



resentful, ruminating over perceived injustices” [Cornell, 1999]. When students in Maryland met to discuss the causes of school violence, the most commonly reported causal factor was “failing to fit in” [Perlstein, 1999, p. B02].

Psychological theory and research support the speculation that social rejection may be associated with aggression. Several studies of children have documented a relationship between peer rejection and aggressive behavior [Marano, 1998; Pakaslahti and Keltikangas, 1998; Waas, 1987; for reviews, see Coie et al., 1990; McDougall et al., 2001]. For example, although average and rejected boys become equally angered and aggressive when provoked, rejected boys respond more aggressively without justification [Coie et al., 1990]. Furthermore, once aggression has started, children who are generally rejected by their peers are more inclined to intensify their aggression and less likely to submit than nonrejected children [Coie et al., 1991]. Of course, cross-sectional designs do not allow us to determine whether rejection leads to aggression, or behaving aggressively increases the likelihood of being rejected. However, a longitudinal study of 880 elementary and middle-school students showed not only that peer rejection was a consistently powerful predictor of aggression and other externalizing problems, but that as rejection increased over time, so did the risk of aggressive behavior [Kupersmidt et al., 1995]. Similarly, rejection by parents is also associated with higher aggression in childhood [Pemberton and Benady, 1973]. In fact, one study concluded that parental rejection “was the most prominent predictor of synchronous aggression, predicting well for both boys and girls” [Lefkowitz et al., 1973, p. 39].

Among adults, a great deal of anger and aggression also appears to be precipitated by real, perceived, or threatened rejection. Research on unrequited love shows that anger is a common response to having one’s romantic desires thwarted [Baumeister et al., 1993], and both empirical and anecdotal evidence suggest that people who are ostracized often become angry and lash out at those who ignore them [Williams, 1997; Williams and Zudro, 2001]. People who feel that another individual does not value their relationship as much as they would like often become hurt and angry, and sometimes behave aggressively [Leary and Springer, 2001; Leary et al., 1998]. Many cases of domestic violence occur when one partner does not feel adequately valued by the other [Gelles and Straus, 1988]; people are often assaulted or killed by their lovers in a fit of jealous rage that was provoked by a real or imagined rejection [Pinker, 1997; Tangney and Salovey, 1999]. Recent experimental research also shows that real or imagined rejection increases the urge to aggress toward both the rejector and other people [Buckley, unpublished data; Twenge et al., 2001]. In brief, extant research showing a link between interpersonal rejection and aggressive behavior provides support for the hypothesis that school shootings may be provoked by real or imagined interpersonal rejection.

Among adolescents, rejection tends to occur in one of three forms—teasing, ostracism, and romantic rejection. First, disliked and unpopular individuals may be bullied, taunted, and maliciously teased [Kindlon and Thompson, 1999; Marano, 1998; Olweus, 1984].<sup>1</sup> People who are the victims of bullying and teasing receive a clear message that the perpetrators do not like, value, or accept them. Furthermore, bullying and teasing typically occur in the presence of other people, thereby providing an element of public humiliation as well. Public attacks may connote even greater interpersonal rejection than private ones because the perpetrator communicates not only that he or she dislikes the victim but is willing to publicly

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<sup>1</sup>In this article, all mentions of teasing refer to malicious teasing. Some instances of teasing may be good-natured and evoke positive responses in the target [Kowalski, 2003; Sharkey, 1992].

let the rejection be known. In the case of the Columbine shootings, media reports widely acknowledged that the shooters had been taunted and humiliated by other students, raising the question of whether bullying is a common feature of school shootings.

Second, certain individuals may be routinely ostracized and ignored by large segments of their peer groups. In many instances, being relegated to the periphery of social life is neither malicious nor intentional, but rather the result of simple disinterest. Individuals who are particularly shy or eccentric, who possess undesirable social characteristics, or who do not share other students' interests may simply be ignored. Of course, in other instances, people may be purposefully excluded from social activities (and even informed that they are being left out). William James [1890] was among the first to suggest that this sort of widespread rejection may precipitate rage: "If no one turned round when we entered, answered when we spoke, or minded what we did, but if every person we met 'cut us dead,' and acted as if we were non-existing things, a kind of rage and impotent despair would ere long well up in us, from which the cruelest bodily torture would be a relief" [p. 281]. Presumably, it would not have surprised James to learn that the shooters in Littleton were reputed to have been ostracized by many students at Columbine High School [Gibbs and Roche, 1999].

Third, romantic rejections—in the form of both unrequited love or the breakup of an existing relationship—are common in adolescence. These events are typically distressing and hurtful, but they may also provoke intense anger and resentment, if not overt aggression [Baumeister et al., 1993].

In brief, many converging pieces of empirical and anecdotal evidence support the idea that various forms of rejection cause anger and may lead to aggression. Our primary interest in the present study was in documenting whether rejection was in fact involved in recent school shootings and in identifying other possible contributors to school violence among people who have been rejected. After all, most students who experience rejection, even those who are bullied and ostracized, do not resort to lethal violence. Thus, it seems likely that other risk factors must be present in addition to social rejection.

Our approach to this question necessarily involved a case study method. Although case studies cannot provide strong evidence relevant to the validity of a particular hypothesis, they can nonetheless provide data that is either consistent or inconsistent with it. Finding evidence of an unusual degree of rejection in the lives of those who perpetrated school shootings would lend support to the hypothesis that rejection may have been involved, and, conversely, failing to find consistent evidence of rejection would lead us to question the connection. The evidence from such case studies is by no means as convincing as that obtained from controlled experimentation, but it is the method of choice for a low-frequency phenomenon such as school violence for which experimental research is impossible.

## **METHOD**

The focus of the study was on all well-documented cases of school violence in the United States from January, 1995 to March, 2001. We began with 1995 because that was the year in which school shootings began to receive national attention. There has always been sporadic violence in schools but, because the cases were infrequent, they were not covered by the media in sufficient depth to permit the kind of analysis we desired.

To be included in our sample, a shooting incident must have occurred at a school during the school day. Shootings that occurred after school hours, for example at school dances and

athletic events, were not included. (For example, in 1998, a 14-year-old student used a semiautomatic pistol to kill a teacher and injure three other people at a high school dance in Edinboro, PA.). In addition, the shooting must have been perpetrated by students and resulted in injury or death to at least one student. Cases in which shots were fired but no one was injured were excluded because the perpetrators may have intended to impress or intimidate their peers rather than harm them (and, thus, would not constitute acts of aggression). Furthermore, incidents in which the only victims were nonstudents were not considered (such as the shooting of an assistant principal in Greensboro, NC) because we were explicitly concerned only with students' aggression toward their peers.

We set out to obtain information about these incidents of school violence that would permit us to test the hypothesis that rejection preceded each school shooting. Several sources of information were consulted. First, national news media were scoured for information. In particular, we consulted three news magazines—*Time*, *Newsweek*, and *US News and World Report*—and three widely circulated newspapers—*USA Today*, *The New York Times*, and *The Washington Post* for articles about the school shootings in question. For many of the shootings, these sources provided sufficient information. If not, newspapers from the local area in which the shooting occurred were consulted. We also explored several world wide web sites that deal with school shootings but relied on information obtained there only if the site was maintained by a reputable news organization (such as CNN, the Associated Press, or a local newspaper).

For each incident, information was recorded regarding the identities and ages of the perpetrator(s) and victim(s), as well as details regarding how the shooting occurred. Most central to our interests, evidence was recorded regarding whether the perpetrator(s) had experienced a pattern of ongoing, chronic ostracism, bullying, or malicious teasing and/or an experience of acute rejection (such as a romantic breakup or a particularly humiliating experience) prior to the shooting. Raters also recorded any indication that the perpetrator (a) had conveyed an intense interest in guns, bombs, or explosives (such as owning a gun or building bombs), (b) seemed to be fascinated by death (such as listening to music with death-related themes, practicing Satanism, or developing a death-related web site), or (c) showed evidence of a psychological disorder prior to the shooting.

Three raters read every available report of the school shootings and independently recorded information relevant to these issues. In compiling the collected information, collaboration was sought for all points, and disagreements regarding details were resolved by a fourth individual. In all, we identified 15 cases that met the selection criteria and for which sufficient information could be obtained from our sources. We identified five other episodes for which we could not find enough information relevant to our target questions, often no more than the fact that a shooting had occurred, and those cases were not included in our analysis.<sup>2</sup>

## RESULTS

Before summarizing our findings relative to rejection and school violence, we will describe each of the shooting episodes to provide a fuller picture of the nature of the episodes.

<sup>2</sup>Shootings for which we could not locate sufficient information included incidents in Richmond, VA (1995), St. Louis, MO (1996), Los Angeles, CA (1996), West Palm Beach, FL (1997), and Norwalk, CT (1997).

### Descriptions of the Incidents

**Moses Lake, WA (2/2/96).** Barry Lockaitis, age 14, used a .30 caliber rifle to kill a teacher and two boys, and injure one girl. He was reportedly severely depressed at the time and was described as having an inferiority complex. He had been teased by one of the victims, who was an athlete.

**Bethel, AK (2/19/97).** Evan Ramsey, age 16, killed his principal and a student, and injured two other people. He had been teased by the student he killed. There may have been some short-term forethought involved because authorities accused two other students of knowing that the shootings would take place.

**Pearl, Mississippi (10/1/97).** Sixteen-year-old Luke Woodham killed two students and his mother with a hunting rifle, and injured seven others. One of the victims was a girl he once dated, another was a friend of his ex-girlfriend, and the rest of the injured appeared to be randomly chosen. He was described as a chubby kid who was often teased. Woodham reportedly said "I killed because people like me are mistreated every day." He allegedly worshiped Satan and was fascinated with the Gothic lifestyle.

**West Paducah, KY (12/1/97).** Armed with a semiautomatic pistol, Michael Carneal, age 14, killed three classmates and injured five others at a prayer meeting before school. An ongoing pattern of rejection was clear; he was regularly teased as a "dweeb" or "faggot," had been called "gay" in the school paper, and was regularly bullied. Carneal had also experienced a recent episode of unrequited love; the girl with whom he was infatuated was the first person he shot. He also had a history of psychological problems and was eventually judged "guilty but mentally ill." After his arrest, Carneal said that he had grown tired of being teased and was quoted as saying "people respect me now."

**Stamps, AR (12/15/97).** Jason "Colt" Todd, 14 years old, wounded two students with a sniper's rifle. He claimed that he was tired of being picked on and that some of his schoolmates had extorted money from him in exchange for not hurting him.

**Jonesboro, AR (4/24/98).** Andrew Golden, 11, and Mitchell Johnson, 13, opened fire with handguns and rifles on Westside Middle School, killing 5 people and injuring 11 others. Johnson, clearly the leader in the episode, was allegedly angry about being rejected by a girl, telling friends that he "had a lot of killing to do." He also had been repeatedly teased for being fat. He also bragged about using drugs and killing animals, allegedly had attempted suicide, and had been accused of molesting a 2-year-old girl. His parents were distant, often calling the police looking for their son. Golden came from a supportive family but, like Johnson, had also been rejected by a girlfriend. He was described as tough and mean-spirited.

**Fayetteville, TN (5/19/98).** Honor student Jacob Davis, age 18, killed a male classmate who was dating his ex-girlfriend, who had recently broken up with Davis. The perpetrator and victim had recently had an argument about the girl.

**Springfield, OR (5/21/98).** Kipland Kinkel, age 15, used a semiautomatic rifle and a pistol to kill two classmates and injure 22 others, in addition to killing his parents. In his journal, he had written about being rejected by a girl, and had recently been suspended from school for possessing a firearm and stolen property. He believed that he had embarrassed his parents and was reportedly upset over teasing from other students. He abused animals, showed interest in making bombs, was under treatment for depression, and was voted "most likely to start World War III" by other students. Evidence presented at his trial suggested that he was possibly schizophrenic.

**Littleton, CO (4/20/1999).** Eric Harris, 18, and Dylan Klebold, 17, opened fire on classmates at Columbine High School using semiautomatic weapons, shotguns, and rifles, then committed suicide. At least 21 people were injured, and 13 people (12 students, one teacher) were killed. The attack had been planned for more than a year. Both boys had been ostracized, taunted, and bullied by other students, particularly athletes. In addition, Harris had been rejected from the Marines a week before the attack and was turned down by a girl whom he had asked to the prom. He was on medication for depression. Klebold reportedly admired Hitler and hurled insults at minorities. Evidence collected after the shootings suggested that the incident was, in part, retribution for how they had been treated by other students. In the videotapes that the killers made prior to their rampage, the boys recounted episodes of teasing and ostracism. "I'm going to kill you all," Klebold said. "You've been giving us shit for years" [Gibbs and Roche, 1999].

**Conyers, GA (5/20/99).** T. J. Solomon, 15, used a handgun and .22 caliber rifle stolen from his parents to injure six people. He had reportedly been depressed after a break-up with his girlfriend, claiming that he had "no reason to live anymore." He apparently aimed low intentionally and never intended to kill anyone. Solomon had been picked on by a football player, and feared becoming the school "wuss." He had been treated for depression, and bomb recipes were found at his home, yet people described him as normal.

**Ft. Gibson, OK (12/6/99).** Seth Trickey, 13, walked up to a group of students at his middle school and started firing with a 9 mm handgun. He didn't seem to know the children he shot and said he did not know why he did it. Trickey was described as a honor student who others regarded as funny, nice, and good-natured. He was popular and well-liked, and clearly not a loner. Trickey has never provided a plausible reason for his actions.

**Mount Morris Township, MI. (2/29/00).** A six-year-old boy pointed a gun at a fellow first-grader, said "I don't like you," and killed her. The day before the shooting, the two children had argued with one another, and the victim had purportedly slapped the perpetrator. Reportedly, he wanted to get revenge by scaring her with the gun. The boy had been left in the care of an uncle, who lived in a suspected crack house, so that his mother could work two jobs.

**Santee, CA (03/05/01).** Having boasted to his friends about the fact that he was going to cause trouble at his school, Andy Williams, age 15, shot two students to death and wounded 13 others. He had been maliciously bullied by his schoolmates and desired simply to "fit in." His parents divorced early in his life. He rarely saw his mother and although he lived with his father, did not have a close relationship with him.

**Williamsport, PA (03/07/01).** In the only school shooting reported here that was perpetrated by a female, Catherine Bush, 14, shot the head cheerleader at her school in the shoulder. Catherine had been teased and harassed at her previous school, leading her parents to transfer her to a smaller, private school, where she was similarly tormented. She felt betrayed by the victim, who ostensibly had revealed to other students the contents of e-mails Catherine had sent her. Catherine also suffered from periods of depression.

## **Summary of Precipitating Factors**

Table I presents a summary of our findings for the 15 shootings. Clear evidence for or against the presence of rejection and other risk factors is indicated. Blank cells in the table indicate that no information about the item was found in published reports and, thus, is

**TABLE I. Summary of the School Shooting**

Location Perpetrator(s) (Age)	Date	Killed/ wounded	Teasing, ostracism or other ongoing rejection	Acute rejection	Psychological problems	Fascinated with guns or explosives	Fascinated with death or violence
Moses Lake, WA Barry Lockaitis (14)	2/2/96	3/1	Teased by one of the victims		Depressed, "inferiority complex"		
Bethel, AL Evan Ramsey (16)	2/19/97	2/2	Teased by student he killed				
Pearl, MS Luke Woodham (16)	10/1/97	3/7	Chronically picked on; teased as a nerd; he and friends were outcasts	Recent romantic break-up; one victim was girl he had dated	Labeled borderline; perception and judgment problems; animal abuse	No	Yes; Satanic worship
West Paducah, KY Michael Carneal (14)	12/1/97	3/5	Chronically teased; was rejected as "dweeb" and "fag"	Unrequited love; object of affection was first person shot	Found "guilty but mentally ill"	Brought guns to school previously	No
Stamps, AR Jason Todd (14)	12/15/97	0/2	Picked on; students extorted money				
Jonesboro, AR Mitchell Johnson (13)	3/24/98	5/10	Teased for being overweight	Romantic break-up; killed ex-girlfriend	Killed animals, threatened violence; alleged suicide attempt, acted "strange"		Yes; interested in gangs
Andrew Golden (11)				Rejected by girlfriend		Yes; gun enthusiast	
Fayetteville, TN Jacob Davis (18)	5/19/98	1/0		Romantic break-up; victim was dating ex-girlfriend			

Springfield, OR Kipland Kinkel (15)	5/21/98	4/25	Teased by older students	Suspended from school; was fixated on girl who was lukewarm to him	Abused animals, often threatened violence, depressed; possibly schizophrenic	Yes; bomb-making, obsessed with guns	Yes
Littleton, CO Eric Harris (18)	4/20/99	13/28	Belonged to ostracized group; taunted and picked on by athletes; trouble fitting in	Recently rejected by Marines	Taking Luvox	Yes; bomb-making	Yes; death web site; interest in Hitler
Dylan Klebold (17)			Belonged to ostracized group; taunted and picked on by athletes		Described as volatile	Yes; bomb-making	Yes; death obsessed music; Hitler
Conyers, GA T. J. Solomon (15)	5/20/99	0/6	Viewed as a nerd; picked on; worried about ostracism	Recent breakup with girlfriend	Depression, talked about suicide; ADHD	Yes; bomb recipes	No
Deming, NM Victor Cordova, Jr. (13)	11/21/99	1/0			Depressed; violent temper		
Fort Gibson, OK Seth Trichey (13)	12/6/99	0/4					
Mount Morris Township, MI ? Owens (6) — first name not released	2/29/00	1/0	Abandoned by mother	Slapped by victim the day before	History of aggression and trouble-making	Lived with easy access to weapons	No
San Diego, CA Andy Williams (15)	3/5/01	2/13	Chronically bullied; locked out of school for repeated tardiness; rarely saw mother; distant father		History of drug use and gang involvement	Lived with easy access to weapons	No
Williamsport, PA Catherine Bush (14)	3/7/01	0/1	Mercilessly teased by victim	Victim passed along secrets shared with her by the perpetrator	Depression; self-mutilation	No	No

presumed not to be a factor in the shooting. As can be seen from the table and the descriptions above, interpersonal rejection was clearly indicated in most of the 15 shootings. In at least 12 of the 15 incidents, the perpetrator(s) had been subject to a pattern of malicious teasing or bullying—for example, teased for their weight or appearance, maliciously taunted and humiliated (regularly called a “nerd,” “dweeb,” or “faggot,” for example), or otherwise picked on. In addition, many cases involved ongoing ostracism that left the perpetrator on the periphery of the school’s social life. Importantly, in many of the incidents, the victims included those individuals who had teased, bullied, or rejected the shooter. In about half of the episodes, the perpetrator had also experienced a recent rejecting event, most commonly a romantic breakup or unrequited love, and the victims often included the particular individuals who had spurned them. In only two cases (Ft. Gibson, OK and Deming, NM) was there no evidence whatsoever that the perpetrator had been rejected or mistreated by other people.

Although rejection in one form or another was implicated in most of the episodes, the shooters also tended to be characterized by one or more of the three other risk factors that we investigated—psychological problems, an interest in guns and explosives, and a fascination with death. First, at least 10 of the 15 incidents involved a perpetrator who had shown previous evidence of having psychological problems, including depression, hyperaggressiveness, or sadistic tendencies. At least half were known by other students and people in the community as troubled individuals. Second, six of the cases involved individuals who were familiar with, if not fascinated by, guns and bombs. At least four perpetrators were interested in making explosives, as evidenced by the fact that they possessed home-made bombs or recipes for making them. Third, four of the incidents involved individuals who showed an interest in death and other “dark” topics, such as death-rock music and Satanic worship.

## DISCUSSION

Our analyses of cases of school violence since 1995 support the hypothesis that social rejection was involved in most cases of lethal school violence. Twelve of the cases involved an ongoing pattern of teasing, bullying, or ostracism, and at least six of the perpetrators had experienced a recent romantic rejection. In only two of the incidents did we find no clear evidence of rejection; Seth Trichey, who wounded four students in Ft. Gibson, OK, was an honor student that other students liked, his victims were randomly chosen, and he seemed unable to explain his actions. Even so, he did not appear remorseful (unlike, for example, the shooters in Fayetteville, TN, and Conyers, GA), which suggests either that he thought that the victims deserved their fate or that he was psychologically incapable of empathy. Victor Cordova, who killed a female student in Deming, NM, also had no history of rejection, but he had been deeply depressed for some time. These findings are consistent with those obtained by the U.S. Secret Service and reported in their Safe School Initiative. In their analysis of school shootings that have occurred in recent years, they found evidence for bullying, ostracism, and social rejection in over two-thirds of the cases [Vossekuil et al., 2000].

Several of the perpetrators explicitly explained their actions as a response to being mistreated by other students. For example, the perpetrator of the Pearl, Mississippi shooting said that he killed because “people like me are mistreated every day.... No one ever really

cared about me” [Chua-eoan, 1997]. Similarly, one of the Jonesboro, Arkansas shooters had vowed to kill all of the girls who had broken up with him [Blake et al., 1998], and the Columbine killers’ rage appeared to come from their rejection and mistreatment by other people. Of course, a murderer’s stated reason for his behavior may reflect nothing more than a self-serving justification. However, independent evidence from other students and teachers corroborates the presence of rejection in most of the cases. It is also noteworthy that, to our knowledge, few of the perpetrators attributed their violent behavior to other equally plausible causes, such as disinterested parents, a broken home, child abuse, academic failure, or psychological problems.

Few individuals navigate their way through adolescence without being teased, bullied, or rejected in some manner, but the vast majority do not exact retribution on their classmates. Rejection may be frustrating, angering, even maddening [Buckley, unpublished data; Twenge et al., 2001], but it is rarely sufficient to provoke premeditated violence even if the victim feels like killing people. Thus, rejection alone, while a possible contributor, does not necessarily cause violence by itself. The information we collected regarding the three other risk factors offers hints regarding other contributors to school violence. In particular, most of the perpetrators displayed at least one of the other three risk factors (psychological problems, interest in guns or explosives, or fascination with death). Thus, we speculate that rejection, combined with one or more of these other factors puts an individual at higher risk to perpetrate aggression against peers.

First, a variety of psychological problems may be associated with an increased tendency for aggressive behavior. For example, certain personality disorders are characterized by aggressiveness, paranoia, low impulse control, lack of empathy for other people, and even sadistic behaviors, all of which may lower one’s threshold for violence [Millon, 1981]. Thus, some instances of school violence may reflect extreme manifestations of an ongoing pattern of antisocial and aggressive behavior. Many of the shooters had been in trouble previously for aggression against their peers, and two had allegedly abused animals. In addition, people who are depressed and perhaps suicidal may behave in desperate ways, feeling that they having nothing to lose by acting aggressively [Marano, 1998]. The Safe School Initiative report indicated that perpetrators in over three-fourths of the school shootings had either threatened or attempted suicide at some time in the recent past [Vossekuil et al., 2000].

Second, individuals who not only have access to guns but who are fascinated by firearms and explosives may be more likely to act on their aggressive impulses because they are comfortable dealing with instruments of destruction than those who are unfamiliar or uncomfortable with guns and explosives, who do not have the means to perpetrate violence with firearms and bombs. Experience with guns is by no means necessary, however; the perpetrator of the West Paducah, Kentucky shooting had apparently not fired a gun before his rampage.

Third, people who are fascinated by themes of death, and whose identity is linked to Gothic, Satanic, and other “dark” lifestyles may find the idea of carnage less revolting than most other people do. It remains unclear whether death-rock music and other aspects of popular culture that glorify death cause otherwise peaceful adolescents to be violent or whether individuals who are already inclined toward aggression are simply more interested in death-related music and activities.

Previous theory and research has not adequately addressed the question of why rejection sometimes leads to anger and an impulse to aggress. Thomas [1995] suggested

that the painful feelings of shame that often result from rejection may provoke anger and aggression, much in the same way in which physical pain (such as slamming one's own hand in a door) can make people angry. Other writers have suggested that aggression may result from a desire to show that one is not a person to be trifled with [Nisbett, 1993] or to maintain self-esteem and buttress one's positive self-concept after an ego-threatening event [Baumeister et al., 1996]. Without discounting other explanations, we believe that the primary motive in most of the school shootings seems to have been retribution, either for an ongoing pattern of ostracism and teasing or for an acute rejection such as a romantic breakup. In fact, many of the cases were characterized by both an ongoing pattern of rejection and a specific rejection experience, suggesting that the recent rejection may have been the straw that broke the camel's back. At the same time, however, the evidence suggests that at least some of the perpetrators were seeking respect as well. After killing three and injuring five in West Paducah, KY, Michael Carneal was quoted as saying "People respect me now," and the Columbine killers fantasized that they would be famous and that movie directors would fight over making a movie of their story [Gibbs and Roche, 1999].

Of course, like all case studies, this one is open to the criticism that the mode of data collection is necessarily selective and uncontrolled. In particular, the evidence that we obtained about the episodes from press reports may reflect reporters' implicit theories about the link between rejection and aggression; we may have found evidence of such a relationship because writers in the mass media selectively reported evidence consistent with their implicit theories. We cannot discount this possibility but find it noteworthy that only a few of our sources drew an explicit connection between the rejection that the perpetrators had experienced and their subsequent violent behavior. In most cases, information regarding the perpetrator's relationships with other students was mentioned only in the context of describing the kind of person he or she was. Only after the Columbine shootings in April of 1999 did many writers begin to explore the role that ostracism or rejection may have played.<sup>3</sup>

Furthermore, like all case studies, ours necessarily lacks an appropriate control group. Although we can document that most of the perpetrators of these school shootings had been subjected to teasing, bullying, or other types of rejection, we do not know for certain whether they experienced an exceptionally high level of mistreatment compared to other children and adolescents. Given that roughly 75% of elementary and middle school students are occasionally bullied at school [Kass, 1999], the perpetrators of the school shootings were by no means unique. Even so, from reading descriptions of their peer relationships, our sense is that most of the shooters had experienced an unusually high amount of bullying or ostracism that was particularly relentless, humiliating, and cruel. Furthermore, when an individual has psychological difficulties, an affinity for guns and explosives, or a fascination with death and gore, such peer mistreatment may evoke a catastrophic reaction.

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<sup>3</sup>In fact, most writers seem to operate from the hypothesis that the shootings were due to problems with the perpetrators' parents. The shooters' relationships with their parents and siblings were often described in detail, and neighbors were interviewed regarding the families. Interestingly, with few exceptions, little evidence was unearthed to indicate that the perpetrators' families had an unusual number of problems, and the perpetrators themselves often absolved their parents of any responsibility for their actions. This is not to say that family problems played no role in the shootings, but rather that the family backgrounds did not fit any particular profile and did not conform to writers' assumptions about the homes of teenage murderers.

To the extent that our conclusions are valid, they raise two important issues. The first involves the toll that bullying and malicious teasing take on many students. Not only do the majority of elementary and middle school children experience bullying at school [Kass, 1999], but a poll conducted by the American Psychological Association revealed that 40% of the youth surveyed expressed concern regarding a potentially violent classmate ["Child violence," 2000]. Approximately 160,000 school-aged children occasionally stay home from school to avoid mistreatment at the hands of their peers. Other consequences for victims of malicious teasing and bullying include feelings of shame, humiliation, depression, anxiety, and low self-esteem [Kowalski, 2003]. In some instances, victims have even committed suicide to escape social torment. For example, in 1993, a middle-schooler killed himself because he was tired of being bullied [Marano, 1998], and in early 2000, a Washington student killed herself rather than face teasing at school. Thus, the violent reactions of students who shoot their classmates are only one tragic consequence of school bullying.

If the kinds of aversive treatment endured by many of the school shooters were targeted at a particular group, such mistreatment of other students would not be tolerated by teachers and school authorities, but because it is aimed rather indiscriminately (primarily at students who are powerless and unpopular), such antisocial behavior at school is typically ignored. We believe that steps are needed to reduce the incidence of teasing and bullying at school, both to improve the quality of life for millions of students and to reduce the likelihood of violence. Along these lines, students at one anti-violence conference proposed that Congress enact anti-teasing laws, and the State of Georgia recently passed an anti-bullying statute. According to this law, students who bully on three separate occasions within a year will be sent to an alternative school. Of course, this law fails to take into account the many bullying episodes that go unobserved and unreported.

Second, our findings offer a tentative profile of the kind of student who may be prone to violence against his peers. The typical shooter is a male student who has been ostracized by the majority group at his school for some time, and has been chronically taunted, teased, harassed, and often publicly humiliated. Moreover, he probably demonstrates one or more of the three risk factors identified in the present study—an unusual interest in guns and explosives; a fascination with death, Satan, and other "dark" themes; or psychological problems that are characterized by depression and/or a personality disorder that involves antisocial behavior, poor impulse control, or sadistic tendencies. Of course, many young people share these characteristics yet do not endanger their peers, so actual efforts to predict which students will behave violently are not likely to be successful [Mulvey and Cauffman, 2001].

In light of the many dangers that adolescents face daily, violence at school is a relatively improbable event for any particular student. Even so, the escalation in school violence during the past five years points to a problem that needs attention from researchers. Although it may be difficult to study deadly school violence systematically (because it occurs so infrequently), additional research attention could be directed toward milder forms of school aggression, as well as toward the unenacted aggressive urges and fantasies of students who are teased, bullied, and ostracized. In addition, controlled experimental research may help us to understand the conditions under which interpersonal rejection does and does not precipitate aggression.

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