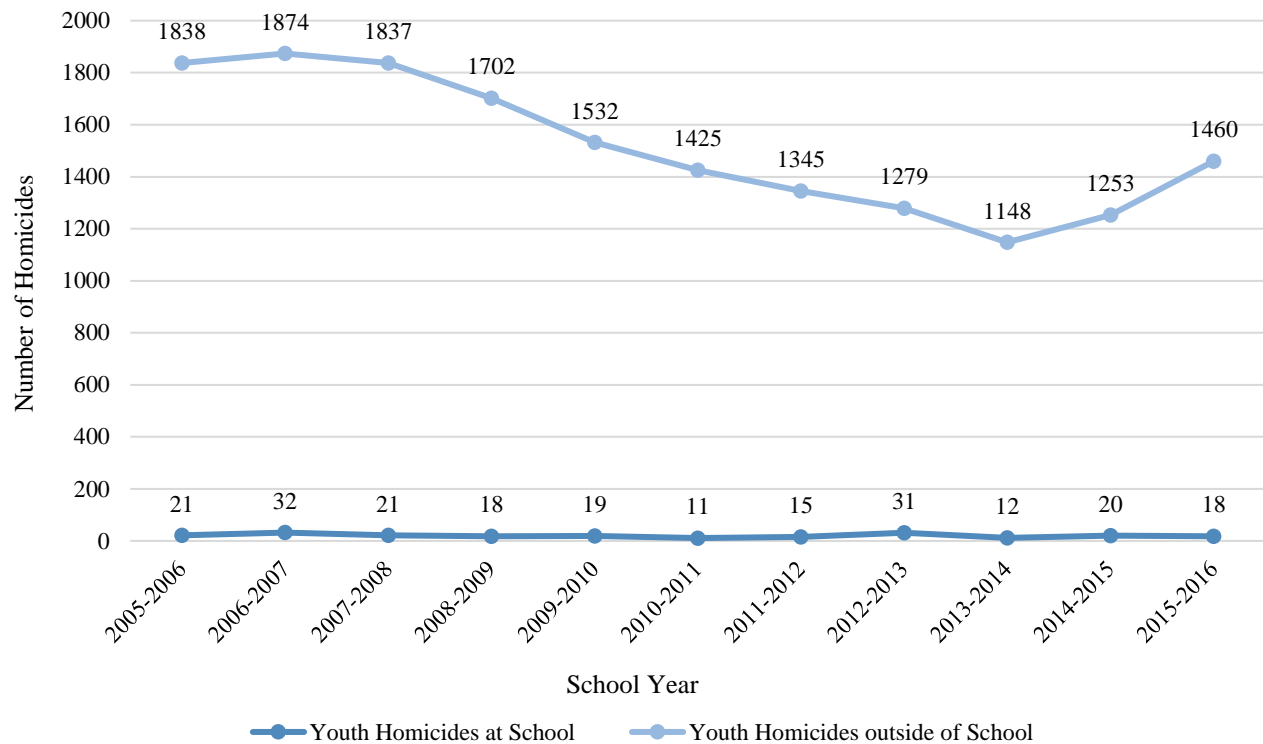
Source: Snyder, T. D., de Brey, C., & Dillow, S. A. (2019). *Digest of education statistics 2018* (NCES 2020-009). National Center for Education Statistics.

A 2019 report from the Centers for Disease Control and Prevention indicated that from mid-1994 through mid-2016, around 90% of school-associated homicides were single-victim incidents, but those that were multi-victim accounted for a sizeable number of fatalities.[56] The same report noted that during this time period, the average rate of single-victim school-associated youth homicides was just 0.03 per 100,000 students, whereas the multi-victim rate was 0.008 per 100,000 students.[57]

When school violence occurs, it can significantly contribute to a negative school climate, affect students' feelings of safety, and influence the development of mental health disorders.[58] Even youth who are not directly involved in the violence may still be affected by violence exposure.[59] Students who are exposed to school violence may begin to fear school, act more aggressively,[60] be more likely to develop a children's mental disorder, or become involved with the juvenile justice system.[61] School violence may also negatively impact academic achievement.[62] Milam, Furr-Holden, and Leaf (2010) hypothesized that this may be because students who are fearful for their safety may have a reduced ability to focus on schoolwork.[63]

School Shootings

School shootings are a statistically rare event, but they are often the most high-profile act of school violence.[64] Their profound impact on students and communities—both those involved and those exposed, even if geographically distant—has necessitated increased focus on understanding and preventing their occurrence.[65]

As with other types of violence, there is no universal definition of school shooting. The K-12 School Shooting Database takes an inclusive approach and defines a shooting as "a gun is brandished, is fired, or a bullet hits school property for any reason, regardless of the number of victims (including zero), time, day of the week, or reason."[66] Others, such as news stations or nonprofit organizations, use different definitions, such as a requirement of one or multiple victims. Elsass and colleagues (2016) noted some groups may also include accidental weapon discharges and suicides occurring on school grounds, creating added difficulty in determining how many shootings occur per year.[67] However, in general, many researchers consider the definition used by Newman et al. (2004) the gold standard when defining a characteristic school shooting:

- The shooting must occur on a school-related public stage in front of an audience.
- The shooting must involve multiple victims, including some who are shot at random or for their symbolic significance.
- The shooting must be carried out by one or more shooters who are or were students of the school.[68]

Despite this standard, varying definitions have contributed to mixed findings on school shooting trends; some researchers have found that the number of shootings is on the rise,[69] whereas others have noted stability over time.[70] Some studies have found that school shootings have gotten deadlier (i.e., resulted in more victims).[71]

Causes

Causes cited for school shootings include being a victim of bullying,[72] seeking notoriety,[73] playing violent video games,[74] and, in particular, untreated mental illness.[75] However, researchers have asserted that the causes of violent behavior are complicated and likely the result of numerous interrelated biological, social, and contextual risk factors.[76] Many school shooters were not bullied and those who were bullied did not always target those who bullied them.[77] Further, prior analyses have found that some shooters had normal grades, at least a few friends, and typical behavioral histories.[78] Though research does not support the conclusion that any single factor can always explain why certain students become violent,[79] researchers still note the vital importance of continuing to provide adequate mental health and social supports for students.[80]

Impacts

Communities may feel collective guilt around the perception that they "allowed" violent events to happen. They also may be stigmatized by having their name associated with the shooting.[81]

Students who have experienced school shootings may have increased feelings of fear,[82] develop post-traumatic stress disorder,[83] or have reduced academic achievement,[84] in addition to physical health consequences, such as injury or death. Some may experience survivor's guilt, a phenomenon where those who have survived traumatic experiences feel guilty for having done so and as if they should have done more to prevent or stop the experience from occurring.[85] Other adverse consequences include potential increases in substance use[86] and risk of suicide[87] among students exposed to a school shooting, though limited scholarly research is available on this topic. Students who witnessed the Columbine High School shooting also noted some positive emotional experiences, such as increased affection between family members, following the incident.[88]

Responses

Many schools have instituted emergency response protocols for reacting to an active shooter incident, and 95% of students nationwide participate in at least one lockdown drill each school year.[89] These responses alone are often insufficient, offering no tools for prevention of such attacks.[90] However, predicting individual acts of violence is impossible and would incorrectly classify students who may never become violent as dangerous.[91] Researchers have discouraged the use of profiling to identify potential perpetrators,[92] as the characteristics of previous shooters are common traits and can be found within a number of students.[93] However, prior examinations of school shooting incidents have found that many perpetrators had, at some point, conveyed their intentions. Therefore, experts have suggested using threat assessment as a way to respond to persons who are exhibiting risk factors for violence.[94]

Behavioral threat assessment is a method used for preventing potential violence before it occurs. Though initially applied within law enforcement agencies, such as the Secret Service, to investigate and respond to threats concerning high-profile political leaders, the method was adapted for school environments after a wave of school shootings throughout the 1990s that triggered inquiries into how these incidents could be prevented.

School threat assessment involves a team comprised of teachers, administrators, counselors, law enforcement, and other school personnel who investigate threats to determine the likelihood of such threats being carried out. Factors such as detailed planning, additional accomplices, possession of a weapon, and refusing mediation for a dispute may all increase the seriousness of a threat. Depending on the level of seriousness, different responses may be used by the threat assessment team, including conflict resolution, law enforcement intervention, a referral to mental health services, or safety planning (i.e., creating a formalized plan that addresses involved students' risks and is frequently reviewed and updated). School threat assessment can be used at all grade levels.

Though individual schools have created their own threat assessment guidelines, there is limited research on what has been effective in reducing violence. Previous controlled studies have indicated support for the *Comprehensive School Threat Assessment Guidelines* (CSTAG), which come with a detailed implementation manual and provide resources for thoroughly training threat assessment team members. The model also prioritizes mental health treatment, when appropriate, and discourages punitive discipline (e.g., zero-tolerance, suspensions). Schools that implemented the CSTAG experienced fewer suspensions, reduced bullying, and increased use of counseling services and parent conferences when compared to schools that administered their own threat assessments or no threat assessment.

More information on threat assessment costs and training can be found here.

Cornell, D. G., (2019). *Overview of the Comprehensive School Threat Assessment Guidelines (CSTAG).* University of Virginia.

Though schools may be quick to implement threat assessment on their campuses, far less research has identified the effects of threat assessment on students and families. Rappaport, Gansner, and Flaherty (2019) noted multiple concerns with school threat assessments gathered from interviews with those personally affected. They found that students and parents involved in the process may feel alienated or attacked by their school and may perceive that they have been found guilty before meetings have even occurred.[95] The use of discipline, such as school suspensions, was thought to be harsh and unfair and pushed students further away from wanting to engage with school treatment services and personnel.[96]

In addition to Rappaport et al. (2019), other individuals have also highlighted concerns with school threat assessment, such as the potential for racial and disability discrimination, stigmatizing labels, child trauma, and unequal application of discipline, as well as problems with privacy and due process.[97] If school threat assessment continues to be a mainstay of U.S. schools as part of a comprehensive safety approach, considerations must be made to move away from responses that keep students out of schools and label them as dangerous, and threat assessment teams must be aware of their biases and privileges when decision-making. Schools also must work diligently to keep track of data related to threat assessment so that it can be properly evaluated and consider other approaches before implementing threat assessment guidelines that have not been empirically validated.[98]

Conclusion

School violence and school safety remain important issues not only for policymakers and researchers, but students, families, and school personnel. Though school violence continues to decrease, and school shootings remain incredibly rare, the significant effects of these occurrences warrant further research into how they can be prevented. Schools have moved quickly to implement prevention strategies such as threat assessment, but less is known about the effects of these methods on students. Improving school climate through efforts targeting bullying and harassment and providing adequate mental health and support services also are essential for a healthy school environment.

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