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Bullying Perpetration and Victimization in Special Education: A Review of the Literature

Chad A. Rose¹, Lisa E. Monda-Amaya¹, and Dorothy L. Espelage¹

Abstract

Bullying perpetration and victimization have become pervasive problems in American schools. Recent research suggests a causal association between prolonged periods of victimization and overt acts of school violence. These findings are germane to students with disabilities in light of evidence suggesting these students are victimized more often than typically developing peers. The purpose of this review is to provide special educators with an overview of definitions and issues related to bullying perpetration and victimization and to synthesize research on this topic as it pertains to students with disabilities by disability type, personal characteristics, and educational placement. It was concluded that additional research is needed on prevalence and types of bullying, factors related to perpetration or victimization, and appropriate school-based interventions for special needs populations.

Keywords

bully, perpetration, victimization, disability, special education

Overt and malicious acts of school violence often evoke immediate public attention. However, these acts themselves are frequently reactionary, developing over a period of time. "School violence is often carried out by alienated students who seek revenge within the school" (Seita & Brendtro, 2005, p. 15). This alienation may result from the social hierarchy extant in our system of education (Baker & Donnelly, 2001), in which bullying and victimization are generally considered a social ritual (Brendtro, Ness, & Mitchell, 2001), a typical part of the adolescent experience, or even a student's rite of passage (Carter & Spencer, 2006; Dawkins, 1996; Thompson, Whitney, & Smith, 1994; Walker, Ramsey, & Gresham, 2004). Because high rates of bullying and victimization often precede overt acts of school violence (Lawson, 2005; Midlarsky & Klain, 2005; Walker, Colvin, & Ramsey, 1995), tolerance and classification of these behaviors as a rite of passage are disconcerting.

The national focus on bullying research in the United States was preceded by a government campaign called the Safe School Initiative (Vossekuil, Fein, Reddy, Borum, & Modzeleski, 2002). This collaborative initiative between the U.S. Secret Service and the Department of Education examined planning and preattack thoughts and behaviors of the 41 perpetrators of 37 U.S. school shootings occurring between 1974 and 2000. Although a clear and concrete perpetrator profile could not be developed, common

characteristics were determined. Most importantly, researchers discovered that approximately 71% of the school shooters had been victimized prior to the incident (Vossekuil et al., 2002).

Following the Safe School Initiative, a national survey was conducted to determine the prevalence of bullying perpetration in the United States (Nansel et al., 2001). Findings indicated that approximately 30% of the school-age population experienced bullying as a perpetrator, victim, or provocative victim. More recently, the National Center for Educational Statistics documented that 28% of adolescents reported being victimized within a 6-month period prior to being surveyed (Dinkes, Cataldi, Kena, & Baum, 2006). Espelage, Bosworth, and Simon (2000) conducted a survey in which they found that only 19.5% of middle school students had not observed, been a victim of, or participated in bullying perpetration within the past month of being surveyed. And although several reports have documented a decline in juvenile violence (Brener, Lowry, Barrios, Simon, & Eaton, 2005; Dinkes et al., 2006), evidence suggests that

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bullying victimization and perpetration have remained relatively stable over the past decade (Garrity, Jens, Porter, & Stoker, 2002).

Based on these reports, it may be concluded that 20% to 30% of the student population has experienced bullying through either victimization or perpetration. Researchers have investigated this phenomenon in a whole-school context, often comparing subgroups of students based on age, gender, or race. However, the subgroup of students with disabilities has been neglected, and present statistics (i.e., school, age, gender, race) may significantly underestimate prevalence in this population. Studies involving students with disabilities have yielded victimization rates in excess of 50% (Dawkins, 1996; Doren, Bullis, & Benz, 1996; Langevin, Bortnick, Hammer, & Wiebe, 1998; Little, 2002; Llewellyn, 2000; Monchy, Pijl, & Zandberg, 2004; Norwich & Kelly, 2004; O'Moore & Hillery, 1989; Singer, 2005; Whitney, Smith, & Thompson, 1994), indicating that these students are targets of victimization more often than their nondisabled peers.

This review is aimed to provide special educators with a better understanding of the bullying phenomena and to offer a synthesis of literature on perpetration and victimization of students with disabilities. This review is organized in a progressive format, providing contextual definitions to clarify understanding, synthesizing victimization and perpetration data, and summarizing predictive and preventative factors for individual populations. It should be noted that, presently, very little bullying research has focused solely on students with disabilities.

Literature was accumulated for this review from several sources in a progressive format. First, a search was conducted through the EBSCO database using the terms *bullying* and *disability*. Abstracts were retrieved if the respective studies (a) were published in a peer-reviewed journal, (b) investigated perpetration and/or victimization, (c) included participants with disabilities, and (d) reported data on students with disabilities. Initially only five articles met these criteria, so the search was expanded using additional databases and using more extensive search combinations (*bully*, *bullied*, *victimization*, *victim*, *perpetration*, *perpetrator*, *teasing*, *tease*, *aggression*, *aggressive*, *harass* and *special education*, *disabilities*, *disabled*, *learning difficulties*, *learning problems*, *disorders*). Seventeen articles met the criteria, and ancestral searches were conducted. It was noted that some frequently cited research did not appear in a peer-reviewed journal (e.g., book chapters), so final criteria were adjusted to the following: (a) published in a peer-reviewed journal or cited in at least five other peer-reviewed articles, (b) contained bullying, harassment, perpetration, or victimization as the primary or secondary focus of the study, (c) included students with disabilities in the sample, and (d) reported data on students with disabilities. The 32 articles selected

for review (25 international and 7 U.S.) are summarized in Table 1.

Definitions of Participants and Behaviors

Definitions of bullying vary considerably, and as a consequence empirical data often yield inconsistent results (Miller, Beane, & Kraus, 1998). Generally, bullying is defined as

a negative and often aggressive or manipulative act or series of acts by one or more people, against another person or group of people usually over a period of time. It is abusive and is based on an imbalance of power. (Sullivan, Cleary, & Sullivan, 2004, pp. 4–5)

The concept is complex, with perpetration and victimization rarely occurring in isolation of other behaviors. Bullying can only be understood in relations among individuals, families, peer groups, schools, communities, and cultures (Smith, 2004; Swearer & Espelage, 2004). Table 2 demonstrates inconsistencies in operational definitions found in the literature.

Although definitions varied across studies, three commonalities emerged (Espelage & Swearer, 2003; Garrity et al., 2002; Langevin et al., 1998; Marini, Fairbairn, & Zuber, 2001; Miller et al., 1998; Nansel et al., 2001; Walker et al., 2004). First, for an act to be considered bullying, there must be an imbalance of physical, social, or emotional power between the victim and the bully. Second, the act of perpetration is systematic with intent to cause emotional or physical harm to the victim. Third, victimization and/or perpetration are generally repeated over the course of days, months, or years. In 1995 Olweus introduced a fourth concept that should be considered, that of unequal level of effect, in which the victim is left traumatized whereas the bully maintains a lack of concern and compassion.

Participants in the Bullying Dynamic

Bullying perpetration and victimization involve the overwhelming majority of the school population because involvement falls on a participatory continuum (Espelage & Swearer, 2003). The bullying dynamic includes three possible participants: (a) the bully, (b) the victim, and (c) the bystander (Marini et al., 2001; Olweus, 1993; Walker et al., 2004). All participants play an integral role by engaging in, experiencing, or reinforcing the aggressive behavior.

A bully is defined as an individual who perpetrates emotional or physical power over the victim. Bullies can be classified into three categories: (a) aggressive bully, (b) anxious bully, and (c) passive bully (Olweus, 1993). An aggressive bully usually displays violent characteristics and the desire to dominate others. The passive bully is often less violent

Table 1. Literature on Bullying and Victimization of Students With Disabilities

Authors and Location	Participants and Age (M or Range)	Placement Setting	Data Collection Procedures
Baker and Donnelly, 2001 (Australia)	4 Students with Fragile X Syndrome (10.5 years)	Special schools (2) Special class (1) Inclusion (1)	Participant observation Interviews—Parents, teachers, and occupational therapists
Bramston, Fogarty, and Cummins, 1999 (Australia)	459 Adults with mild or moderate intellectual disabilities (87% between 20 and 30 years)	56% lived with parents 44% live in residential care	<i>Life Stress Inventory</i> — Self-report
Conti-Ramsden and Botting, 2004 (United Kingdom)	200 students with specific language impairment (10 years 11 months)	Inclusive education with specialized speech instruction	Teacher—Rating scales, questionnaires, and checklist Student—Questionnaire, intelligence and achievement tests Peer nominations
Davis, Howell, and Cooke, 2002 (United Kingdom)	16 students who stutter across 16 different classes and their general education peers (11.5 years)	Inclusion	Peer nominations
Dawkins, 1996 (United Kingdom)	46 students with conditions affecting their appearance or gait 57 students with condition not affecting their appearance or gait (13–16 years)	Various educational settings	Bullying questionnaire sent to parents by mail
Doren, Bullis, and Benz, 1996 (United States)	422 students with disabilities during their final year of high school and first year of adult transition (17 years or older)	Adult transition	Interviews with students and parents (computer- assisted telephone interview technology) Videotaped playground interactions
Fuijki, Brinton, Isaacson, and Summers, 2001 (United States)	8 students with language impairment and their age-matched peers (6 years 1 month to 10 years 7 months)	Playground interactions	Videotaped playground interactions
Kaukiainen et al., 2002 (Finland)	141 students with learning disabilities (11–12 years)	Inclusion	Academic evaluation, self- report, peer nominations
Knox and Conti- Ramsden, 2003 (United Kingdom)	100 students with language impairment (inclusive settings [50], specialized schooling [50]) 50 students without disabilities (11 years)	Self-contained Inclusion	Self-report questionnaire
Kuhne and Wiener, 2000 (Canada)	38 students with learning disabilities 38 demographically matched peers without disabilities (9–12 years)	Self-contained (limited integration)	Peer nominations
Kumpulainen, Räsänen, and Puura, 2001 (Finland)	Stage I—5,813 students with psychiatric disorders Stage II—Subsample of 420 from Stage I (8.4 years)	Inclusion	Stage I—Parent, teacher, and student questionnaire Stage II—Parent and children interviews
Langevin, Bortnick, Hammer, and Wiebe, 1998 (Canada)	28 students who stutter (7–15 years)	Public or community schools (26) Home school (1) Home and public school (1)	Teasing and bullying questionnaire

(continued)

Table 1. (continued)

Authors and Location	Participants and Age (M or Range)	Placement Setting	Data Collection Procedures
Little, 2002 (United States)	411 Participants (Asperger syndrome [75.4%], nonverbal learning disorder [15.3%], combined [9.2%]; 10.5 years)	Nonspecified	Parent questionnaire
Llewellyn, 2000 (United Kingdom)	6 students with mild to severe physical disabilities and their parents and teachers (15.5 years)	Inclusion	Interview
Marini, Fairbairn, and Zuber, 2001 (Canada)	17 adults with developmental disabilities (21–63 years)	Assisted living	Self-report, draw a picture, tell a story, open-ended interview
Martlew and Hodson, 1991 (United Kingdom)	10 students—mild learning disabilities in inclusive settings	Inclusion	Student interview
	18 students—mild learning disabilities in special schools	Special schools	Teacher questionnaire
	10 demographically matched peers (9 years 7 months)		
Monchy, Pijl, and Zandberg, 2004 (Netherlands)	21 students with behavior problems (pervasive developmental disorder [PDD; 9], ADHD [1], ADHD + PDD-NOS [3], Tourette's syndrome [1], Asperger syndrome [2], reactive attachment disorder [1])	Inclusion	Teacher and student questionnaire
Morrison, Furlong, and Smith, 1994 (United States)	411 students without disabilities (9.7 years)		
	485 students in general education (leadership class [39], opportunity class [11], special day class [19]; grades 9–12)	Leadership class, general education class, opportunity class, special day class	Student survey
Nabuzoka, 2003 (United Kingdom)	20 students with learning disabilities (10.4 years)	Inclusion	Peer nominations
	101 students without disabilities (10.2 years)		Teacher ratings
Nabuzoka and Smith, 1993 (United Kingdom)	36 students with learning disabilities (10.4 years)	Inclusion	Peer nominations
	143 students without disabilities (10.2 years)		Teacher assessment
Norwich and Kelly, 2004 (United Kingdom)	51 students with disabilities in mainstream schools	Inclusion	Semistructured Interviews
	50 students with disabilities attending special schools (12 years)	Special school	
O'Moore and Hillery, 1989 (Ireland)	109 students with disabilities in remedial classes	Self-contained	Teacher-facilitated student self-report
	35 students with disabilities in full-time special classes	Inclusion	
	639 students without disabilities (7–13 years)		
Reiter and Lapidot-Lefler, 2007 (Israel)	186 students with intellectual disabilities (12–21 years)	Special education schools	Harassment and bullying questionnaire Teacher report form (aggression) Portion of <i>Social Skills Rating System</i>
Sabornie, 1994 (United States)	38 Students with learning disabilities	Self-contained (limited integration)	Student self-report
	38 demographically matched peers without disabilities (Grades 6–7)		Teacher ratings

(continued)

Table 1. (continued)

Authors and Location	Participants and Age (M or Range)	Placement Setting	Data Collection Procedures
Sheard, Clegg, Standen, and Cromby, 2001 (United Kingdom)	54 adults with severe intellectual disabilities (23 years)	Lived with parents (41), lived with nonparental family members (2), adult placement (3), residential care (2), unavailable (6)	Self-report
Singer, 2005 (Netherlands)	60 Dutch children with dyslexia (9 to 12 years)	Inclusion	Student interview
Sweeting and West, 2001 (Scotland)	2,237 students (visual difficulties [6.3%], hearing impairments [2.2%], language impairments [1.0%], reading difficulties or dyslexia [2.9%]; 11 years 3 months)	Inclusion	Secondary analysis of student self-report data from the West of Scotland 11 to 16 Study
Unnever and Cornell, 2003 (United States)	2,472 students (ADHD [14%]; Grades 6–8)	Inclusion	Student survey
Van Cleave and Davis, 2006 (United States)	102,353 students (special health care needs [21%]; 0–17 years)	Not specified	Secondary data analysis of a large-scale telephone survey
Whitney, Smith, and Thompson, 1994 (United Kingdom)	93 students with disabilities (mild learning difficulties [22], moderate learning difficulties [45], physical disability [6], hearing impairment [6], visual impairment [14]) 93 demographically matched peers without disabilities (11.6 years)	Inclusion	Student and teacher interview
Woods and Wolke, 2004 (United Kingdom)	1,016 students (students with disabilities [4.1%]; 7.5 years)	Inclusion	Student interview, parent questionnaire, curriculum assessment, teacher assessment
Yude, Goodman, and McConachie, 1998 (United Kingdom)	55 Students with hemiplegia Classmate controls (10.7 years)	Inclusion	Teacher—Interviews, questionnaires, and rankings Student—Peer nominations

Table 2. Definitions of Bullying

Citation	Definition
Dawkins (1996, p. 603)	Bullying is the intentional, unprovoked abuse of power by one or more children in order to inflict pain or cause distress to another child on repeated occasions.
Olweus (1993, p. 9)	A student is being bullied or victimized when he or she is exposed, repeatedly and over time, to negative actions on the part of one or more other students
Nansel et al. (2001, p. 2095)	A student is being bullied when another student, or a group of students, say or do nasty and unpleasant things to him or her. It is also bullying when a student is teased repeatedly in a way he or she doesn't like. Any form of verbal or physical hurtful behavior, such as name-calling, punching, repeated teasing, kicking, hitting, spreading malicious rumors, pestering, socially isolating can be considered bullying if the peer persists with it after it is apparent that the victim is traumatized by what is being said or done.
O'Moore and Hillery (1989, p. 431)	Bullying is longstanding violence, mental or physical, conducted by an individual or a group and directed against an individual who is not able to defend himself/herself, in the actual situation.

and aggressive and usually plays a supporting role to the aggressive bully. An anxious bully is generally a provocative victim who has adopted bullying behaviors as a way to combat victimization.

However, it is difficult to characterize the bully because he or she may exhibit either negative (e.g., low self-control, poor academic performance, externalizing behaviors, alcohol abuse) or desirable (e.g., classroom leader, popular, high

spirited, active) personality traits (Kumpulainen et al., 1998; Marini, Koruna, & Dane, 2006; Miller et al., 1998; Nansel et al., 2001; Perren & Alsaker, 2006). Perpetration is reinforced by social or peer group dynamics. These dynamics may become established at a young age (Perren & Alsaker, 2006) and exacerbate prolonged bullying perpetration (Espelage, Holt, & Henkel, 2003; Espelage & Swearer, 2003). Although data on bullying behavior are available, it is difficult to profile a bully on demographic, physical, or social characteristics because of the heterogeneity across students.

Victims of bullying have been classified into two separate subgroups: the passive victim and the provocative victim. Passive victims account for 80% to 85% of the victimized population (Olweus, 2003). Generally the passive victim does not aggress or act out toward the bully and is characterized as being physically weaker, having fewer friends, demonstrating lower self-esteem, being rejected by peers, being dependent on others, having observable differences, or possessing weaker social skills (Kumpulainen et al., 1998; Marini et al., 2006; Nansel et al., 2001; Whitney, Nabuzoka, & Smith, 1992). Research has indicated that passive victims may have preexisting internalizing behavior problems prior to school enrollment that could serve as a predictor for victimization (Arseneault et al., 2006).

Conversely, the provocative victim develops bullying characteristics as a result of exposure to victimization. This group of victims is often described as having internalizing and externalizing behavior problems, being reactively aggressive, maintaining poor interpersonal relationships, or displaying a negative demeanor (Kumpulainen et al., 1998; Marini et al., 2006; Nansel et al., 2001). These findings imply that students may be predisposed to or develop social roles at a young age, and early behavior problems may serve as a predictor for future victimization (Schwartz, McFadyen-Ketchum, Dodge, Pettit, & Bates, 1999) and possible identification for special education placement. Overall, victims of bullying may possess or develop character traits that have long-term consequences and adversely affect their social, emotional, or academic development.

In addition to the bully and victim, bystander participation and support networks that reinforce perpetration should be examined (Smith, 2004). A bystander is not directly involved in the act of bullying but can reinforce the bully (observer) or support the victim (defender; Marini et al., 2006). Bystanders may include followers (who actively engage in bullying after the initial onset), supporters (reinforce the bully but not actively engage), passive supporters (support the bully but do not take an open stand), disengaged onlookers (watch but do not support either party), possible defenders (dislike the bully but do not intervene), and defenders (help the victim when they feel it is appropriate; Olweus, 2003; Salmivalli, Karhunen, & Lagerspetz, 1996).

Types of Bullying

Bullying involves proactive or reactive aggression through direct or indirect means (Doll & Swearer, 2006; Espelage & Swearer, 2003; Walker et al., 2004). The U.S. Department of Education identified four distinct categories of bullying perpetration: (a) physical, (b) verbal, (c) indirect (i.e., relational, emotional, social), and (d) sexual (Walker et al., 2004). Researchers suggest aggression is more direct during the early stages of educational development, becoming more indirect with age (Björkqvist, 2001; Björkqvist, Österman, & Kaukiainen, 1992; Monks, Smith, & Swettenham, 2005). Björkqvist et al. (1992) noted that physical, verbal, and indirect aggression followed distinct developmental phases. Younger students without well-developed verbal or social skills resort to physical aggression. As verbal skills develop, they transition to less physical forms of aggression. Finally, as social skills develop and students learn to analyze and manipulate situations in their favor, they used more indirect means of aggression. Although developmental stages of aggression differ, Björkqvist et al. noted that physical, verbal, and indirect aggression can be observed throughout each stage.

Physical bullying can range from intentional shoving to aggressive fighting and may include damage to personal property. Verbal bullying can consist of intimidation, abusive language, mimicking, and racist remarks. It often begins with teasing but can transition into threats of violence. Relational (indirect) bullying is purposeful manipulation and damage to the victim's peer relationships (Crick & Grotpeter, 1995) and occurs when the bully tells lies, spreads rumors, ignores, or intentionally isolates a victim to destroy or damage the victim's reputation (Doll & Swearer, 2006; Hill, 2003; Marini et al., 2001; Sullivan et al., 2004; Walker et al., 1995). One more recent and common form of relational bullying is cyberbullying. Sexual bullying includes sexually explicit language and/or sexually abusive actions and is more accurately described as sexual harassment (American Association of University Women Educational Foundation, 1993, 2001). Although indirect bullying and sexual harassment are the focus of increased study, the majority of the extant special education literature addresses verbal and physical aggression.

Because bullying can be defined so broadly (physical, verbal, indirect, and sexual), it is important to understand the contexts in which behaviors are not characterized as such. Three types of aggression typically are not interpreted as bullying: instrumental, retaliatory, and jostling. Instrumental aggression occurs when someone takes a stand to defend his or her property or reputation or the well-being of a peer. Retaliatory aggression, generally interpreted as a "typical" physical altercation, is impulsive and displayed

in the “heat of the moment.” Finally, jostling (rough and tumble play) is perceived as enjoyable and mutually rewarding interaction (Doll & Swearer, 2006). Most importantly, when two students of similar strength or social standing fight or quarrel, their behavior generally is not regarded as bullying (Nansel et al., 2001; Olweus, 1993). Although assessment of intent is desirable, the examples above do not demonstrate imbalance of power, repetition of occurrence, intent to cause harm, or unequal levels of effect.

Victimization of and Perpetration by Students With Disabilities

Although many researchers investigating victimization indicate students with disabilities are victimized more frequently than are their nondisabled peers, findings related to prevalence and predictors have yielded inconsistent results. Woods and Wolke (2004), for example, found comparable victimization rates among students with and without disabilities, but Little (2002) found that up to 94% of students with disabilities reported experiencing some form of victimization. These variations may be attributed to ambiguity in the definition, differences in data collection procedures, the settings in which the bullying occurs, the populations of students examined, and/or demographics. Cornell, Sheras, and Cole (2006) also note that types of bullying and social contextual and cultural factors may account for differences in figures reported. Regardless of reasons for differences, the majority of studies on victimization of students with disabilities documented increased verbal abuse (e.g., name calling, mimicking disability characteristics, teasing), social exclusion, and physical aggression when compared to nondisabled peers (Dawkins, 1996; Langevin et al., 1998; Little, 2002; Llewellyn, 2000; Marini et al., 2001; Norwich & Kelly, 2004; O’Moore & Hillery, 1989; see Table 3).

In general, approximately 13% of the American school population (students with and without disabilities) exhibits bullying characteristics (Nansel et al., 2001), and a growing number of researchers are investigating perpetration by students with disabilities (see Table 3). One serious concern is that over time victimized students may develop aggressive characteristics as a strategy to combat the victimization (Kumpulainen, Räsänen, & Puura, 2001; O’Moore & Hillery, 1989; Singer, 2005; Van Cleave & Davis, 2006). Some researchers have suggested that students with disabilities display more bullying and/or aggressive behaviors (physical, verbal) than students without disabilities (Kaukiainen et al., 2002; Kuhne & Wiener, 2000; Nabuzoka & Smith, 1993; O’Moore & Hillery, 1989; Unnever & Cornell, 2003; Whitney et al., 1994).

Although some students with disabilities perpetrate bullying, others might be considered provocative victims. The

literature in this area is extremely limited, yet some researchers have provided insights into the prevalence of such behaviors. Although Sheard, Clegg, Standen, and Cromby (2001) reported that adults with severe cognitive disabilities who bullied others were not more likely to have been bullied themselves, other data raise concerns. For example, victims from inclusive schools who transferred to special schools had a higher tendency to become bullies (Whitney et al., 1992). Overall, researchers have documented between 15% (Van Cleave & Davis, 2006) and 42% (O’Moore & Hillery, 1989) of victims with disabilities exhibiting bully characteristics. Furthermore, students with psychiatric disorders or high-incidence disabilities may adopt aggressive behaviors in an attempt to eliminate being victimized (Kumpulainen et al., 2001; Singer, 2005). It is difficult to generalize findings because of the lack of research in this area.

Preventative and Predictive Factors

Through a synthesis of the literature, three distinct areas emerged for exploring predictive and preventative factors influencing victimization and perpetration in students with disabilities: school factors, disability type, and personal attributes. Categorical differences on these variables may, in part, account for increased victimization and perpetration rates.

School Variables

Victimization. Two key school variables found in the literature include educational setting and qualification for special education services (status). Overall, victimization rates between students with and without disabilities in inclusive settings yield comparable results. At the elementary level, special education status does not appear to impede peer acceptance scores (Vaughn & Haager, 1994) or to be a predictor of bullying and victimization. Wood and Wolke’s (2004) investigation of 1,016 students (Grades 2 and 4) demonstrated that although status was an indicator for academic achievement, it was not necessarily a predictor of victimization. Various factors may explain these findings, such as the bullies’ inability to distinguish cognitive differences at a young age or the visibility of the disability (Langevin et al., 1998; Monks et al., 2005). Findings raise the question of whether inclusive settings serve to prevent victimization. For example, some data reveal that in inclusive settings the discrepancy between victimization rates among students with learning disabilities (LDs) and those of their general education peers is not substantial. Yet students and teachers consistently rank their classmates with disabilities as frequent victims of bullying (Nabuzoka, 2003; Nabuzoka & Smith, 1993; Sabornie, 1994). It should be noted that the self-report data suggest that students and teachers are aware

Table 3. Victimization and Bullying Rates of Students With Disabilities

Author and Disability Type	Victimization Rates	Bullying Rates
Baker and Donnelly, 2001, fragile X syndrome	100% ($n = 4$)	Not measured
Bramston, Fogarty, and Cummins, 1999, cognitive disabilities	37% victimized 47% teased 25%, 30% control	Not measured
Conti-Ramsden and Botting, 2004, language impairment	36% At risk for Victimization	17% Bullied others
Davis, Howell, and Cooke, 2002, stuttering	37.5% victimized 10.6% control	Not measured
Dawkins, 1996, observable and unobservable disabilities	Observable disabilities 50% at least once 30% on a regular basis 9% severe Unobservable disabilities: 21% at least once 14% on a regular basis 10% severe	Not measured
Doren, Bullis, and Benz, 1996, adult transition	54% victimized	Not measured
Fujiki, Brinton, Isaacson, and Summers, 2001, language impairment	> 1% victimized	Not measured
Kaukiainen et al., 2002, LDs	10.7% victimized 6.3% control	21.4% bullied others 6.3% control
Knox and Conti-Ramsden, 2003, language impairment	36.2% total special education Victims: 14.9% mainstream setting 21.3% pullout setting 12.0% control	Not measured
Kuhne and Wiener, 2000, LDs	Not measured	83% of the aggressive group (LD) 5.7% total population
Kumpulainen, Räsänen, and Puura, 2001, psychiatric disorders	24.8% victimized	
Langevin, Bortnick, Hammer, and Wiebe, 1998, stuttering	59% victimized (for stuttering) 56% on a regular basis 69% victimized (for something other than stuttering) 50% on a regular basis	Not measured
Little, 2002, Asperger syndrome	94% victimized during the past year	Not measured
Llewellyn, 2000, physical disabilities	67% severely victimized	Not measured
Marini, Fairbairn, and Zuber, 2001, developmental disabilities	28% victimized	13% bullied others
Martlew and Hodson, 1991, LDs	Students with disabilities reported significantly more teasing and bullying than their mainstream peers (this was especially true for older students)	Not measured

(continued)

Table 3. (continued)

Author and Disability Type	Victimization Rates	Bullying Rates
Monchy, Pijl, and Zandberg, 2004, behavior problems	50% victimized 50% rejected 19% control	Not measured
Morrison, Furlong, and Smith, 1994, various disabilities	Special day class students experienced higher rates of verbal assaults and bullying when compared to the other subgroups	Not measured
Nabuzoka, 2003, LDs	Teachers and peers nominated students with LDs as being victims of bullying significantly more than students without disabilities	Not measured
Nabuzoka and Smith, 1993, LDs	25.0% rejected 9.0% control 66.7% female with LDs rejected 7.4% control No significant difference for males	20.0% females with LD 1.5% females without LD No significant difference for males
Norwich and Kelly, 2004, various disabilities	84% victimized	Not measured
O'Moore and Hillery, 1989, various disabilities	67.9% remedial class victimized 17.5% frequently 77.2% special class victimized 14.3% frequently 62.1% control 6.1% control (frequently)	43.1% remedial class 68.6% special class 42.0% control
Sabornie, 1994, LDs	Students with LDs were 3.5 times more likely to be victimized	Not measured
Sheard, Clegg, Standen, and Cromby, 2001, cognitive disabilities	21% victimized 10% residential placements 11% placement within the home	27% bullied others (total) 19% residential placements 8% home placement
Singer, 2005, dyslexia	85% teased 25% frequently	28% reported teasing others
Sweeting and West, 2001, various disabilities	39% language impairments (weekly) 30% reading difficulties (weekly) 15% control	Not measured
Unnever and Cornell, 2003, ADHD	34% victimized (2–3 times per month) 22% control	12% bullied others 8% control
Van Cleave and Davis, 2006, special health care needs	42.9% victimized 22.0% control	31.8% bullied others 51.1% students with emotional or behavioral disorders 21.1% control
Whitney, Smith, and Thompson, 1994, various disabilities	67% victimized (SE Total) 55% mild learning difficulties	33% bullied others (total special education) 27% mild learning difficulties

(continued)

Table 3. (continued)

Author and Disability Type	Victimization Rates	Bullying Rates
	78% moderate LDs	29% moderate LDs
	50% physical disabilities	33% physical disabilities
	100% hearing impairments	50% hearing impairments
	29% visual impairments	29% visual impairments
	25% control	17% control
Woods and Wolke, 2004, disabilities not specified	No significant difference	Not measured
Yude, Goodman, and McConachie, 1998, hemiplegia	43% victimized	6% bullied others
	13% control	11% started fights
		17% control (bullied)
		13% control (started fights)

Note: Control = nondisabled peer group; LD = learning disability.

of the fact that students with disabilities are victimized more often than their nondisabled peers.

For students with disabilities educated in segregated settings (i.e., classrooms or schools), findings vary. For example, in a recent study conducted in Israel (Reiter & Lapidot-Lefler, 2007), the extent of harassment or victimization among students with disabilities educated in segregated settings was similar to that experienced by students in regular schools (49%). Other researchers documented that students in segregated settings were victimized by their classmates or adolescent peers 2 to 3.5 times more than any other subgroup of students (Martlew & Hodson, 1991; Morrison, Furlong, & Smith, 1994; O'Moore & Hillery, 1989; Sabornie, 1994). Similar findings have also been reported for adults in assisted living facilities when compared to demographically matched peers (Bramston, Fogarty, & Cummins, 1999). These findings may be attributed to educational placement, a lack of socialization between students with and without disabilities, or severity of disability (discussed below).

Evidence suggesting students educated in segregated settings are victimized more often may point to inclusive settings for minimizing bullying perpetration. Researchers suggest inclusive settings enhance social skill acquisition, improve overall social and academic development (Brown et al., 1989), increase acceptance, reduce negative stereotypes (Martlew & Hodson, 1991), and increase participation (Sabornie, 1994). On the other hand, if students are not fully integrated into peer groups, inclusive settings may maintain or exacerbate victimization (Martlew & Hodson, 1991). Isolation limits opportunities to learn, practice, and receive validation for appropriate social skills (Mishna, 2003) and limits the development of a protective peer base (Morrison et al., 1994; Whitney et al., 1994).

Perpetration. One significant school factor in examining perpetration is teacher awareness and intervention. Teachers can reinforce or maintain perpetration if they are unaware it is occurring or do not effectively address the problem. Bradshaw, Sawyer, and O'Brennan (2007) investigated perceptual differences between students and school staff in the incidence of perpetration. The researchers surveyed teachers, school psychologists, guidance counselors, and students in 109 schools in a large public school district in Maryland. Results indicated that although 49% of students reported being bullied at least once, with 41% reporting frequent involvement in bullying, most staff (71.4%) estimated that fewer than 15% of students were frequent victims.

Teachers also have difficulty differentiating between bullying and other forms of student conflict. Educators identify physical threats or abuse as bullying regardless of the confrontation but view verbal or social-emotional abuse as far less severe (Bauman & Del Rio, 2006; Hazler, Miller, Carney, & Green, 2001). These findings are noteworthy in that students often rate the severity of emotional, verbal, and physical abuse equally (Newman & Murray, 2005), and students with disabilities often report indirect and verbal abuse as the most frequent forms of bullying (Dawkins, 1996; Langevin et al., 1998; Little, 2002; Llewellyn, 2000; Marini et al., 2001; Norwich & Kelly, 2004; O'Moore & Hillery, 1989).

Thus, a disconnect is evident between teachers' and students' perceptions of the severity in various types of bullying situations. This discrepancy may be attributed to the covert nature of verbal and indirect bullying (Miller et al., 1998) or the educators' obligation to intervene with physical conflicts (Bauman & Del Rio, 2006; Ellis & Shute, 2007). Newman and Murray (2005) and Newman, Murray, and Lussier (2001) determined that teachers and students believed that physical threats and harm warranted seeking

adult assistance, but students preferred to resolve indirect conflicts independently. In addition, students surveyed indicated that seeking help for indirect events could “backfire” and escalate perpetration (Newman & Murray, 2005). This reluctance is a common theme in the bullying literature; students think teachers may not believe them or assume teachers will be unable to assist or eliminate the abuse (Brendtro et al., 2001; Miller et al., 1998; Sharp & Smith, 1994; Walker et al., 1995). Although students were less likely to seek help from adults for indirect bullying, students identified as “unpopular” identified indirect aggression as severe as physical abuse (Newman & Murray, 2005).

A second predictor for bullying perpetration is the restrictiveness of the classroom placement. One investigation in the Dublin schools (O’Moore & Hillery, 1989) documented students educated in special classes bullied more often (68.6%) than their general education peers (42.0%) or peers who receive remedial instruction (43.0%). This discrepancy is also evident in students moving from an inclusive setting to a more restrictive environment. Whitney and colleagues (1992), for example, suggested students with disabilities tended to exhibit more bullying behaviors in segregated classes when they were victimized in inclusive settings. In addition, higher levels of bullying behaviors may not be exclusive to educational settings. Sheard et al. (2001) noted that adults with disabilities in assisted living situations exhibited more bullying behaviors when placed in residential placements (19%) as compared to those in home environments (8%). Although research indicates restrictive placements often elicit elevated reports of perpetration, it is unclear whether results may be attributed to disability characteristics within the educational environment or the overall restrictiveness of the placement. Research in this area is quite limited, and further investigation is warranted.

Disability Type and Personal Attributes

Victimization. As mentioned, severity of the disability may be a factor in victimization; students with severe disabilities in segregated settings are victimized more often than those in inclusive settings (Kaukiainen et al., 2002; Morrison et al., 1994; O’Moore & Hillery, 1989), but again the research in this area is very limited. According to Whitney and colleagues (1994), “Just being different in a noticeable way” puts a person at risk for victimization (p. 213). For example, students with cognitive disabilities (i.e., mild to moderate learning difficulties) were 2 to 3 times more likely to be victimized than classmates without disabilities. They also found students with observable disabilities (i.e., physical disabilities, hearing impairments) 2 to 4 times more likely to be victimized. In addition, Reiter and Lapidot-Lefler (2007) found that “being a victim was correlated with emotional problems and interpersonal problems” (p. 179).

In examining victimization rates between students with and without observable disabilities, Dawkins (1996) noted that 50% of students with visible disabilities reported being victimized at least once, with 30% victimized on a regular basis. On the other hand, only 21% of students with nonobservable disabilities were victimized at least once, and 14% on a regular basis.

Although a growing body of evidence supports these findings, particularly related to observable disabilities in the general education classroom, the data vary. Some studies documented 20% more students with language impairments reported being victimized compared to their general education peers (Davis, Howell, & Cooke, 2002; Knox & Conti-Ramsden, 2003; Sweeting & West, 2001). Comparable data were found for students with psychiatric disorders (Unnever & Cornell, 2003; Van Cleave & Davis, 2006) and physical disabilities (Whitney et al., 1994; Yude, Goodman, & McConachie, 1998). Similarly, 30% more students with emotional or behavioral disorders (EBDs) and (Monchy et al., 2004; Van Cleave & Davis, 2006) 66% more students with Asperger syndrome are reported to be victimized compared with the national average (Little, 2002). These data indicate that visibility (observability) and overt behavior may influence victimization.

In addition to severity and type, personal factors may contribute to prolonged victimization. Although characteristics such as problem behavior may contribute (Martlew & Hodson, 1991; Morrison et al., 1994; Yude et al., 1998), victims with disabilities often are characterized as having poor social skills (Baker & Donnelly, 2001; Doren et al., 1996; Kaukiainen et al., 2002; Kuhne & Wiener, 2000; Llewellyn, 2000; Miller et al., 1998; Woods & Wolke, 2004). Students may be victimized because they are too passive or exhibit timid responses that may reinforce bullying behavior. Victims may also misread nonverbal communication or misinterpret nonthreatening cues (Sabornie, 1994). Victims with disabilities also maintain few close friendships or have unstable relationships. This lack of social networks deprives the victim of a substantial social protection base. Students with disabilities who are victimized also require greater academic assistance, are reportedly rejected by their general education peers, and are regarded as unpopular (Baker & Donnelly, 2001; Kuhne & Wiener, 2000; Llewellyn, 2000; Martlew & Hodson, 1991; Morrison et al., 1994; Nabuzoka & Smith, 1993). Nabuzoka (2003) states that these students can be at less risk if they understand and exhibit appropriate social behaviors that help them avoid being victimized; if they have difficulty comprehending social cues or applying strategies to avoid victimization, they become targets of bullying. Rejection and victimization may lead to anxiety, depression, poor self-esteem, a lack of confidence, and minimal social or academic participation (Dawkins, 1996; Marini et al., 2006; Miller et al., 1998; Sabornie, 1994; Unnever & Cornell, 2003; Whitney et al., 1994).

Although bullying research has implied a need for social skills interventions, victims often develop strategies that help them cope with prolonged victimization. Research suggests that students who understand and accept their disability are more accepting of diversity among their classmates (Llewellyn, 2000), develop friendships, and are victimized at lower rates (Schwartz et al., 1999). According to Singer (2005), students develop four methods for coping with victimization. They (a) hide from the bully, (b) work hard academically to catch up with peers, (c) fight back, and/or (d) attempt to explain their disability to the aggressor. Further research suggests that positive self-concept, adequate social skills, academic independence, social confidence, quality friend base, and school enjoyment serve as protection against victimization (Flynt & Morton, 2004; Garrity et al., 2002; Kumpulainen et al., 1998; Martlew & Hodson, 1991; Mishna, 2003; Whitney et al., 1994).

Perpetration. Overall, students with high-incidence disabilities (i.e., LDs, mild learning difficulties, EBD) exhibit more bullying perpetration than the national average, about twice as often as students without disabilities (Kaukiainen et al., 2002; Whitney et al., 1994). These bullies tended to exhibit significantly higher levels of challenging behavior (Reiter & Lapidot-Lefler, 2007). Females with LDs may be 10 times more likely to exhibit bullying perpetration than females without disabilities (Nabuzoka & Smith, 1993). Students with LDs in self-contained settings exhibit high levels of aggressive or bullying behaviors (Kuhne & Wiener, 2000; O'Moore & Hillery, 1989).

Although we see increased perpetration rates among students with LDs, those with EBDs demonstrate the highest levels of perpetration when comparing students with and without disabilities (Monchy et al., 2004; Van Cleave & Davis, 2006). Finally, although students with language impairments (Conti-Ramsden & Botting, 2004), psychiatric disorders (Kumpulainen et al., 2001; Unnever & Cornell, 2003), dyslexia (Singer, 2005), hemiplegia (Yude et al., 1998), and severe cognitive disabilities (Sheard et al., 2001) have participated in bullying, perpetration rates among seem to be much lower (6% to 19%) than for those with high-incidence disabilities and their general education peers.

Bullying perpetration by students with disabilities is often a learned behavior, possibly a reaction to prolonged victimization or an overall lack of social skills. Although educational setting and prevention programs could affect perpetration, behavioral characteristics of students may increase the likelihood of bullying. Again, these students may act too aggressively or misinterpret social stimuli because of social information processing deficits (Burks, Laird, & Dodge, 1999; Crick & Dodge, 1994, 1996; Dodge et al., 2003; Sabornie, 1994). Students with disabilities may have greater difficulty with assertion and self-control (Mayer & Leone, 2007) or they may misread social communication (Whitney et al., 1994) or rough and tumble play by acting

aggressively during socially unacceptable times (Nabuzoka & Smith, 1993). They also may engage in perpetration to protect themselves from further victimization or because they have learned the behavior in other social situations (e.g., family structure, social acquaintances).

Discussion

Violence among the nation's youth has become a pervasive problem. In an attempt to understand, intervene, and prevent further violence within the schools, the federal government has funded several large-scale research studies. Although the results of these studies revealed that the majority of American school children are involved in bully perpetration or victimization, data typically are reported at the whole-school level rather than aggregated by subgroups. Furthermore, although a definition of bullying has not been agreed on, defining characteristics and subgroups of participants has remained consistent, as have the types bullying (verbal, physical, indirect, or sexual aggression).

"Students who have a disability or who have unusual attributes are especially vulnerable as targets of teasing and bullying" (Walker et al., 1995, p. 190). Although data do suggest that students with disabilities are victimized more often, victimization rates seem to fall on a continuum. Students with higher incidence disabilities experience less victimization than students with more severe cognitive or physical disabilities. Those in special classes or segregated schools appear to be victimized more often than students with and without disabilities in inclusive settings. Victimization also may be exacerbated by individual character traits or an inability to effectively interpret social cues.

Although empirical validation exists regarding the escalated rates of victimization and perpetration among students with disabilities, very few studies address intervention strategies for individual subgroups of students. This gap in the literature may translate to the implementation of inadequate practices or supports for students with disabilities who are subjected to bullying. Educators must intervene to eliminate bullying within the nation's schools.

Promoting proactive schoolwide interventions can create positive school climates, encourage social awareness, and decrease bullying perpetration. Since 1999 approximately 33 states have enacted legislation related to bullying and harassment with the intent of (a) establishing school or district policies that prohibit bullying and (b) communicating those policies to students and their parents (Swearer, Espelage, & Napolitano, in press). Schools are incorporating research-supported bullying prevention programs into the curriculum. Unfortunately, these programs rarely address interventions for individualized subgroups of students.

Therefore, schools also must consider targeted intervention programs for students with disabilities who either perpetrate bullying or are at greater risk for victimization.

Interventions should allow for modifying existing school policies and prevention programs to meet individual needs. The lack of empirically validated intervention for these populations poses a difficulty in determining the most effective prevention strategies for students with disabilities. However, overall violence prevention requires that we examine what Leone and Mayer (2004) refer to as systemic risk factors, including (a) academic missions that mesh poorly with student's needs, (b) zero tolerance and reactive punitive approaches to discipline, (c) noncollaborative systems of control, (d) racial and cultural disconnects, and (e) disconnects with students with disabilities. In later work they go on to suggest,

Programming at the school level must include a multifaceted approach, with programs meaningfully addressing physical safety, educational practices and programs that support students' social-emotional-behavioral *needs*. . . . Specific areas of programming should include, among others, mental health supports, bully prevention, anger management, and conflict resolution. (Mayer & Leone, 2007, p. 22)

In applying these tenets to bully prevention programs or targeted interventions for students with disabilities, several thoughts emerge. First, programs and policies should be multifaceted, addressing schoolwide prevention, individualized supports for victims and perpetrators, and proactive prevention strategies for at-risk student populations. School policies should support a mission of promoting cultural competence and diversity awareness among staff and students. These in turn should be ingrained in the curriculum selection process. For students with disabilities, as well as populations at risk for perpetration and victimization, individualized behavioral supports (e.g., social skills training, mental health counseling, behavioral modeling) should be incorporated into regular curricular activities. Disciplinary policies and codes of conduct should incorporate measures addressing immediate physical safety concerns as well as individualized supports (e.g., anger management, conflict resolution, functional behavior assessments, behavior intervention plans) to decrease the frequency of perpetration. Finally, school policies should endorse a commitment to collaborative practices among administration, school personnel, students, families, and community agencies to meet individual student needs.

In addition to schoolwide commitment toward bully prevention, teachers must take a proactive role within their classrooms in decreasing perpetration and supporting victims. Are teachers aware of the extent to which bullying behavior occurs within the classroom? Teachers must have an awareness of social interactions among their students with and without disabilities and create a positive environment that supports individual student differences (Meadan & Monda-Amaya, 2008).

Special educators must collaborate with general educators to structure the overall setting to promote social competence among students (Meadan & Monda-Amaya, 2008). Marini et al. (2006) suggest rethinking the physical environment of the classroom and teaching social skills. Baker and Donnelly (2001) recommend having teachers promote social awareness, encourage positive social interactions, provide an equal social structure, value academic and social goals equally, participate in teacher training opportunities, and collaborate with other teachers, parents, and community agencies. Crothers and Kolbert (2008) stress the importance of constructive conversations with bullies and victims, parent-teacher collaborations, and effective classroom management techniques.

Adopting practices that reduce bullying requires educators and administrators to modify their approaches to instruction and behavior management. First, teacher preparation programs must increase instruction in behavior and classroom management (positive behavior supports), social competency, and diversity awareness. Providing these foundational skills will equip novice teachers with techniques and intervention strategies necessary to recognize and address perpetration in their classrooms. Second, professional development must be available to classroom teachers to understand perpetration and victimization and risks across populations and to develop a repertoire of intervention strategies. Finally, to increase buy-in and adherence to program mandates, teachers should be regarded as equal partners in making decisions regarding school bullying policies.

In addition, school personnel should collaborate with families on home-based interventions to decrease victimization and perpetration. Baker and Donnelly (2001) provide parents with six suggestions for increasing social competence in students with disabilities: (a) advocating for their children both socially and academically, (b) encouraging participation in social events and activities, (c) engineering opportunities for socialization with peers without disabilities, (d) informally educating other children and parents on disability characteristics, (e) encouraging a valued social identity, and (f) deliberately taking action to separate negative or nonproductive social situations. Teacher-family collaboration in socialization efforts increases a student's ability to learn, practice, and validate social skills, which might help avoid victimization.

Limitations

Although data presented in this review are convincing, there are several limitations to the extant literature, the most obvious being the limited number of studies solely focused on students with disabilities. In addition, one overarching limitation is the ambiguity among definitions used for bullying. This ambiguity confounds comparisons across studies and raises questions as to whether the same phenomena are being

measured. With respect to the current literature, a majority of studies were conducted outside of the United States; findings therefore may not generalize. Second, although some studies focused on bullying, others took a broader perspective, examining violence. Bullying differs from isolated acts of violence; it is ongoing, is chronic, and has no clear beginning or ending point. Third, the majority of the data were collected via self-report measures (e.g., structured interviews, nominations, questionnaires, rankings), which may over- or underrepresent the overall prevalence of bullying perpetration within the field of special education. Future studies should incorporate a common practice in developmental research of including data from multiple informants (i.e., peers, teachers, and parents). Fourth, few studies investigated preventative or predictive variables that account for or exacerbate bullying behaviors. Most importantly, no studies incorporated or investigated interventions for students with disabilities who were victimized or engage in bullying perpetration. Many studies presented similar findings; however, the limitations may signify inconsistency in the data collection and reporting procedures and raise questions regarding results.

These limitations also point to significant gaps in the literature regarding students with disabilities. A commonly acceptable yet measurable definition for bullying is needed. In addition, research should focus on the function of bullying behaviors and equivalent predictor and preventative variables as described above (disability type, educational setting). Researchers should examine potential support systems for victims, including social skills training and conflict resolution. In addition, schoolwide prevention programs should be evaluated for their effectiveness in decreasing perpetration and victimization of students with disabilities with an emphasis on long-term outcomes.

Bullying perpetration and victimization have become a national problem; overt acts of school violence are often the result of prolonged victimization. Therefore, it is critical to develop appropriate and effective interventions, especially for students with disabilities who may be victimized at greater rates than their nondisabled peers. Effective schoolwide and individual interventions are needed to target subgroups predisposed to perpetration and victimization.

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