The Changing Landscape

There was a time, not very long ago, when the “three Rs” was a catchy reference to the trilogy of basic skills (i.e., reading, ’riting and ’rithmetic). But over the past quarter century, several major shockwaves involving multiple-victim school shootings have put the concern for student safety and security on par with scholastics. In the modern-day climate of fear, the “three Rs” has also become about risk, readiness, and response with regard to gun violence.

For many generations of students, schools were seen as a place of safety. Although schoolyard fistfights and bullying had long been commonplace, gun violence was hardly a serious problem. By the early 1990s, however, middle schools and high schools, particularly those in urban locations, confronted the spillover of gang-related gun violence from the city streets to the school hallways. The spike in gang violence within schools prompted the US Congress to pass legislation establishing schools as “gun-free zones,” with heavy penalties for possessing a firearm at or within close proximity of a school.

The focus of concern and the locus of fear changed suddenly and dramatically in 1996 when a 14-year-old student from rural Moses Lake, Washington, who was obsessed with a school shooter in a fictional Stephen King tale, mimicked the actions of his hero by killing his algebra teacher and two classmates during a classroom hostage-taking. The Moses Lake massacre then set the stage for a series of multiple homicides at the hands of alienated adolescents over the next five years (as reflected in the first eight cases of multiple-victim school homicides listed in Table 1.1), including the infamous and massive shooting spree at Columbine High. The surge in bloodshed impacting schools across the country impelled the venerable CBS anchorman Dan Rather (2001) to declare school shootings an emerging epidemic.

The string of deadly school shootings occurred during the time frame when the now-expired federal assault weapons ban was still in force. President Bill Clinton and many Americans had hoped the 1994 prohibition against certain military-style weapons would reduce the scourge of mass killings that had surfaced at post offices, restaurants, and shopping malls as well as schools. However, with the notable exception of the Columbine High assailants, all of the young school shooters of this era had used...
<table>
<thead>
<tr>
<th>Date</th>
<th>School, location</th>
<th>Shooter(s), age(s)</th>
<th>Victims killed</th>
<th>Students</th>
<th>Staff</th>
<th>Others</th>
<th>Victims wounded</th>
<th>Total victims</th>
</tr>
</thead>
<tbody>
<tr>
<td>February 2, 1996</td>
<td>Frontier Junior High School Moses Lake, WA</td>
<td>Barry Loukaitis, 14</td>
<td></td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>February 19, 1997</td>
<td>Bethel Regional High School Bethel, AL</td>
<td>Evan Ramsey, 16</td>
<td></td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>October 1, 1997</td>
<td>Pearl High School Pearl, MS</td>
<td>Luke Woodham, 16</td>
<td></td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>7</td>
<td>10</td>
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<tr>
<td>December 1, 1997</td>
<td>Heath High School West Paducah, KY</td>
<td>Michael Carneal, 14</td>
<td></td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>March 24, 1998</td>
<td>Westside Middle School Jonesboro, AR</td>
<td>Mitchell Johnson, 13, Andrew Golden, 11</td>
<td></td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>10</td>
<td>15</td>
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<tr>
<td>May 21, 1998</td>
<td>Thurston High School Springfield, OR</td>
<td>Kipland Kinkel, 15</td>
<td></td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>25</td>
<td>29</td>
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<tr>
<td>April 20, 1999</td>
<td>Columbine High School Littleton, CO</td>
<td>Eric Harris, 18, Dylan Klebold, 17</td>
<td></td>
<td>12</td>
<td>1</td>
<td>0</td>
<td>23</td>
<td>36</td>
</tr>
<tr>
<td>March 5, 2001</td>
<td>Santana High School Santee, CA</td>
<td>Charles &quot;Andy&quot; Williams, 15</td>
<td></td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>23</td>
<td>15</td>
</tr>
<tr>
<td>March 21, 2005</td>
<td>Red Lake High School Red Lake Indian Reservation, MN</td>
<td>Jeffrey Weise, 16</td>
<td></td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>5</td>
<td>14</td>
</tr>
<tr>
<td>October 2, 2006</td>
<td>West Nickel Mines School Nickel Mines, PA</td>
<td>Charles Roberts IV, 32</td>
<td></td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>February 27, 2012</td>
<td>Chardon High School Chardon, OH</td>
<td>Thomas “TJ.” Lane III, 17</td>
<td></td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>December 14, 2012</td>
<td>Sandy Hook Elementary School Newtown, CT</td>
<td>Adam Lanza, 20</td>
<td></td>
<td>20</td>
<td>6</td>
<td>1</td>
<td>2</td>
<td>29</td>
</tr>
<tr>
<td>October 24, 2014</td>
<td>Marysville-Pilchuck High School Marysville, WA</td>
<td>Jaylen Fryberg, 15</td>
<td></td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>September 28, 2016</td>
<td>Townville Elementary School Townville, SC</td>
<td>Jesse Osborn, 14</td>
<td></td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>5</td>
</tr>
</tbody>
</table>

Note: Incidents with 4+ victims and at least two deaths (not including the assailant)
semi-automatic handguns or long guns, which were not illegal under the federal ban but still sufficiently capable of causing substantial death and injury.

The series of school massacres energized gun control advocates, but did little to silence gun rights proponents. One ultra-conservative group exploited the shootings as political fodder to attack Clinton's gun control efforts. Assembling a map showing the era's school shootings as falling almost precisely on two straight lines that intersected at Hope, Arkansas (Clinton's birthplace), the Cutting Edge Ministries claimed there was a conspiracy involving Clinton and a handful of young assailants designed to turn public opinion against the Second Amendment and the right of private gun ownership.

The September 11, 2001 terrorist attack on America then shifted public discourse and political debate from school safety to national security. Meanwhile, schools enjoyed a respite of several years from shooting rampages. Unfortunately, any notion that the carnage was a problem of the past was quickly dispelled early in the 2006–2007 school year when three frightening incidents occurred within a week. Unlike the student-perpetrated shootings of the 1990s, two of the cases involved adult intruders who capitalized on the vulnerability of schools by taking children hostage. The October 2, 2006 siege upon a one-room Amish schoolhouse in rural Pennsylvania was particularly tragic, as five girls were killed and five others wounded before the 32-year-old assailant turned the gun on himself.

This second wave of bloodshed prompted President George W. Bush, a strong gun rights supporter, hurriedly to convene a special White House summit on school violence. However, the elephant in the room – guns and gun control – was explicitly off limits for the conference proceedings, replaced with the overarching theme of character education.

The focus on school safety then gave way, at least for a period of several years, to worries about the nation's economic crisis following the 2008 stock market plunge. The economy did eventually recover, of course. And, sadly, the issue of school safety reemerged with a vengeance in December 2012, when the nation collectively mourned the deaths of 20 children and 6 adults at a Newtown, Connecticut elementary school (Sandy Hook) at the hands of a local resident who had attended the school during his formative years.

The Sandy Hook massacre, and the issue of school shootings in general, dominated the news and the national discourse, so much so that the Associated Press named it the top news topic of the year. The carnage at Sandy Hook eclipsed another Sandy, the devastating hurricane that stormed the eastern coast. Hurricane Sandy actually resulted in five times as many deaths of Americans as did the shooting with a similar name. However, unlike the storm, the Connecticut school massacre claimed the lives of young children, causing it to have a decidedly different impact on the nation's consciousness.

The other significant distinction between the two Sandys surrounded the source of the devastation, one being of natural origin and the other resulting from the deliberate actions of one deeply disturbed gunman. The belief that the massacre was preventable gave new life to the debate over gun control as well as related issues of access to mental health treatment and the adequacy of school security.

Perception and Reality of School Violence

Each multiple-victim shooting has reinforced a sense that schools are under siege. While calling the spate of school shootings an “epidemic” may have been more hyperbole than reality, there is little question that the level of fear and anxiety over school
safety has spread wide and fast, particularly in the immediate aftermath of the most high-profile episodes. With impressions especially impacted by the double-digit death tolls at Columbine and Sandy Hook, there remains pervasive concern among school officials and parents of school-age children that school violence is definitely a significant problem, if not reaching epidemic proportions.

Notwithstanding the unmitigated horror and outrage associated with the 13 school-yard massacres over the past two decades presented in Table 1.1, the overwhelming majority of school homicides involve a single victim and single perpetrator.

Unfortunately, no “official” (i.e., “known to the police”) national data series for school crime exists. However, there are available several sources of data pertaining to school violence, based either on student/staff surveys or news media reports, all of which vary with regard to their coverage, completeness, and accuracy. Arguably, the most accurate data available come from incident reports of school-associated violent deaths initially maintained by the National School Safety Center – a private organization established in 1984 initially through federal funding directed by President Ronald Reagan. Then, in 2010, the data collection and reporting were assumed by the Centers for Disease Control. Although these data are not exactly “official,” school-related homicides are presumably always reported in some media outlet somewhere, and thus relatively easy to identify.

Between the 1992–1993 and 2014–2015 school years, there were a total of 235 shootings at primary and secondary schools in the United States in which at least one victim was killed. These included shootings by students (such as the Columbine massacre) as well as assailants not directly connected with the school setting (such as the Sandy Hook mass murder). Overall, these shooting incidents claimed the lives of 317 people, 217 of whom were students. Nearly half of the remaining victims were administrators, faculty, or other school employees, and the others included parents and individuals not connected with the school. Over 70% of the shootings took place at a high school, and the remainder were slightly more likely to have occurred at a middle school than at an elementary school. In terms of location, nearly 40% of the shootings occurred in the South, which is slightly above its share of the population, with all other regions roughly proportional to their population shares as well.

In terms of victim characteristics, over 70% of the victims were male, reflecting the large share of cases involving conflict between two male students, sometimes over gang rivalries. In shooting incidents involving multiple victims, cases in which the victims were less likely to have been specifically targeted, the gender split was virtually even. Just over half the victims were 15 to 19 years old; however, focusing on student victims alone, older adolescents accounted for 70% of the victims, consistent with the predominance of shootings at high school.

Table 1.2 displays annual counts for several measures based on these shooting episodes (see also Figure 1.1). In addition, the rate of homicide victimization per million students is calculated based on annual public and private school enrollment figures. Contrary to the impression that many Americans have formed from watching media saturation surrounding high-profile school massacres, the number of incidents and of victims – both overall and students only – were appreciably larger in the early 1990s, when concerns about school violence were not center stage in public discourse. In reality, schools are not only safe relative to other settings in which children typically spend their time, but are growing safer.

Without minimizing the pain and suffering that these incidents cause the victims, their families, and their entire communities, the rate of victimization is remarkably low.
At its height in 1992–1993, partially reflecting the spillover effect of gang violence, the homicide risk for students was one in 2 million. After that, the rate declined steadily throughout the 1990s. Since 2000, the risk has remained relatively flat— with the exception of the 2012–2013 academic year during which 20 students and 6 adults were killed at Sandy Hook— with an average risk as low as one in 10 million.

Part of the reason for the disconnect between incidence and public awareness involves the changing nature of school-related lethal violence between the early and late 1990s, specifically the emergence of mass shootings and multiple-victim homicides. Whereas single-victim homicides, particularly those that occurred during the early 1990s when the rate was at its highest, tended to be publicized only locally, the string of multiple

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**Table 1.2** School shootings and mass shootings, 1992–1993 through 2014–2015.

<table>
<thead>
<tr>
<th>School year</th>
<th>Fatal shootings</th>
<th>Fatal multiple-victim shootings</th>
<th>Students killed per million</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Incidents</td>
<td>Total victims</td>
<td>Student victims</td>
</tr>
<tr>
<td></td>
<td>Total victims</td>
<td>Student victims</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total victims</td>
<td>Student victims</td>
<td></td>
</tr>
<tr>
<td>92/93</td>
<td>33</td>
<td>35</td>
<td>27</td>
</tr>
<tr>
<td>93/94</td>
<td>31</td>
<td>32</td>
<td>21</td>
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<td>10</td>
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<tr>
<td>95/96</td>
<td>17</td>
<td>21</td>
<td>16</td>
</tr>
<tr>
<td>96/97</td>
<td>12</td>
<td>14</td>
<td>10</td>
</tr>
<tr>
<td>97/98</td>
<td>18</td>
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<td>5</td>
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<tr>
<td>01/02</td>
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<td>02/03</td>
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<td>09/10</td>
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</tr>
<tr>
<td>10/11</td>
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<td>11/12</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>12/13</td>
<td>4</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td>13/14</td>
<td>7</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>14/15</td>
<td>6</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>235</td>
<td>317</td>
<td>217</td>
</tr>
</tbody>
</table>
homicides that took place between 1996 and 2001 became a national obsession. Each new incident attracted massive publicity across the country (and internationally), creating an unprecedented sense of urgency and alarm. The media focus, including cover photos in prominent magazines, also placed the young assailants in the limelight, making them undeserving heroes in the eyes of at least a few similarly minded youngsters. Thus, although Dan Rather’s characterization of the school shooting problem as an epidemic may have been overstated in terms of the risk, the description was unfortunately on target in terms of the contagion effect (Coleman 2004). Moreover, not only did the media exposure encourage copycat murders and countless aborted attempts (see Towers et al. 2015), it had a powerful impact on policy and practices related to school safety and security, not necessarily for the better.

Even though the increased level of concern expressed by parents of school-age children was understandable, their fears were also well out of proportion to the actual risk. Table 1.3 places the risk of school homicide in context with other causes of death for children, based on mortality data from the National Center for Health Statistics (NCHS) for the years 1999 to 2013. Clearly, swimming pools and bicycles represent a far greater peril for the safety of children than their classmates. This would suggest a greater benefit in having more lifeguards at pools rather than more armed guards at schools. Likewise, requiring all children to wear bicycle helmets would certainly be more advantageous that equipping them with bullet-resistant backpacks. Focusing specifically on homicide, the bottom panel of the table confirms that school is in fact a very safe place for children. Less than 1% of murders of children and adolescents occur at school, where they typically spend more than one-quarter of their waking hours during a calendar year.

The exclusive focus here on school-associated homicides does not mean that non-fatal shootings are unimportant. In fact, non-fatal school shootings far outnumber those in which a student or staff member is killed. Specifically, of the 86 shootings in elementary and secondary schools from 2013 through 2015 identified in the crowd-source database maintained by Everytown for Gun Safety (2015), a gun control
advocacy group that grew out of Mayors Against Illegal Guns, only 19 (or 22%) resulted in the death of one or more victims.

It has been noted, based on the Everytown tally, that there was, on average, about one school shooting per week in the United States in the three years after the December 2012 Sandy Hook massacre (including suicides, accidental shootings, cases without injury to anyone, and all school types from preschool through college). Of course, that claim can be misinterpreted to suggest a far worse situation than exists in reality, as the public tends to imagine the worst (horrors like Sandy Hook) when confronted with this statistic. Not only is the typical school shooting in the Everytown database significantly less serious than the kind of multiple-victim rampage that dominates the news, but with the limited window of just three years, it is not possible to draw any conclusions about whether the rate is increasing, decreasing, or is relatively unchanged.

The Brady Center to Prevent Gun Violence has been gathering data on school shootings, including non-fatal incidents, since 1998. Unfortunately, the less severe incidents reported only in local newspapers are easily overlooked, especially in the earlier years when these news outlets were not digitized and searchable. This would explain the fact that, over time, an increasing share of the Brady Center cases were non-fatal. Thus, it is not possible to identify trends reliably because the availability of information in less serious, non-fatal school shootings has changed over time. The apparent rise in the number of school shootings since the late 1990s in the Brady Center data may reflect an increase in data completeness rather than any change in the actual incidence.

### Fear and Overresponse

The string of school shootings that marked the late 1990s changed the face of public education, and had many Americans questioning their faith in the notion that schools were safe places for children to grow intellectually and socially. Each episode of schoolyard
terror – at least those that were highlighted, if not hyped, by the national media – incited widespread fear, dread, and anxiety. Each recurrence of the seemingly same old story of some alienated adolescent running amok in the hallways of his school intensified concerns that school shootings were not just an occasional and frightening aberration, but a new and persistent crime wave that should place schools everywhere on high alert.

In reaction to the flurry of school shootings in the late 1990s, the Gallup polling organization incorporated school violence and safety as a regular theme in its ongoing program of research measuring changes in public opinion. Gallup had not examined the issue since 1977, when a quarter of parents surveyed across America indicated a concern for their children’s safety at school. Twenty years later, Gallup routinized its questioning regarding school violence and safety in surveys coinciding with the start of each school year, as well as at exceptional points in time immediately following certain widely publicized school rampages.

Figure 1.2 summarizes the overall results of the series of Gallup polls related to a question presented to parents about whether they fear for the safety of their oldest child while he or she is at school. Clearly, the Columbine shooting had a strong effect on the respondents’ sense of security for their children, as the majority of respondents (55%) surveyed on the day following the April 20, 1999 massacre indicated feeling fearful.

As Americans faced new challenges during the decade after Columbine (precipitated by the 9/11 attack on America), the school-related fears of parents gradually subsided, despite a spike of 45% in the survey taken immediately after the multiple shooting at Santana High School in Santee, California. By the late 2000s, as the level of panic and media hype dissipated, the percentage of parents worried about their child’s safety settled back to 26%, just about the same level as a decade earlier.

The December 2012 massacre at Sandy Hook – the deadliest school massacre in the United States except for the 1927 bombing of a Michigan elementary school that killed 45, including 38 children – resulted in but a modest jump in the percentage being fearful (from one-quarter to one-third). Perhaps Americans have grown somewhat accustomed to, although surely not tolerant of, the occasional incident of multiple fatalities of students.

Figure 1.2 Percent of parents fearful of oldest child’s safety while at school. Source: Data from Gallup News Service.
Despite the relatively low statistical risk, the extensive, sensationalized, and ubiquitous news coverage of certain high-profile school shootings (particularly those in largely white, suburban communities) has raised the level of panic and fear. Because of advances in communications technology and the emergence of 24-hour news channels with fleets of satellite trucks, dreadful images of mass murder can be transmitted live to viewers far and wide, making it seem as if the horror is taking place in their own backyards (Heath and Gilbert 1996).

Bracy and Kupchik (2009) examined the way in which school shootings and violence were portrayed in the media between 2000 and 2006. They observed that the media repeatedly reminded the public about the Columbine massacre, suggesting that such shootings were a random, unpredictable, and growing menace. They also found that stories were presented out of context, as they failed to include the data on the degree of risk, particularly ignoring the rarity of such episodes. At the same time as the media were exploiting this issue, students themselves were reporting that they were experiencing less crime in schools than previously. Despite the safer reality, security issues remained a major priority for school systems and families alike.

**Target Hardening**

The immediate response to deadly shootings in schools is typically a call for enhanced physical security (see Lassiter and Perry 2009; Trump 2011). In the short term, access control and close surveillance may calm the fears of an anxious public. Yet, in the long run, it is equally important to avoid transforming comfortable places for learning into imposing fortresses.

Despite the safer reality, school systems around the country reacted aggressively to prevent another Columbine. As a result, the majority of middle and high school children spend a large portion of their day in a locked building with armed guards, video surveillance, and random inspections of their possessions.

Table 1.4 identifies the most common methods implemented by middle and high school administrators to address the perceived need to bolster security at their facilities. These figures are based on observations by students, aged 12 to 18, at schools across the country concerning the prevalence of technology and supervision aimed at reducing the danger they face in their daily efforts to get an education. As such, the data reflect the percentage of students reporting the existence of safety strategies at their schools, not the percentage of schools that employ such methods.

Codes of conduct, visitor sign-in, and hallway supervision are nearly universal, part of the educational environment for at least 90% of middle school and high school students. Nearly 70% of our young people spend their school days under the watchful eyes of security guards or armed police officers. It is of note that the widespread use of these measures has not diminished in the years since the 1999 Columbine massacre, even though the incidence of fatal school shootings has declined.

Based on student reports, the use of security cameras doubled, from 38% in 2001 to 77% in 2013, while the extent to which students confront locked entrances and exits increased from 49% to 76%. Although not quite so dramatically, nearly all the other measures of school security increased over the 12-year time span. With consistently over half of all students reporting locker checks, a grim picture of life in a secured environment emerges.
Although generally effective in protecting a student population, most security measures serve only as a minor inconvenience for those who are determined to cause mayhem (see Fox and Burstein 2010; Rocque 2012; Trump 2000). At the time of the mass shooting, Columbine High School had both a video surveillance system and armed police, neither of which deterred Dylan Klebold and Eric Harris from carrying out their murderous plan. Two unarmed security guards monitoring a metal detector at the entrance to Red Lake Senior High School on the first day of spring 2005 did not prevent 16-year-old Jeffrey Weise from killing five fellow students and a teacher. He simply shot one of the guards to death and sent the other one scrambling before walking through the metal detector on his way to infamy. In the West Side Middle School shooting in Jonesboro, Arkansas, 11-year-old Andrew Golden politely asked to be excused from class, pulled a fire alarm, and then ran to join his 13-year-old partner, Mitchell Johnson, to ambush students and teachers as they streamed out of the building.

Security cameras, access control measures, random searches and the like are designed not only to protect students from harm but to reassure students (and their parents) and alleviate fear. But absent a significant threat, tight security instead projects a feeling of impending danger. A fortress-like environment can be a constant reminder of the risk, however small.

To avoid the negative impact on school climate, surveillance systems in school buildings should be as unobtrusive as possible. This is a lesson that architects of Sandy Hook’s new elementary school, replacing the demolished building where the December 2012 massacre took place, have incorporated into their plans. The Sandy Hook reconstruction uses landscape design to create natural and aesthetic separation between the school and visitors, including pushing the building back from the road to provide for more open space. Visitors must cross one of three bridges to reach the front entrance, and first-floor

<table>
<thead>
<tr>
<th>Table 1.4</th>
<th>Percentage of students aged 12–18 who reported selected security measures at school.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Security measure</td>
<td>2001 %</td>
</tr>
<tr>
<td>Metal detectors</td>
<td>8.7</td>
</tr>
<tr>
<td>Locker checks</td>
<td>53.5</td>
</tr>
<tr>
<td>Security cameras to monitor the school</td>
<td>38.5</td>
</tr>
<tr>
<td>Security guards and/or assigned police officers</td>
<td>63.6</td>
</tr>
<tr>
<td>Other staff/adult supervision in the hallway</td>
<td>88.3</td>
</tr>
<tr>
<td>Students required to wear badges or picture ID</td>
<td>21.2</td>
</tr>
<tr>
<td>A code of student conduct</td>
<td>95.1</td>
</tr>
<tr>
<td>Locked entrance or exit doors during the day</td>
<td>48.8</td>
</tr>
<tr>
<td>A requirement that visitors sign in</td>
<td>90.2</td>
</tr>
</tbody>
</table>
rooms are elevated from ground level. The open space and building configuration allows for easier means of egress should an emergency evacuation ever become necessary.

Apart from Sandy Hook, another promising covert security measure involves the use of acoustic detection systems, technology developed for the military to identify gunfire. For example, the Guardian Indoor Gunshot Detection system employs small and well-disguised sensors throughout the building that would immediately alert first responders of a shooting as well as the shooter's location and movements. It is extremely unlikely that the Guardian system will ever be triggered in any school where it might be installed. Even so, should the unthinkable in fact occur, the speed and efficiency of police response would likely save lives and reduce injuries.

**Zero Tolerance**

Reacting to the high rate of gun violence involving youth, Congress enacted the Gun-Free Schools Act of 1994, requiring schools that receive federal aid to expel any student in possession of a firearm on school property for at least one year. This zero tolerance approach did not end with firearms, however. States soon expanded their no-nonsense posture to other weapons or could-be weapons, including knives, penknives, and plastic knives as well as scissors and even nail files (Pinard 2003). Hoping to send a stern message, school administrators further broadened mandatory suspension or expulsion policies to include possession of drugs, alcohol, and tobacco, and ultimately to many other violations of school rules and codes of conduct (Hirschfield 2008).

The zero tolerance approach is designed, ostensibly, to achieve several objectives. Most fundamentally, mandatory sanctions are often believed to achieve the greatest deterrent effect, as punishment certainty (rather than severity) tends to carry the greatest weight in the calculus of decision making. At the same time, it is hoped that removing all serious violators of the student code of conduct, no matter what their intent or exact purpose, would create a calmer school climate, ensuring the safety and well-being of the overwhelming majority of the student population. In addition to the stated objectives, school administrators embraced zero tolerance because it eliminated any second-guessing that could potentially follow from discretionary use of sanctions. Similarly, it was also widely assumed to alleviate professional responsibility and civil liability should an underresponse in disciplining a troublemaker lead to more serious acts of aggression. Despite these presumed benefits, zero tolerance lacks the essential element of discretion and level-headed reasoning about the difference between menace and mistake.

The rigid application of zero tolerance punishment has resulted in countless instances of excessive or misplaced punitiveness. A 5-year-old Massachusetts kindergartener was suspended for bringing his souvenir toy gun to school. A 7-year-old Maryland boy was suspended after he nibbled away at his breakfast pastry until it was left shaped like a gun. A Colorado girl, who mistakenly grabbed her mother’s lunch bag from the kitchen counter when rushing off to school, was punished after she learned of her error and volunteered the small paring knife that her mother had packed for slicing an apple. A high school junior in Chicago was expelled, taken to jail, and charged with misdemeanor battery for shooting a paper clip at a classmate that inadvertently struck a cafeteria worker instead (see Skiba and Peterson 1999).
Notwithstanding the many inane examples of overreaction to innocuous behavior, the zero tolerance approach would still be defensible were there evidence that it had an appreciable deterrent effect. Sponsored by the American Psychological Association, a special task force undertook a meta-analysis of existing research on the effectiveness of zero tolerance policies (Skiba et al. 2008). The review revealed no real evidence that zero tolerance increased school safety or reduced inconsistency in the application of school discipline. On the contrary, zero tolerance policies were found to breed a hostile school climate and a decline in academic achievement linked to increased school exclusions. Not only do zero tolerance policies fail to deter misbehavior, they may even contribute to higher rates of misbehavior and school dropout for the students they punish.

It is critical that however the student code of conduct is enforced and discipline is applied, respect for student rights and a commitment to fairness remains essential for maintaining a positive school climate. Unfortunately, instead of promoting an atmosphere of mutual respect, many school administrators have used court rulings as a crutch to defend random locker searches, use of metal detectors, drug-sniffing dogs, and similarly aggressive tactics in the name of safety. The change in approach is visible in areas beyond security and sanctions. Out of concern for protecting a vulnerable population from harm, the rules pertaining to search and seizure in the context of a school setting have been gradually relaxed. Apparently, when it comes to conducting student searches, the courts have applied lower standards, replacing probable cause with reasonable suspicion (Campbell 2003).

Given the range of negative repercussions that derive from decidedly punitive disciplinary practices, some schools have instead opted for a restorative justice framework for handling school-based infractions. According to Zehr (2002), the restorative justice approach engages various local stakeholders (victims, offenders, and other members of the affected community) in a collective dialogue about the harm caused by the transgressions as a critical step in the healing process. Thus, rather than focusing on just punishing the person responsible, the restorative justice model addresses the needs and concerns of all those impacted in some significant way. Instead of emphasizing measures to deter and punish wrongdoing, it strives to allow victims, offenders, and others to achieve a sense of closure while at the same time pursuing personal accountability for misbehavior (see Morrison, Blood, and Thorsborne 2005).

Several evaluations of the effects of adopting a restorative justice approach in schools have been quite promising (see Karp and Breslin 2001). Most importantly, this philosophy on discipline fosters a positive school climate based on connectedness and trust, rather than a negative climate based on suspicion and disrespect. In the long run, the positive approach leads to healthy, safer school environments in which both the intellectual growth and social development are immovably center stage. At a minimum, restorative justice lays a path toward restoring justice in school discipline.

**School Resource Officers**

As early as the 1960s, long before school violence became a serious national concern, police officers were occasionally assigned to public schools as a special form of community policing (Girouard 2001). But by the late 1990s, President Bill Clinton, responding to a disturbing string of school shootings (including one in his home state of Arkansas),
pushed for having more police officers placed in public schools. In 1999, the US Department of Justice created the “COPS in Schools” program. With federal funding, the number of school resource officers (SROs) increased by 50% between 1999 and 2005 (US Department of Justice 2008).

There are, of course, many advantages to having police regularly assigned to school settings, including the ability to respond quickly to potentially deadly incidents. However, Columbine High School, for example, had school resource officers on duty the day in 1999 when two alienated adolescents turned their school into a war zone. Columbine was a fairly large campus with nearly 2,000 students enrolled, and the officers couldn’t be everywhere at once.

Despite the many benefits of employing school resource officers, their presence has led to a criminalization of student misbehavior. Rule infractions that would otherwise be resolved informally within the school context by school personnel have resulted in formal sanctions (arrest and prosecution). Many more students, particularly minorities, are being processed through the criminal justice system in what has been termed the school-to-prison pipeline. Youngsters who might otherwise have had only a school disciplinary record are being saddled with the lasting effects of a criminal record instead.

As law enforcement officers, SROs should arguably be held to the more rigorous standard of “probable cause” for searches, yet, just like school officials, SROs can conduct searches with only “reasonable suspicion” (S.W., 171 N.C. App. 335, 2005). Even more disconcerting is when aggressive police tactics are employed in response to relatively minor issues. It is not surprising, therefore, that a 2015 video of a South Carolina SRO pulling a 16-year-old female student out of her seat and wildly tossing her across the classroom before arresting her for being disruptive in math class instantly went viral and sparked widespread public outrage (as well as the officer’s termination) (Ford, Botelho, and Conlon 2015).

Extreme actions and overresponse only serve to alienate students further from the school personnel, making them less likely to reach out for support in times of emotional distress. Instead, school officials should protect students’ rights and treat them with respect. Policies and practices designed to promote a safer school environment have inadvertently created disciplinary procedures that are capricious, exclusionary, and excessively punitive. Although undoubtedly well-meaning, the approach to school discipline has become decidedly mean-spirited.

Preparing for the Worst

First introduced selectively following the 1999 Columbine massacre, lockdown drills have become commonplace in schools across America, especially in the wake of 2012 Sandy Hook shooting spree. A number of states have gone so far as to mandate that all schools drill their faculty and students on how to act should there be an actual shooting on campus. Called “active shooter drills” in the more recent lexicon, these exercises sometimes include fake blood and blanks fired in the hallway for added realism. At the extreme, one tactical approach has a trainer chasing students from classroom to classroom, pointing a large flashlight as if it were a firearm and shouting, “Bang, bang, you’re dead.” Some schools arm their pretend intruder with a fake, but realistic-looking, gun.
Emergency drills are nothing new to schools, of course. Simulated exercises to prepare pupils for fire and other natural catastrophes have been commonplace for generations. Yet the aggressive nature of shooting drills makes them qualitatively different and exceptionally more traumatizing to children, especially younger ones. These simulations reinforce the notion that schools are dangerous places where the bad guy is coming to shoot you.

The psychological harm that may come from these simulations is not warranted in light of the low probability that such an event will occur. It is one thing to prepare the faculty and staff for what to do and how to instruct the students in the case of a violent episode; it is quite another to involve impressionable youngsters whose innocence need not be compromised. Furthermore, it is questionable whether children would recall their escape lessons amid the hysteria associated with an actual shooting.

School administrators could take an important lesson in moderation from the airline and cruise industries. Commercial airlines train their flight crews to handle disaster situations, but passengers are only asked to watch a brief demonstration of grabbing hold of oxygen masks, without actually having to practice this maneuver. Cruise ships require that guests don life jackets and learn the location of their muster stations, but no one has to step foot inside a lifeboat or suffer the unsettling experience of being lowered into the water. In the case of a catastrophe in the air or at sea, passengers will be directed where to go and told what to do. Schools would be wise to take the same low-key approach to the unlikely event of a shooting. The faculty and staff need to be adequately trained, and the students just reminded to listen to instructions from staff members.

Exploiting the elevated level of fear prompted by school shootings, several companies designed and successfully marketed bullet-resistant backpacks and blankets. Anxious parents, wanting to protect their kids from harm, were willing to pay a high price for an additional measure of protection. Students have also been advised to fill their backpacks with heavy textbooks that also might shield them in the event of a shooting. Actually, the best advice in such cases might be to drop the heavy bag of books and run as fast as possible.

**Armed Protection**

In January 2013, in the immediate aftermath of the Sandy Hook massacre, the National Rifle Association, hoping to deflect criticism as well as efforts to tighten gun control laws, promoted a “more guns” national strategy for school safety. The so-called School Shield Program would furnish every school in America, regardless of size or grade level, with trained sharpshooters (Hutchinson 2013). In subsequent months, lawmakers in many states sponsored legislation to arm schoolteachers and train them to shoot. More than a few of these initiatives became law. And, based on a nationwide poll by the Gallup organization, nearly two-thirds of Americans see merit in this idea (Newport 2012).

Supporters of firearms-for-faculty laws argue that ever since the early 1990s, when the US Congress established schools as gun-free zones, an armed assailant, be it a student-insider or a stranger-intruder, could be assured of facing little opposition. The belief is that arming teachers and administrators might serve as a powerful deterrent to anyone contemplating a Columbine-style school shooting. It is hard to imagine, however, that a vengeful student, who is willing to die by police gunfire or by his own hand, would be dissuaded by knowing that the faculty were armed. He may even welcome the chance to shoot it out with the principal at high noon in the school cafeteria.
More importantly, we want faculty to educate their students, not execute them. For schoolteachers, especially the ones who are frustrated when dealing with the belligerent bully seated in the back of the classroom, marksmanship should just be about As and Bs, not guns and ammo. Concealed chalk is fine, a concealed Glock is not.

If armed guards and armed teachers are indeed worthy strategies for protecting children, then what should schools do to protect the students before and after school? Expanding this approach would dictate providing weapons to coaches, athletic directors, and even bus drivers. The slope behind the school is treacherously slippery.

Bullying

Despite their relative safety, schools can still feel dangerous to children, particularly in the face of harassment and intimidation. In fact, most bullying in school does not involve actual violence or fighting, but rather the constant threat of violence, which can make school halls and bathrooms tremendously fear‐provoking.

Bullying at school or in the schoolyard is hardly a new concern for students and their parents, or for teachers and administrators. Harassing behavior – from teasing to intimidation, from targeted vandalism and malicious pranks to shoving and fighting – has been a problem for decades, if not centuries, likely for as long as there have been schools. Previously dismissed as normal and relatively harmless child’s play – “boys being boys,” “girls being catty” – in recent years bullying has taken on an entirely different meaning, occasionally with devastating repercussions.

Chronic bullying has frequently been cited as an underlying precipitant for suicide and homicide. Several high-profile cases of school homicide have involved a victim of long-term bullying seeking payback with a gun. In October 1997, for example, 16-year-old Luke Woodham of Pearl, Mississippi, used a rifle from home to murder two female classmates (one of whom was his former girlfriend) and wound seven other students at his high school. He had also killed his mother with a knife and baseball bat. In what apparently was meant to be a suicide note (were it not for the fact he lived), Woodham wrote, “I am not insane! I am angry. I kill because people like me are mistreated every day. I do this to show society – push us and we will push back. I have suffered all my life. No one ever truly loved me.”

Woodham was not the only beleaguered student to have avenged repeated bullying with a counter-assault. Anne Lenhardt (pers. comm., February 13, 2009) assembled case profiles of 15 young assailants involved in 13 episodes of school homicide in the United States between 1996 and 2005. She found that 73% of the 15 perpetrators had apparently been the victims of bullying and persecution. Of course, bullying itself is hardly sufficient to produce the level of rage seen in school rampages; it is usually harassment in combination with poor coping skills that produces this extreme response. Lenhardt’s results show that 71% of attackers felt rejected and isolated by peers, 64% had poor coping skills, and 64% demonstrated an exaggerated need for attention and respect.

For too many years, schools often responded to reports of bullying by placing the blame on the shoulders of victims, implicitly assuming that they were somehow responsible for their own victimization, if only because they failed to stand up for themselves. In cases where a student had to be transferred from one class or homeroom to another to prevent further harassment, it was usually the victim and not the bully who was displaced.
In the past couple of decades, however, school administrators have come to take – or have been compelled by law to take – a more progressive and enlightened view of the causes of and solutions to bullying. Rather than focusing just on the victims and offenders, schools have had far greater success by addressing the broader school climate (Fox and Burstein 2010).

Despite the range of promising tools for bullying suppression, there are significant hurdles to their successful application in school settings. Most of all, the school climate must be amenable to changing norms surrounding intimidation and aggression. Intolerance of acts of bullying must be the perspective widely embraced and shared by both staff and students, not something merely imposed upon students by administrative decree.

Unfortunately, even when students and teachers appear, at least superficially, solidly unified against bullying, certain deeply rooted prejudices that favor bullies over victims remain somewhat resistant to change. A study of perceptions and attitudes among middle school students and teachers in Pennsylvania (Crothers and Kolbert 2004) found relatively weak confidence in the utility of anti-bullying curricula and role-playing strategies. Rather, both groups seemed to prefer an approach that encourages victims to be more assertive and to stand up for themselves. Apparently, the long-standing “blame the victim” viewpoint suggesting that victims are in some way responsible for their mistreatment remains largely impenetrable.

Notwithstanding the widespread adoption of various school-based anti-bullying curricula, the empirical evidence with regard to their preventive value is disappointing. An analysis of anti-bullying interventions implemented over a 25-year time period, from 1980 to 2004, concluded that the effectiveness of bullying prevention programs was modest at best, and mostly had an impact on knowledge and attitudes rather than actual bullying behavior (Merrell et al. 2008).

Regardless of the approach to prevention and enforcement, it remains extremely difficult to convince bullies that their actions are disadvantageous to themselves, besides being injurious to the targets of their abuse. Even with threats of punishment, some students see bullying as a positive thing – for themselves, that is.

All too often, bullies gain from their use of power over weaker classmates. Not only do they come away with their victim’s lunch money or property, but they are typically admired for their supremacy. Researchers at the University of Virginia found that bullies are, based on peer nominations, overwhelmingly considered to be the more popular students in class (Thunfors and Cornell 2008).

Of course, the problem of bullying and its solution goes way beyond the schoolyard. In our competitive society – in sports, in corporate America, and especially in politics – we admire aggressors and pity pushovers. Schools need to change, but then so does society.

**School Size and Climate**

Public schools, especially high schools, vary widely in terms of their enrollments, from a couple of hundred to several thousand. Whereas college students can make a choice between attending a large or a small campus, their younger and less mature counterparts
at the secondary school level are generally assigned to attend whatever school lies in their district no matter the size or their emotional readiness. For some adolescents, attending a sprawling school with thousands of students can be quite daunting and a significant threat to their sense of comfort and well-being. Confronting a sea of unfamiliar faces, students can easily feel alienated, depersonalized, and disconnected from the school environment.

Columbine High School and Marysville-Pilchuck High School, for example, enrolled nearly 2,000 and 1,200 students respectively at the time of their mass shooting incidents. Large enrollment can also have an impact on the effectiveness of oversight. With so many students to supervise, teachers, guidance counselors, and coaches have tenuous emotional links to their charges, and thus have more difficulty identifying warning signs and addressing issues like depression and anxiety, academic failure, and the potential for violent behavior. In 2013, the national average of students per guidance counselor was a whopping 470, nearly twice the recommended number as per the American School Counselor Association (2014). Even worse, more than one in five US high schools did not employ any guidance counselors during the year prior (US Department of Education 2014). Furthermore, Haller (1992) found that school size was significantly related to problems of disorder and truancy, even after controlling for race, disadvantage, achievement level, and location.

Despite the negative effects of large school size, the United States has a long tradition of consolidating small schools for the sake of economic efficiency. A century ago, for example, there were more than a quarter of a million public schools in the United States, a number which has since plummeted to just about 100,000 (Snyder and Dillow 2012). As the number of schools declined, school size naturally increased. Due to the large variation in school size, averages tend to be deceptive: in 1995–1996, elementary and secondary schools had an average of around 500 students each, yet less than 2% of students attended districts with fewer than 500 students (Snyder, Hoffman, and Geddes 1998). In contrast, during the 2009–2010 school year, only 6.5% of districts enrolled over 10,000 children, yet these schools accounted for over half of the nation’s school population (Snyder and Dillow 2012).

Expanding school enrollment may have been necessary a half-century ago when millions upon millions of baby boomers flooded our nation’s schools. In fact, US school enrollment nearly doubled (from 28 million to 51 million) between the 1949–1950 and the 1972–1973 school years (Snyder and Dillow 2012). With the exception of slight increases between 1985 and 2006, however, school enrollments have remained fairly stable since the 1970s. In light of this, it would seem reasonable and prudent to control enrollments and school size.

While completely dismantling massive schools is not a viable solution to reducing school violence, large schools should make efforts to develop smaller internal communities to foster a sense of attachment and school spirit for students. Many universities have developed a “residential college” or “house system” model for precisely this purpose in response to large enrollment sizes, where students can number in the tens of thousands. While most high schools cannot incorporate the residential component of these university models, they can sort students into subschools with their own academic advisors, deans, and guidance counselors so that students have a more personal relationship with adults in their support networks.
Discussion

For millions of Americans, the notion of terrorism evokes frightful images of hijacked airliners crashing into the Twin Towers of New York City and suicide bombers wreaking devastation upon countless innocents. However, years before the identities of Osama bin Laden and al-Qaeda became widely recognized, another form of terror – based not on religious fundamentalism but on adolescent rage – had surfaced in once-obscure places like Moses Lake, Washington; Pearl, Mississippi; and Jonesboro, Arkansas. And the word “Columbine,” once reflecting the colorful beauty of the Colorado state flower, has become linked to the horror of children beinggunned down in the halls of their school. Adding to the irony, the diary of one of the young shooters from Columbine High described a fantasy about following up the massacre by flying an airplane into the skyline of New York; of course, the journal entry was made years before the Twin Towers collapsed.

It may seem a stretch to characterize school shootings as a form of terrorism. Yet, the issues of international terror and schoolyard terror are remarkably similar. Prompted by a string of school massacres in the late 1990s, school administrators were eager to profile dangerous students, just as airport security officials strived to identify violent extremists among those who boarded commercial airplanes. And while the US Congress voted to permit airline pilots to carry weapons in the cockpit to guard against a possible in-air takeover, state legislators around the country debated the wisdom of arming school teachers. Moreover, the fine balance between privacy and security that troubles many Americans with regard to the ongoing “War on Terror” has been a thorny matter as well at educational institutions of all levels, from elementary schools to colleges.

As widespread fear and apprehension over the safety of students pushed school security onto the national agenda, the body of research and scholarship on the topic of school violence and its prevention grew dramatically. While at one time the theme would have seemed far too narrow, in 2002 the Journal of School Violence, an interdisciplinary quarterly on theory, research, and practice focused only on violence and disorder in schools, released its inaugural issue. In addition, based on key terms included in the Social Science Abstracts, the focus on school violence in particular rose significantly after the late 1990s’ string of school rampages. Whereas 1% of all violent-related scholarly articles published between 1985 and 1999 concerned school violence, the percentage doubled to 2% from 2000 through 2014.

The growth in interest and concern has also been reflected outside of the academic literature. As one measure, the New York Times, widely considered the newspaper of record, has published more than 1,500 articles containing the phrase “school shooting” since the early 1990s, a pattern that reveals the impact of the most high-profile incidents. As shown in Figure 1.3, the count of Times articles increased in the late 1990s when several multiple-victim shootings took place, and then spiked in 1999 following the Columbine massacre. After a steady decline through the 2000s, the number of articles soared once again in late 2012 into 2013 in the aftermath of the Sandy Hook shooting spree. Meanwhile, a cottage industry emerged for school security hardware, technology, guidebooks, and consulting.

Whatever the enduring impact of the Columbine massacre on public consciousness and the operation of schools at all academic levels, the shooting spree at Sandy Hook became the new watershed in terms of school safety and security. Not only was the victim count double that of Columbine, but the tender age of the victims seared through
the public consciousness. Hopefully, there will never be another episode as devastating at the Sandy Hook shooting. Even so, there will continue to be enough isolated incidents in which schoolchildren are slain that the impact will endure.

While attention to tragic school shootings is certainly appropriate, the hyperfocus on isolated cases of gun violence in school and the fortress-like approach to security carry significant drawbacks in terms of maintaining a school climate that is conducive to learning. Certain preventative measures, particularly those that are disproportionate to the actual risk, can serve as constant reminders for impressionable youngsters that schools are under siege. In addition, regarding school shootings as the “new normal” can become a self-fulfilling prophesy by which disgruntled, alienated adolescents continue to perceive violence as the best way to resolve conflict. In the long run, a low-key approach may be the most effective in promoting a safe school environment and alleviating fears.

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