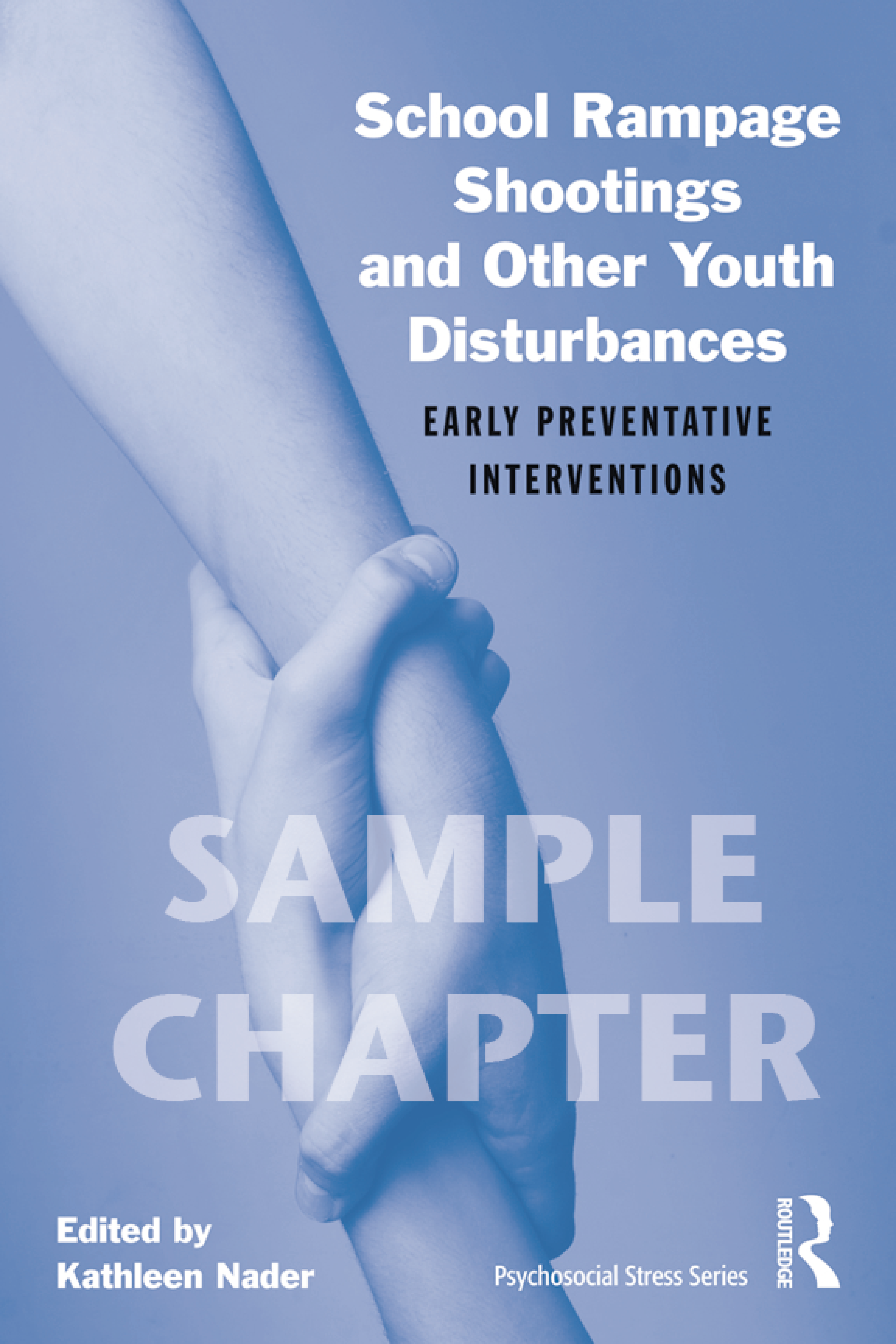

School Rampage Shootings and Other Youth Disturbances

EARLY PREVENTATIVE INTERVENTIONS

SAMPLE
CHAPTER

Edited by
Kathleen Nader

Psychosocial Stress Series

ROUTLEDGE

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CHAPTER 1

School Shootings and Other Youth Problems

The Need for Early Preventive Interventions

Kathleen Nader

School safety is important to learning and to well being (Allen, Cornell, Lorek, & Sheras, 2008; American Psychological Association [APA] Zero Tolerance Task Force, 2008; Robers, Zhang, Truman, Snyder, 2010). Aggression in schools has long been a problem. Although barricaded captive events and rampage or targeted shootings are infrequent occurrences (Borum, Cornell, Modzeleski, & Jimerson, 2010; Daniels, Royster, Vecchi, & Pshenishy, 2010a), their long-term impact on schools, individuals, and families can be significant. In addition to school preparedness for the possibility of such events is the need for early preventive interventions that reduce the likelihood of their occurrence. Because some of the traits, circumstances, and conditions associated with the individuals who commit such events are also associated with other youth difficulties, engaging in early interventions such as those presented in the second half of this book may prevent a number of youth and later adult problems including aggression.

Section I of this book examines school shooters, especially youth-targeted school shooters, as well as the family, school, and community environmental conditions associated with school shootings. A number of interventions may assist the reduction of aggression, other delinquency, and psychopathology in general as well as reduce the likelihood of targeted (sometimes called rampage) shootings by those with the potential to carry them out. In Section II of this book, methods to improve social skills, coping skills, self-control, empathy, and environmental conditions for elementary school children are described. Addressing insecure and disorganized attachments and creating supportive environments with increased connection among individuals are also important to the prevention of school violence and other youth-related problems.

SCHOOL SHOOTINGS

Incidence of Violence in Schools

In 2006, homicide was the second leading cause of death for youth ages 10 to 24 (5,958 murdered; CDC 2009a) (Suicide was the third leading cause for adolescents in 2002; Gould et al., 2006). The incidence of violence, including violence resulting in deaths, is greater outside of schools than within schools (National School Safety Center [NSSC], 2006). Arrest rates for murder increased from 1980 to 1993 and declined through 1997 (Snyder, & Sickmund, 1999). The number of youth arrested for committing homicides decreased from 3,092 (1993) to 1,354 (1998) (Brooks, Schiraldi & Ziedenberg, 2000).

The 1994 Gun-Free Schools Act requires expulsion of students carrying firearms to schools. During the 1996–1997 school year, 5,724 students were expelled, and in 1997–1998, 3,927 students were expelled for carrying weapons to school (NSSC, 2006). Nevertheless, in 2007, youth in grades 9–12 reported carrying a gun or other weapon on school grounds—28.5% males versus 7.5% of females; 5.2% carried a gun on school grounds (CDC, 2008b).

On school property, 7%–8% of students sampled were threatened or injured with a weapon in 1993, 1995, 1997, and 1998 (Kaufman et al., 1999, 2000). Although response rates suggest that statistics are incomplete, a 2007 nationally representative sample of youth grades 9–12 reported threat rates similar to the 90s (CDC, 2008b). That is, nearly 8% of youth (7.8%) reported being threatened or injured with a weapon on school property one or more times in the past 12 months. In addition, 12.5% of reporting students were in physical fights in the past 12 months (16.8% of male students; 8.5% of female students fought on school property). During the 2008–2009 school year, an estimated 55.6 million students were enrolled in schools (prekindergarten through high school; Snyder & Dillow, 2010). In 2008, there were approximately 1.2 million victims of nonfatal crimes at school among students ages 12–18 (e.g., 619,000 thefts, 629,800 violent crimes) (Robers et al., 2010). Again in 2009, 8% of students reported being threatened or injured with a weapon, such as a gun, knife, or club, on school property.

School-associated student homicide rates decreased between 1992 and 2006 and have remained relatively stable in recent years (CDC, 2008). In 2008–2009, there were approximately 38 school-associated violent deaths among youth ages 5–18 (24 homicides; 14 suicides). Like other youth homicides, most school-associated homicides are generally gang or drug related or otherwise associated with criminal activity or interpersonal disputes (Borum et al., 2010). Targeted school shootings are rare. Between 1996 and 2005, 17 school shootings perpetrated by students, with multiple victims, resulted in deaths of 39 youth and 13 adults as well as 111 physical injuries (Kaiser, 2005; see Table 1.1). The numbers of deaths and injuries reported do not include other victims, such as the many students and families who suffered psychological traumas and traumatic grief, as well as loss of a sense of safety at school for students, teachers, other school personnel, and parents. In recent years, school shootings and stabbings have occurred all over the world (Allen et al., 2008).

Manifestation of Aggression

Multiple pathways may lead to aggression (Cornell, 1990; Cornell, Benedek, & Benedek, 1987; Nader, 2008). Among factors associated with aggression are environments (e.g., home, community), attachment issues, age, humiliation, moral socialization, personality, neurobiology, past traumas, and information processing. For example, from an information processing perspective, Sutton et al. (1999) suggest that maladaptive behaviors (e.g., persistent aggression) are the result of deficits in any one or more of the steps identified by Crick and Dodge (1994) in a child's behavioral responses to social stimuli: (1) encoding of cues, (2) interpretation of encoded cues, (3) clarification of goals, (4) response access or construction, (5) response decision, and (6) behavioral enactment (Peeters, Cillessen, & Scholte, 2010). No single factor or trait explains violence, and the traits identified in shooters can be found in those who do not commit aggression. Additionally, youth's skills, traits, and styles combine in a complex way to influence behavioral and social outcomes (Angold & Heim, 2007; Nader, 2008). For example, genetic vulnerabilities combine with home, community, and/or traumatic adversities to result in specific types of psychopathology. Cumulative or extreme stresses may contribute to emotional reactivity (Nader, 2008; Sapolsky, 1998; van der Kolk & Sapporta, 1991). One skill may influence multiple interrelated skills or outcomes. For example, the ability to take the perspective of another is important to social skills including the ability to influence others, express and understand humor, and display empathy (Semrud-Clikeman & Glass, 2010). Empathy and moral development are

TABLE 1.1 Completed U.S. School Shootings With Multiple Victims (1966 Onward)

School and University Mass Shootings (from 1966)	**Shooter**	**Event and Number of Deaths/Injuries**
August 1, 1966 University of Texas–Austin	Charles Whitman (CJW)	Whitman strangled his mother and stabbed his wife the night before the shooting. The next morning he arrived at school and began to ascend the UT clock tower. His first victim was a receptionist, whom he knocked unconscious. She later died. He then shot two more people before he reached the upper deck of the tower. There, he unpacked his weapons and proceeded to shoot people at random. Whitman killed a total of 15 people, including his wife and mother, and injured 31.
January 20, 1983 Parkway South Junior High School St. Louis, Missouri	David F. Lawler (DFL)	Lawler entered a classroom and shot two classmates, killing one and injuring the other. He then shot and killed himself.
November 1, 1991 University of Iowa–Iowa City	Gang Lu (GL)	Lu, a graduate student, was angry that his dissertation did not receive an award. He went to school carrying a revolver and handgun with the intent of shooting specifically targeted people, including his academic advisor and the student who won the award. He killed five people in total, and severely injured another. He committed suicide.
May 1, 1992 Lindhurst High School Olivehurst, California	Eric Houston (EH) Age 20	Houston was being laid off because he had no high school diploma. He killed a teacher who flunked him and went on a shooting spree in the hallways, holding 70–85 students hostage for over 8 hours. He killed three students and injured nine.

December 14, 1992 Simon's Rock College of Bard Great Barrington, Massachusetts	Wayne Lo (WL)	Wayne took an SKS rifle to school and shot six people, killing two and injuring four.
November 15, 1995 Richland High School Lynnville, Tennessee	Jamie Rouse (JR) Age 17	Rouse walked into the school and started shooting with a semiautomatic weapon at the first teacher he saw. He killed one teacher and one student and seriously injured another teacher. He was wrestled to the ground before he could hurt anyone else.
February 2, 1996 Frontier Junior High School Moses Lake, Washington	Barry Loukaitis (BL)	Loukaitis, dressed up like a western gunslinger, walked into his algebra classroom with two pistols and a rifle, and proceeded to shoot three students and his teacher. Three were killed and one injured.
October 1, 1997 Pearl High School Pearl, Mississippi	Luke Woodham (LW) Age 16	Woodham killed his mother and then went to school. With a rifle he killed two girls and wounded seven other students. He was stopped by the assistant principal when trying to go to the middle school to continue his rampage.
December 1, 1997 Heath High School West Paducah, Kentucky	Michael Carneal (MC) Age 14	Carneal used a pistol to kill three students and wound five, after they participated in a school prayer circle in the lobby of the school and were starting to go to class.
December 15, 1997 Stamps, Arkansas	Joseph "Colt" Todd (JT) Age 14	Todd used sniper fire to shoot two students outside of their high school.
February 19, 1997 Bethel Regional High School Bethel, Alaska	Evan Ramsey (ER)	Ramsey went to school with a shotgun. He shot three students, killing one and injuring two. He then shot and killed his principal.

Continued

TABLE 1.1 (*Continued*) Completed U.S. School Shootings With Multiple Victims (1966 Onward)

School and University Mass Shootings (from 1966)	Shooter	Event and Number of Deaths/Injuries
March 24, 1998 Jonesboro Jonesboro, Arkansas	Andrew Golden & Mitchell Johnson (AG & MJ)	Golden and Johnson dressed in camouflage, went to school, and shot 15 people at their school's playground. Five were killed.
May 21, 1998 Thurston High School Springfield, Oregon	Kip Kinkel (KK) Age 15	Kinkel killed two students in the hall and wounded 22 in the cafeteria firing 50 rounds from a semiautomatic pistol and two other guns. He had killed his parents before going to school.
April, 1998 James W. Parker School Edinboro, PA	Andrew Wurst (AW) Age 14	Wurst killed a teacher and wounded two students at an eighth-grade dance. Another teacher was grazed with a bullet but did not require medical treatment.
April 20, 1999 Columbine High School Littleton, Colorado	Eric Harris and Dylan Klebold (EDH & DK)	Harris and Klebold killed one teacher and 12 students. They wounded 24 others before committing suicide. They had two 9-mm firearms and two 12-gauge shotguns. Their 99 homemade bombs did not detonate.
May 20, 1999 Heritage High School Conyers, Georgia	Thomas Solomon Jr. (TJS)	Solomon went to school with a .22 rifle and began shooting at random. He injured 6 students.
December 6, 1999 Fort Gibson Middle School Fort Gibson, Oklahoma	Seth Trickey Age 13	Trickey shot a semiautomatic weapon into a crowd of about 70 students in front of the school. He wounded four students.
March 5, 2001 Santana High School Santee, California	Charles Andrew Williams (CAW) Age 13	Williams went to school with a .22 and began shooting in the men's bathroom where he killed 2 students. He proceeded to injure 13 others.

March 22, 2001 Granite Hills High School Granite Hills, California	Jason Hoffman (JH) Age 18	Hoffman knelt next to a tree on the school grounds and fired at fellow students with a shotgun. He wounded one teacher and three students. He was wounded by a policeman.
September 24, 2003 Rocori High School Cold Spring, Minnesota	John Jason McLaughlin (JJM) Age 15	McLaughlin killed two students with a pistol.
September 4, 2004 Columbia High School White East Greenbush, NY	Jon William Romano Age 16	Referenced Columbine but only wounded one.
March 21, 2005 Red Lake High School, Red Lake, MN	Jeffrey Weise (JW) Age 16	Weise killed his grandfather and grandfather's companion, one teacher, a security guard, and five students. He then killed himself.
November 8, 2005 Campbell County High School Jacksboro, Tennessee	Kenneth Bartley Jr. (KB) Age 15	Bartley killed an assistant principal and seriously wounded two other administrators. May have been accidental weapon discharge.
March 14, 2006 Pine Middle School White Reno, Nevada	James Scott Newman Age 14	Studied Columbine. Wounded two.
August 30, 2006 Orange High School Hillsborough, North Carolina	Alvaro Rafael Castillo Age 18	Studied and referenced Columbine. Killed one.
September 29, 2006 Weston High School Cazenovia, Wisconsin	Eric Hainstock (EHa) Age 15	Hainstock, armed with two guns, killed the school principal in a struggle over one of the guns.

Continued

TABLE 1.1 (*Continued*) Completed U.S. School Shootings With Multiple Victims (1966 Onward)

School and University Mass Shootings (from 1966)	**Shooter**	**Event and Number of Deaths/Injuries**
April 16, 2007 Virginia Tech Blacksburg, Virginia	Seung-Hui Cho (S-HC) Age 23	Cho Seung-Hui killed two in a dorm; 2 hours later he killed 30 and wounded 15 in a classroom building. He then killed himself.
October 10, 2007 Success Academy White Cleveland, Ohio	Asa Coon Age 14	Killed one, wounded five.
February 14. 2008 Northern Illinois University DeKalb, Illinois	Steven Kazmierczak Age 27	A former NIU student stepped from behind a screen on a lecture hall stage; with four guns, he fired dozens of shots into a geology class, then shot himself; killed five; injured more than a dozen.

Note: This list may not be comprehensive. It is limited to cases occurring in the U.S. Listings are taken from newspaper stories (e.g., *New York Times, Chicago Sun Times*) and from texts and articles by Daniels et al., 2004; Davis, 2004; Larkin, 2009; Pollack, 2004; and Stearns, 2008.

among factors that are important to self-regulation. In general, bullying (e.g., relational or physical aggression) is associated with moral disengagement and lack of emotional understanding. However, the socially intelligent youth has the option to use this skill peacefully or aggressively; some social intelligence is needed in order to engage in concealed relational aggression (Peeters et al., 2010). Genetic predispositions may combine with parental modeling such that youth are prone to and learn to resolve interpersonal conflict with antagonism/aggression. In such cases, lack of social skills combined with coercive behaviors may lead to peer rejection, and noncompliance may lead to failure in school. In turn, these failures may exacerbate problems. Additionally, time of onset is a factor. Early onset patterns of aggression emerge before age 6 and may translate into adult criminality (Bennett, Elliot, & Peters, 2005). As early as kindergarten, elementary school teachers may assist the increase of social skills and self-control, as well as the reduction of social and behavioral problems.

School Shootings With Multiple Deaths and/or Injuries

In addition to school shootings aimed at one or two individuals because of disputes, power seeking, or gang activities, there are shootings aimed at multiple students. Such shootings, sometimes referred to as rampage or targeted school shootings/attacks or barricaded captive situations (depending on the circumstances), may be adult or youth perpetrated. Although full information about perpetrators of these events is usually not available (e.g., withheld for legal reasons; lack of thorough findings prior to events) and newspaper accounts are not always accurate (Borum et al., 2010; Lieberman, 2006), some information is provided in the psychological investigations that follow these events (see Chapter 2). As will be discussed in the pages to follow and in the chapters of this book, what is known underscores the need for, among other things, the treatment of traumas, complicated grief, and other mental disorders, as well as the reduction of bullying, teaching youth skills to deal with bullying and other adversities, and the provision of early interventions for faulty caretaker–youth attachments.

CHILD-RELATED VARIABLES THAT INFLUENCE DEVELOPMENT

Life provides numerous stressors for youth. Early attachment relationships (Chapters 6 and 10) help to shape a youth's ongoing ability to cope with stress and adversity. The nature of a youth's personality, neurobiology, social skills (e.g., perspective taking/empathy, social ease), and coping skills influence how they respond to stressors, including the likelihood of aggression or suicidality.

Neurobiology

As discussed in Chapter 2, genetic (e.g., low MAOA activity) and neurochemical characteristics are associated with aggression as well as with internalizing (e.g., serotonin system and depression) and other externalizing disorders (Nader, 2008). Changes in hormone levels, changes in reactivity to neurochemicals (such as cortisol reactivity), specific brain injury, and activation of the fight–flight neurochemistry have been linked to aggression (McBurnett, King, & Scarpa, 2003; Sapolsky, 1998). Serotonin deficiencies, for example, have been associated with low mood, lack of willpower, poor appetite control, and the dysregulation of aggression (Grigorenko, 2002; Schmidt & Fox, 2002). Although care must be taken in prescribing drugs for youth, the correction of deficits by use of serotonin reuptake inhibitors decreases aggression, ameliorates anxiety, and induces secure attachment phenomena. Additionally, even though from a neurobiological perspective most aggression is not associated with brain deficits, when the brain is implicated in the expression of aggression, a number of brain deficits, especially right hemispheric deficits, are found to be associated with aggression (Kaiser, 2005). Violence and antisocial behaviors have been linked to abnormal prefrontal circuitry, especially on the right side.

Previous traumatization has been among associations with behavioral problems including aggression and suicidality. Either over-activation (e.g., fear or fight-inducing traumas) or under-activation (e.g., neglect) of important neural systems during critical periods may profoundly affect child development (Perry, Pollard, Blakely, Baker & Vigilante, 1995). For example, extreme stress may disrupt the functioning of the cortex, which is critically involved in inhibiting the stress response as well as in attention, organization, self-regulation, and planning (Rothbart & Rueda, 2005; Stevens et al., 2007; Stein & Kendall, 2004) (see Trauma and Adversity, to come).

Social and Coping Skills

Social and coping skills deficits have been associated with adjustment problems and behavioral disorders (Chapter 5). Nonproductive coping strategies have moderated the relationship between personality characteristics and delinquency (Hasking, 2007; Chapter 5). Aspects of self-regulation are associated with social and coping competence—for example, the ability to delay gratification and to inhibit reactions is important to coping and social interaction (Posner & Rothbart, 2007). Research indicates that, compared to youth with poor self-regulation, youth with good self-regulation score higher on measures of social competence, as well as academic achievement, grades, and coping (Buckner, Mezzacappa, & Beardslee, 2009). They score lower on behavioral problems, anxiety, and depression. Youth high in self-regulation appear to respond in more adaptive manners to real past and hypothetical stressors. Buckner et al. (2009) suggest that self-regulation skills may help children cope with adversity in manners that help to alleviate distress and to resolve problems.

Evidence suggests that interventions can integrate prevention of suicide and violence by focusing on their joint risk and protective factors. Among these factors are coping skills and family functioning (Lubell & Vetter, 2006). Although it has been suggested that, under continued harassment, anyone might eventually erupt into violence, become self-destructive, or suffer other severe adverse emotional effects (see Daniels et al., 2010b), well-developed coping skills reduce the likelihood of aggression (Chapter 5).

Empathy

Empathy is a multidimensional concept that encompasses cognitive as well as emotional dimensions, including the ability to take the perspective of others, to correctly identify their subjective reality, and to experience appropriate affective responses to the perception of others' emotional states (e.g., empathic concern, sharing the emotions of the other; Grynberg, Luminet, Corneille, Grèzes, & Berthoz, 2010). Martin Henley suggests that lack of social skill development and inadequacies of emotional intelligence handicap disruptive youth, such as those who bully, talk back, or refuse to finish tasks (interview in Hopkins, 2004). These youth may have shortcomings in their abilities to understand the impact of their behaviors on others as well as to control impulses, anticipate consequences, and manage stress.

Alexithymia refers to a deficit in the ability to identify and describe one's own emotions, as well as a tendency to deal with superficial themes and to avoid emotional/affective thinking (such avoidance is referred to as *externally oriented thinking*) (Frewen et al., 2008; Grynberg et al., 2010). Alexithymia has been found in some traumatized individuals and in association with somatic and other mental illnesses (Frewen et al., 2008). Evidence suggests a correlation between empathy (e.g., perspective taking, empathic concern) and the ability to identify and describe personal emotions as well as a negative association between empathy and externally oriented thinking (i.e., when empathy is higher, externally oriented thinking is lower) (Grynberg et al., 2010; Guttman & Laporte, 2002). Youth who perpetrate social cruelty (e.g., relational or overtly aggressive bullying) tend to lack empathy, compassion, and perspective taking (Cunningham, 2007).

Processing of facial expressions and other indicators of emotion is important to human interaction (Douglas, & Porter, 2010). Traumatic or depressive reactions may interfere with components of empathy such as information processing (e.g., perspective taking and accurate recognition of others' emotions). For example, individuals who experience violence or exclusion may attribute malicious intent to others more often than their peers, even in ambiguous situations (Crick & Dodge, 1996). Depressive symptoms have been associated with negative interpersonal expectations and perceptions, biased information processing in interpersonal interactions, and maladaptive relationship-oriented beliefs (Hammen & Rudolph, 2003). For example, depressed individuals more often than others see sadness and less often see happiness in neutral faces (Douglas & Porter, 2010). Cognitive biases may contribute to aggression (Nader, 2008). Aggressive youth may have biases that endorse the value of aggression. Aggressive individuals tend more often to demonstrate a hostile attribution bias (Georgiou & Stavrinides, 2008). That is, they more often see hostile intent in ambiguous or neutral situations than others.

ENVIRONMENTAL FACTORS

Family, school, community, and national environments influence outcomes such as effective coping or aggression, exclusion or support, and risk or resilience in youth. For example, socioeconomic status (SES) and community violence have been implicated (Klein & Cornell, 2010). A number of school environmental factors have been linked to school violence (see Chapter 3; "The Caring School Community Project," Chapter 7; and "Peaceful Schools Project," Chapter 8). School size, climate or social atmosphere, connection, the cycle of victimization and aggression, bullying and an atmosphere that condones it, among other factors, have been linked to school outcomes (Gregory, Cornell, Fan, Sheras, Shih, & Huang, 2010). Creating a safe environment and enhancing rapport between adults and students is a part of prevention, as well as a part of averting potential aggression. As Chapters 2 and 8 elaborate, programs that reduce the acceptability of bullying behaviors, increase perceived adult responsiveness, and promote conflict resolution have been linked to reductions in bullying and other aggression. Providing youth with methods of coping with aggressors has also proven effective.

The School Environment—School Size

Among the multiple school-related factors that influence behavioral and mental health outcomes (Werblow, Robinson, & Duesbery, 2010), school size is associated with mixed findings influenced by differences in study methods (e.g., variable inclusion, source of data) and in school and community characteristics. For example, demographics such as SES (e.g., low SES), ethnic make-up of schools (e.g., ethnic diversity/homogeneity), and local crime rates (e.g., high crime) are associated with outcomes (e.g., antisocial aggressiveness, externalizing behaviors; see Klein & Cornell, 2010 for a summary). In addition, the frequency of problems must be distinguished from the percentage rate of their occurrence. That is, larger schools may have more reported behavior problems but may have a smaller percentage of problems for their population than smaller schools. For example, Klein and Cornell (2010) found a higher frequency but a lower rate of recorded bullying offenses in larger schools. More study is needed to discover the meaning of findings. For example, do increased bullying discipline violations reflect stricter enforcement in racially diverse schools or the impact of diversity? Is school size, location, or demographics the key factor in outcomes? In the case of physical attacks, Klein and Cornell (2010) found that the danger did not appear to be linked to urban location or school size, but instead to the proportion of low-income, minority students.

Although small and larger school-size are discussed here, some research suggests an optimal school size related to some outcomes. Six studies found an "inverted U" relationship between school size and achievement. Achievement increased with school size up to an optimum size then began to decline as school size exceeded the optimum (Leithwood & Jantzi, 2009).

Small Schools

Proponents of small schools suggest the following upper limits for schools: (a) for elementary schools, the recommended range is 300 to 400 students; and (b) for secondary schools, the range is 400 to 800 (Cotton, 1996; Leithwood & Jantzi, 2009; Werblow & Duesbery, 2009). Many investigators conclude that no school should have more than 400 or 500 students. Related to achievement and student attendance and retention rates, Leithwood and Jantzi (2009) concluded that especially struggling and economically disadvantaged students benefit from smaller schools. A body of research has demonstrated that small schools have greater parent participation, better student engagement in school (i.e., more participation, identification, and connection with school), more positive school climates, warmer relationships between adults and students, more opportunity for school involvement, better school achievement, and fewer behavioral problems (Abbott, Joireman, & Stroh, 2002; Cotton, 1996; Klein & Cornell, 2010; Leithwood & Jantzi, 2009; Werblow & Duesbery, 2009).

Larger Schools

Arguments in favor of large schools point out their economic and resource benefits. In addition to economical advantages (e.g., bulk purchasing; Klein & Cornell, 2010), large schools sometimes provide a greater variety of courses (Leithwood & Jantzi, 2009; Monk & Haller, 1993). Although findings are mixed for achievement, some research suggests higher scores for middle and high school students in larger schools (Klein & Cornell, 2010).

Some evidence suggests an absence of correlation between large school size and some externalizing problems (e.g., bullying; Klein & Cornell, 2010). In a large Virginia statewide study of high school size and victimization, according to school records, the relationship between school size and bullying, threat, and attack violations was negative (Klein & Cornell, 2010). That is, larger schools had a lower rate of violations than smaller schools. Because school principals and their assistants can only deal with a fixed number of discipline cases each day, it is possible that less serious cases were not recorded. Student reports of their own victimization showed no correlations with school size. In contrast, a nationally representative longitudinal study of 2,232 elementary schoolchildren demonstrated that school size was associated with an increased risk of being victimized by bullying (Bowes et al., 2009).

The School Environment—Peer Victimization

Vying for social status is among normal human behaviors. Vying for status is among forms of bullying and relational aggression as well. Victims, bullies, and bully-victims are at risk for a number of negative outcomes, such as absenteeism, alcohol abuse, antisocial behaviors, cigarette smoking, and use of other forms of violence, as well as poor psychosocial adjustment, poor academic achievement, loneliness, rejection, depression, anxiety, and poor self-esteem (Beran & Lupart, 2009; Hawker & Boulton, 2000; Nansel, Overpeck, Haynie et al., 2003; Nansel, Overpeck, Pilla et al., 2001; Phillips, 2007). Findings for prevalence of bullying are influenced by definitional criteria (Cornell & Bandyopadhyay, 2010). In a study of prevalence rates of bullying victimization reported for the 2 months prior to questioning, in a nationally representative sample of grades 6–10, Wang, Ionnatti, and Nansel (2009) stated that 12.8% of students reported being physically bullied, 36.5% were verbally bullied, 41.0% relationally bullied, and 9.8% cyber bullied. Bullying and the impact of humiliation and helplessness are discussed in more detail in Chapter 2.

Vying for Social Status

According to Kaiser (2005), all adolescent primates, especially males, strive for social status. For animals and humans, aggression has been linked to social status. *Rough and tumble* (R&T) play, for example, demonstrates this link (Nader, 2008). R&T behavior combines (1) gentle contact such as open-handed hitting, pushing, or teasing; (2) positive affect such as smiling or laughing; and (3) remaining together after the *rough* act (Pellegrini, 2003). *Aggressive* behavior, in contrast, combines (1) hard contact such as closed-handed hitting or kicking; (2) negative affect such as frowning or crying; and (3) separation after the *aggressive* act. Although, R&T and aggression are separate systems, and they appear to be linked to different neural and endocrine controls, Pellegrini (2003) demonstrated that R&T practices are used to establish dominance in adolescence. R&T permits youth to evaluate the strength of others or to establish their own dominance. In most mammalian species and cultures, males engage in more R&T than females (Pellegrini & Smith, 1998). Females, in contrast, primarily use verbal rather than physical means to gain or keep resources. For adolescents, the stronger boy may escalate the intensity of behaviors such as fighting if the weaker boy does not yield or show distress. Vying for status has been a part of bullying and relational aggression.

Peer Reinforcement and the Cycle of Violence

Aggressors and victims help to shape each other's behaviors, and peers reinforce the pattern (Nader, 2008; Chapter 8). In a longitudinal study, Schwartz et al. (1993) found that aggressive boys targeted youth who were not well regarded. The peer group environment fostered chronic victimization by offering positive regard to aggressors for agonistic behaviors towards victims but not for aggression toward nonvictims. Additionally, in the Schwartz et al. study, boys reinforced the aggressive behaviors of their attackers, for example, by permitting domination or giving up objects. As time progressed, peers rarely rewarded and frequently refused persuasion attempts by victim boys. The more boys were victimized, the less peers liked them. Thus, early victimization may result in additional or ongoing victimization by exclusion or other forms of relational aggression as well as overt aggression. In turn, repeated victimization may lead to humiliation and rage that ultimately erupts into violence. Chronically victimized boys have been among those who have committed school shootings (including targeted school shootings) or suicides (Seals & Young, 2003). Exposure to school shootings (or suicides) can traumatize youth. A history of trauma is among the factors associated with subsequent aggressiveness in youth (Greenwald, 2002; Nader, 2008).

Averted School Shootings

A number of targeted shootings (or shooting rampages) have been averted. An examination of schools where planned shootings have been averted has demonstrated some of the measures that can be taken to prevent in-school violence (O'Toole & Critical Incident Response Group, 2000). Methods used are elaborated in Table 1.2. *Zero tolerance* policies that impose severe sanctions (e.g., suspension or expulsion) even for minor offenses in hopes of preventing more serious ones have not proven effective in preventing school violence (Allen et al., 2008; APA Zero Tolerance Task Force, 2008; Borum et al., 2010). Threat assessment methods have received greater endorsement. Youth often communicate their plans for targeted acts of violence. High-level threats are specific and detailed; the individual has taken steps to carry out the plan (Daniels et al., 2010b). Creating a safe environment in which youth feel free to tell what they have been told or overheard is important. In addition to establishing a good rapport with all students, making an effort to establish a relationship with at-risk youth or those who have shown warning signs is also important. Responding immediately to any reports of potential rampages is essential. As documented by student reports and school records, Cornell, Sheras, Gregory, and Fan (2009) found that schools using the Virginia threat assessment method reported less bullying, greater willingness to seek help related to threats of violence or bullying, more positive perceptions of school climate, and fewer long-term suspensions than schools using other threat assessment approaches.

Home and Community Environments

A number of home and community issues influence aggressive and other outcomes in youth. When combined with adversity, parental mental health, parenting and attachment styles (Chung & Steinberg,

TABLE 1.2 Targeted School Violence Prevention

Method	Aspects of the Method
Safe climate	Maintaining a safe and positive school climate
	Mutual respect between adults and students
	Rapport building—developing positive connections with students, treating students with dignity and respect, compassionate interactions, accentuating students' strengths, open and trusting relationships with families
	The visible presence of school personnel throughout the school
	Encouragement for students to communicate rumors/concerns or weapons
	Use of a trained, uniformed school resource officer
Staff training	Watchfulness—ever-present awareness of conditions in and around the school • reporting any altercation, behavioral changes, indicators of mental illness, or suspect body language • taking all threats seriously
	Crisis planning • methods of response • planning and practice for worst case scenarios • planning for the aftermath of events
	Anticipating police and media response
Liaison	Clear communication and liaison with law enforcement and mental health professionals before, during, and after an event
Threat assessment (e.g., see Virginia Threat Assessment Model, Dallas Threat of Violence Risk Assessment)	Use of a threat assessment team (e.g., principal or assistant principal, school resource officer or law enforcement officer, and a psychologist, counselor, or social worker)
	Using a multidisciplinary approach—employment of all school personnel, law enforcement, and mental health professionals
	Using a problem-solving approach
	Maintaining order—looking for evidence
	Investigation, triggered by a student's threatening behavior or behaviors (not characteristics) that are of concern
	Assessment of youth's intent or ideas of attack—communication of intent, interest in other attacks or attackers, interest in and access to weapons, belief that violence is an acceptable way of dealing with things

Continued

TABLE 1.2 (*Continued*) Targeted School Violence Prevention

Method	Aspects of the Method
	Assessment of youth's ability to carry out an attack
	Assessment of youth's mental state—hopelessness, desperation, and/or despair
	Cognizance of whether others are worried about the student's potential for violence
	Examination of circumstances that might influence the likelihood of attack
	Assessment of whether the case can be resolved as a transient threat
	Immediate security measures, if deemed appropriate—notification of law enforcement, warning potential victims, and/or other intervention
Bullying prevention	Teacher/staff awareness of bullying as a problem
	Teacher/staff willingness to intervene
	Equipping students to deal with bullying
Crisis intervention	Communicating with a suspected shooter in a calm, nonconfrontational manner to deescalate emotions of the assailant; use of good listening skills
	Trained negotiators negotiating the release of any hostages
	Restoring safety
	Deescalating the situation—assuring students that they are safe, enlisting mental health services
	Evaluating psychological trauma risk and responding to psychological needs

Note: From Allen, K., Cornell, D., Lorek, E., and Sheras, P., 2008; Borum, R., Cornell, D., Modzeleski, W., and Jimerson, S., 2010; Cornell, D., 2006; Cornell, D., & Sheras, P., 2006; Daniels, J., Royster, T., Vecchi, G., & Pshenishy, E., 2010; Daniels, J., Volungis, A., Pshenishy, E. Gandhi, P., Winkler, A., Cramer, D., & Bradley, M., 2010; see Chapter 9 this book.

2006; Fletcher, Steinberg, & Williams-Wheeler, 2004), family history and structure (Langenkamp & Frisco, 2008; Scaramella, Sohr-Preston, Callahan, & Mirabile, 2008), and peer and community influences (Chung & Steinberg, 2006; Laird et al., 2001) affect mental health outcomes. For example, across racial and economic demographic groups, the combination of strong supervision and positive parental involvement is protective against outcomes such as aggression and delinquency (Chung & Steinberg, 2006; Nader, in press). Discussions of attachment, adversity, and support follow.

Attachment

Research on parent–child/infant attachment has demonstrated the importance of early attachment relationships (Cassidy & Shaver, 1999). Caregiver–youth relationships evolve over time and continue to influence well-being and functioning. Infants and children who are valued and sensitively cared for develop qualities (e.g., good self-confidence and self-esteem, reasonable trust, empathy, and the capacity to self-reflect and to self-soothe) that enhance the ability to be productive, competent (personally and interpersonally), and resilient (i.e., the facility to do well in the face of adversity; see Fosha, 2003; Knox, 2003a,b; Main, 1995; Nader, 2008). Children with secure early and ongoing attachments are more resistant to stress and are less vulnerable to problem behaviors and other psychopathology (Fosha, 2003; Weinfield, Sroufe, Egeland, & Carlson, 1999; Chapter 6). They are more likely to rebound toward adequate functioning following a period of troubled behavior. In contrast, insensitive, frightening, or confusing care may result in the lack of resilience and in behavioral, temperamental, and emotional difficulties. Disorganized/disoriented attachments, for example, predict later chronic disturbances of affect regulation, stress management, hostile-aggressive behavior, a predisposition to relational aggression, and risk of a number of mental disorders (Lyons-Ruth & Jacobvitz, 1999; Schore, 2003). Notably, as will be discussed in Chapter 6, insecure or disorganized attachments have been associated with aggression, low self-esteem, depressive, anxiety, dissociative, somatic, externalizing, internalizing, and overall psychopathology in childhood, adolescence, and young adulthood, as well as to vulnerabilities to a number of disturbances including PTSD and being led into acts of violence (e.g., terrorism) (Hesse et al., 2003; Lyons-Ruth, Zeanah, & Benoit, 2003; Muller, Sicoli, & Lemieux, 2000; Scheff, 1997; Volkan, 2001; see Nader, 2008 for a summary). Adolescents' *insecure–dismissing* attachments also have been linked to externalizing problems (e.g., aggression or delinquency, conduct disorder, and substance abuse; Allen & Land, 1999).

Trauma and Adversity

Traumatic reactions are associated with a number of mental health problems including aggression or suicidality. Overt aggression (e.g., bullying and other assaults, childhood abuse), relational aggression (e.g., relational bullying, exclusion, depersonalizing gossip), and other traumas (e.g., witnessing domestic violence, traumatic deaths of loved ones) often are among the experiences of those who committed multiple shootings at schools (Henry, 2009; Nader, 2008). For example, the UT clock tower shooter's father abused him. Incarcerated violent adolescents significantly more often than not have histories of violent traumas (Ford, 2002). A number of clinicians have observed that severe, repeated, or varied traumas damage the core self or personal spirit (Ford, 2002; Kalsched, 1996; Knox, 2003a; Nader, 2008; Pearlman, 2001; Wilson, 2004). As noted, dysregulation of emotion and behavior may also result (Ford & Courtois, 2009; van der Kolk, 2005).

Support

Some individuals need more alone time than others. Some individuals have less regard for others than the average person. Nevertheless, all individuals need a good support system. For example, research suggests that mental health outcomes following adversities have been better with increased levels of social support (Kilpatrick et al., 2007; Scheeringa, in press). Research has now demonstrated that the combination of structure (consistent enforcement of school discipline) and support (availability of caring adults) in schools is associated with lower bullying and victimization rates (when school size, ethnicity, and low-income are controlled for; Gregory et al., 2010).

National Influences

Societies and religions differ in their emphasis on independence or connectedness–interdependence (Hofstede, 1980; Shiang, 2000). The importance of competitiveness and fame may be related to this orientation and/or to the media that influences their desirability. Pushing children to outdo their peers is sometimes motivated by a desire to give a child an advantage in life. If competition does not include a goal of enhancing each individual's personal talents and skills, some may benefit while others suffer from its effects. Emphases on, for example, competition and independence influence youth's motivations such as those related to rating their personal worth, valuing others, and committing or avoiding aggression. In addition to those values taught and modeled in the home, much of the national value system is shaped or reinforced by electronic media.

Media

Although entertainment media can have a positive (e.g., increasing helping behaviors) or a negative effect on youth, across studies, violent media, in TV, movies, video games, music, and comic books, have been linked to aggressive thoughts and behaviors, angry feelings, and arousal levels (Nader, 2010). Well-designed research has repeatedly shown that the effects of watching electronic media violence (i.e., the intentional injury or irritation of a person by another person or character) increases the risk of behaving aggressively right after viewing and years later (Anderson et al., 2010; Huesmann, 2007, 2010; Bushman & Huesmann, 2006). Even after controlling for early aggressiveness, habitual exposure to media violence in middle-childhood predicted increased aggressiveness 1, 3, 10, 15, and 22 years later (Huesmann, 2007).

IMPLICATIONS

Multiple factors influence aggressive behaviors and other mental health disturbances. A number of youth and environmental characteristics have been identified as relevant to the manifestation of aggression and other disturbances. In part, because children exhibiting persistent disruptive behaviors are more likely to become delinquents, and delinquents are more likely to become chronic, serious, or violent offenders, some observers believe that providing interventions as early as the preschool level is critical in preventing the emergence of disruptive behaviors and child delinquency (Loeber, Farrington, & Petechuk, 2003). In fact, prevention begins with the child's beginnings. Early and ongoing secure attachment relationships and other parenting practices may enable the skills and habits to live without resorting to aggression (Chapter 6). Additional interventions can be used in preschool and throughout the elementary school years to assist prevention.

A number of early interventions are associated with prevention of aggressive and other behavioral and mental health disturbances. Among them are teaching youth social skills, coping skills, and empathy, as well as creating environments that enhance support and secure attachments, do not tolerate bullying, provide skills for dealing with bullies, and instill healthy competition. To be effective, interventions must be aimed at both sides of the problem—would-be killers and the environments that produce them. Some of the well-known targeted/rampage shooters have been victims of bullies before lashing out in violence. As will be clear in the chapters of Section I, bullying in schools must be addressed early. Many of the interventions discussed in the chapters of Section II of this book may assist bullies and their victims who might become violent.

As discussed in Chapter 2, rejecting experiences such as early insecure attachments, bullying, and other humiliations may engender intense feelings of helplessness and hopelessness, rage, and vulnerability that lead to self-destructive behaviors, violence, or vulnerability to be manipulated by others who intend harm. Those who train terrorists often choose from those who have suffered severe or ongoing traumas, abandonment, or other repeated humiliations (Scheff, 1997; Volkan, 2001). Early interventions may reduce vulnerabilities and increase skills that provide choices other than aggression. As Chapter 9 will demonstrate, youth can learn to respond to aggressors in a way that makes their continued aggression less likely. Valuing of others and of uniqueness can be learned in and outside of schools. As will be shown (Chapters 3 and 10), increasing connection among and between youth and adults in schools and at home is an important aspect of prevention. To be most effective, interventions begin early and include parents, schools, and communities.

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