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MINI-SERIES

Research on School Bullying and Victimization: What Have We Learned and Where Do We Go From Here?

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Abstract. This special issue on bullying and victimization in *School Psychology Review* highlights current research efforts in American schools on bullying and peer victimization, and how this research can inform prevention and intervention planning. This introductory article provides a brief overview of several major insights gained over the last decade from research on bullying in school-aged youth and sets the stage for the special issue. Research on psychosocial correlates in bullying behaviors is reviewed and four insights that provide directions for future research are derived. The contributing authors in the special issue augment these insights by examining the influence of the peer ecology on bullying (Rodkin & Hodges, 2003), using longitudinal and multivariate methodologies in bullying research (Long & Pellegrini, 2003), assessing the climates within the school where bullying typically occurs (Leff, Power, Costigan, & Manz, 2003), exploring implementation issues of school-wide bullying prevention programming (Orpinas, Home, & Staniszewski, 2003), reviewing laws and policies to address bullying (Limber & Small, 2003), and challenging researchers to reach a consensus on bullying research (Furlong, Morrison, & Greif, 2003).

School bullying among children and adolescents has been the focus of many international studies over the last 30 years. In his seminal research, Norwegian scholar Daniel Olweus (1972) coined bullying as "mobbing," and defined it as an individual or a group of individuals harassing, teasing, or pestering another person. However, it was not until 1982 that school officials in Norway turned their attention to school bullying, and did so only after three 14-year-old boys committed suicide as a result of extreme harassment from class-

mates (Olweus, 1993). Following these events, the Ministry of Education in Norway launched a national campaign against bullying in which a prevention program was implemented in every primary and secondary school. Indeed, many other countries have recognized bullying as a serious concern, including England, Italy, Canada, Japan, the United States, and Australia, to name a few.

Recent events in the United States raise some issues about the transportability of international findings to the culture of American

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schools. For example, the recent concern over school shootings in the United States has led to many schools to adopt "zero-tolerance" policies for aggressive behavior, including bullying. However, what happens to these youth who are suspended or expelled for aggressive behavior? Compulsory education mandates that these students receive a "free and appropriate education." Thus, these students return to school. The United States has a history of legislative mandates that affect education for all students in this country. Additionally, the U.S. government has influenced educational policies and practices (i.e., DARE campaign). In fall 2003, the U.S. Department of Health and Human Services is launching a multiyear national bullying public awareness and prevention campaign. What might be the effect of this public awareness campaign on antibullying policies in American schools?

Rationale for this Special Issue

In the past 3 years several special issues devoted to research on bullying have been published in national and international journals (Elias & Zins, Eds., *Journal of Applied School Psychology*, 2003; *School Psychology International*, 2000; Geffner & Loring, Eds., *Journal of Emotional Abuse*, 2001; and Smith & Brian, Eds., *Aggressive Behavior*, 2000). It is surprising that only four special issues have been devoted to this topic when schools are increasingly being mandated to develop antibullying policies. Therefore, given the dearth of articles on bullying and victimization in the journal that has one of the largest school personnel readerships, it is timely for a special issue on research on bullying and victimization to appear in *School Psychology Review*. In a PsychINFO search of articles on bullying and victimization from 1980 to the present in *School Psychology Review*, only four articles that focused on bullying and victimization were found. Of these four articles, only three specifically focused on bullies and victims (Batsche & Knoff, 1994; Leff, Kupersmidt, Patterson, & Power, 1999; Leff, Power, Manz, Costigan, & Nabors, 2001). This special issue fills a gap in the literature and will be a critical resource for school psychologists and educators working in our nation's schools.

The three aforementioned articles on bullying published in *School Psychology Review* have set the stage for this special issue on bullying research. In 1994, Batsche and Knoff stated that bullying was a pervasive problem and urged researchers and practitioners to consider bullying as a pervasive form of violence. They encouraged school personnel and researchers to examine the relationship between school climate, academic performance, and bullying. Five years later, Leff and colleagues tackled the difficult issue of accurate assessment of bullies and victims (Leff et al., 1999). They found that teachers more accurately identified elementary versus middle school bullies and victims and that multiple teacher reports increased accurate identification of bullies and victims. Finally, they found low concordance between peer and teacher nominations; teachers identified less than half of peer-nominated bullies and victims. Two years later, Leff et al. (2001) reviewed five model programs designed to reduce aggression in schools. The five programs reviewed met Chambless and Hollon's (1998) criteria for "possibly efficacious" programs and were: (a) Promoting Alternative Thinking Strategies (PATHS), (b) Second Step, (c) First Step to Success, (d) Anger Coping Program, and (e) Brain Power Program. Leff and colleagues noted that missing from many of these programs was a focus on relational aggression. Given the relationship between relational and overt aggression, this omission has serious implications for effectively treating all forms of aggression, including bullying.

In addition to school psychologists, developmental psychologists in the U.S. have also studied peer victimization and its detrimental effects for many years (see Juvonen & Graham, 2001 for a review). Similarly, physical aggression and more extreme forms of violence have been investigated for decades in the United States by sociologists, psychologists, and criminologists (e.g., Dishion, French, & Patterson, 1995; Goldstein, 1994; Loeber & Stouthamer-Loeber, 1998). Unfortunately, fewer studies have focused exclusively on bullying, so scholars and clinicians have used findings from international studies to guide pre-

vention and intervention efforts in the United States. Despite our nation's slow start, many active research programs on bullying are making significant advances in our understanding of the dynamics of bullying, how it emerges, and how to effectively intervene. This article is intended to provide the foundation for the special issue on bullying and peer victimization in *School Psychology Review* by highlighting some of the major findings that have recently emerged from studies conducted in American schools. However, there continue to be some areas dominated by international research and this research is also included. Overall, the goal of this special issue is to highlight how extant theoretical and empirical research can guide bullying prevention and intervention efforts in schools. An additional goal is to emphasize the questions that remain unanswered about the dynamics of bullying in American schools, and to provide directions for future research.

Incidence of Bullying in Schools

The exact prevalence of bullying is difficult to generate as definitions and measures used across studies vary tremendously. However, evidence from several large-scale studies in midwestern and southeastern U.S. schools suggests that bullying behavior is quite common (Espelage, Bosworth, & Simon, 2000; Hoover, Oliver, & Hazler, 1992; Limber et al., 1997). In a study of junior high and high school students from midwestern towns, 88% reported having observed bullying and 77% reported being a victim of bullying during their school years (Hoover et al., 1992). Similarly, 25% of students in Grades 4 through 6 admitted to bullying another student with some regularity in the 3 months preceding the study (Limber et al., 1997). A more recent study in the *Journal of the American Medical Association* (Nansel et al., 2001) demonstrated the seriousness of bullying in schools. These authors surveyed 15,686 students in Grades 6 through 10 across the U.S. and found that a total of 29.9% of the sample reported frequent involvement in bullying, with 13% as a bully, 10.6% as a victim, and 6% as a bully-victim.

Further support for the need to address bullying was provided by a report conducted

by the U.S. Secret Service (Vossekuil, Fein, Reddy, Borum, & Modzeleski, 2002). In this interview-based investigation of the friends, families, and neighbors of 41 school shooters (between 1974–2000), a startling finding emerged. Attempting to uncover familial or psychological profiles that could be helpful in identifying future school shooters, the Secret Service discovered one commonality among the shooters: 71% had been targets of a bully. Although school violence has decreased over the past 4 years (U.S. Department of Health & Human Services, 2001), this report still raises concern about how students treat each other and suggests that schools should focus on making schools safer places where *all* students feel protected and valued and that the consequences of neglecting psychosocial functioning may have dire results.

It is therefore not surprising that many state legislatures (e.g., Wisconsin, Illinois, Colorado) have mandated that schools adopt a bully policy and/or bully prevention plan to address this significant problem (see Furlong et al., 2003; Limber & Small, 2003). As such, teachers, school administrators, social workers, counselors, and concerned parents are attempting to adhere to state mandates, often within short time frames, to create bully policies and to design, implement, and evaluate bully prevention programs. Although research has consistently highlighted specific components important for bullying prevention programs (e.g., teacher training, importance of peer group), this information is not always readily accessible to practitioners. Thus, this special issue attempts to lessen the science-practice gap.

Insights Gained

To this end, this special issue highlights current research efforts in American schools on bullying and peer victimization, and links this research to prevention and intervention planning. A brief overview of several major insights gained over the last decade in bullying research is presented. The insights are not intended to be an exhaustive list, but are intended to set the stage for the special issue and future research.

Insight 1: Defining and Assessing Bullying and Peer Victimization are Complex Tasks

Defining Bullying

Perhaps, the most challenging aspect of bullying prevention programming is reaching a consensus on a definition of bullying. A number of definitions exist in the literature; however, although these conceptualizations differ semantically, many of them have one similarity: *Bullying is a subset of aggression* (Dodge, 1991; Olweus, 1993; Rivers & Smith, 1994; Smith & Thompson, 1991). The following definitions are commonly found in the literature:

A person is being bullied when he or she is exposed, repeatedly over time, to negative actions on the part of one or more other students. (Olweus, 1993, p. 9)

A student is being bullied or picked on when another student says nasty and unpleasant things to him or her. It is also bullying when a student is hit, kicked, threatened, locked inside a room, sent nasty notes, and when no one ever talks to him. (Smith & Sharp, 1994, p. 1)

Bullying is longstanding violence, physical or mental, conducted by an individual or group and directed against an individual who is not able to defend himself in the actual situation. (Roland, 1989, p. 143)

Thus, bullying is defined in the literature as a repeated behavior (including both verbal and physical behaviors) that occurs over time in a relationship characterized by an imbalance of strength and power (Olweus, 1994). Given this imbalance of strength and power, it is difficult for the person being bullied to defend himself or herself.

Researchers who study bullying can "borrow" from the aggression literature as they struggle to define and assess bullying behaviors. One well-accepted typology of aggression includes Dodge's (1991) categorization of proactive versus reactive aggression. Proactive or instrumental aggression includes behavior that is directed at a victim to obtain a desired outcome, such as gaining property, power, or affiliation. In contrast, reactive aggression is directed at the victim as a result of an aversive event that elicited anger or frustration on the part of the perpetrator. The majority of bully-

ing has been viewed as proactive aggression because bullies often seek out their targets with little provocation and do so for extended periods of time.

Others have distinguished bullying from other forms of aggression using the typology of direct versus indirect aggression (Bjorkqvist, Lagerspetz, & Kaukiainen, 1992; Olweus, 1993) or overt versus covert aggression (Crick, 1995; Crick, Casas, & Ku, 1999). Direct (overt) aggression includes physical fighting (e.g., pushing, shoving, kicking) and verbal threatening behavior (e.g., name-calling, teasing) that is face-to-face confrontation; whereas indirect aggression (covert) includes a third-party in which verbal aggression is accomplished through rumor spreading and name-calling.

Relational aggression has emerged in the literature as another form of aggression or bullying. Coined by Nicki Crick and colleagues, relational aggression is defined as aggression directed at damaging a relationship. Put another way, in relational aggression, relationships are used as a means to harm (Crick & Grotpeter, 1996). For example, relationally aggressive youth might threaten to exclude a friend from a social activity if he or she does not go along with the aggressor. Students might also spread rumors about a close peer as a way of retaliating when their target did not go along with the crowd. To date, relational aggression is defined and assessed as verbal aggression; however, it is also plausible that some students damage friendships through physical force or threat of physical force.

In summary, despite their disparate nature, most definitions of bullying include the notion that bullying includes both physical and verbal aggression, which is a systematic, ongoing set of behavior instigated by an individual or a group of individuals who are attempting to gain power, prestige, or goods. Tactics might also be directed at the threat of withdrawal of a friendship.

Assessment of Bullying and Victimization

Researchers, school personnel, and state boards of education are not only being asked to define bullying, but are also encouraged to

assess bullying and victimization from multiple sources (e.g., students, parents, teachers) to design programs that are applicable to their school ecology. It is critical to discuss the various types of assessment methods used to estimate the incidence of bullying and to identify bullies, victims, bully-victims, and bystanders (Solberg & Olweus, 2003). These methods include: self-report, peer nominations, teacher nominations, and behavioral observations.

Self-report scales and surveys. Self-report is often the preferred method of assessment for research purposes and for school personnel to gather information about bullying in their school. Examples can be found throughout the extant literature (Espelage, Bosworth, & Simon, 2001; Olweus, 1989; Rigby & Slee, 1999). A common self-report bullying scale involves asking students directly (under assurance of confidentiality) how often they engaged in certain behaviors over a specified time period (e.g., past 30 days). For example, the University of Illinois Aggression scales (Espelage, Holt, & Henkel, 2003) include a bullying subscale that assesses name-calling, teasing, rumor spreading, exclusion, and teasing others. These scales also include a distinct scale that assesses frequency of physical fighting. Items are summed to create a composite score and bullies are often identified as those students scoring at the extreme end of this continuum. These same methods are used to identify victims, except that the categorization is based on items related to the frequency of being bullied. Another type of self-report measure involves providing students with a definition of bullying and then asking them to respond to questions about bullying and victimization (Olweus, 1989; Swearer, 2001). These surveys comprehensively assess bullying incidents by soliciting locations where bullying occurs, who engaged in the bullying, how school personnel responded, and attitudes toward bullying. Self-report survey data are also collected from parents and school staff about their perceptions of school bullying. An advantage of self-report is that these data can be collected at multiple time points to assess changes in bullying as a result of prevention efforts. One issue that should be the focus of future

research is whether students are provided with a definition of bullying when responding to measures designed to assess bullying. Although some argue that a definition should be provided (Solberg & Olweus, 2003), others argue the definition might "prime" a student against responding honestly (Espelage et al., 2001). This definitional issue is fundamentally related to accurate assessment of bullying and to conclusions researchers make about this complex dynamic (Solberg & Olweus, 2003).

Peer and teacher nomination tasks.

Nomination procedures are sometimes used to identify students for targeted interventions, but are predominantly utilized for research purposes because of the legal and ethical issues surrounding gathering student names. Furthermore, they are easier to use in elementary schools (as compared to middle and high school) because teachers have more interaction with students and students do not change classes. At the elementary school level, teachers and students are presented with a roster and asked to nominate classmates that fit certain descriptors (e.g., hits, argues, teases, fights, gets picked on; Boulton, 1997). Nominations are then tallied for each participant and students with a substantial number of nominations are considered bullies, victims, or both. When used with middle and high school students, students are asked to nominate three to eight males and females who fit certain descriptors (e.g., tease, exclude; Espelage et al., 2003). This latter method does not provide peer- and teacher-nomination data for all students, rather identifies students who are engaging in these behaviors at the greatest frequency. Thus, self-report methods are preferred when the purpose of data collection is to gather attitudinal and behavioral data from all students and teachers.

Behavioral observations. Direct behavioral observations of children and adolescents in the natural school setting is an ideal manner of collecting data on bullying frequency and the role of all students (Craig & Pepler, 1997; Salmivalli, Lagerspetz, Bjorkqvist, Oesterman, & Kaukiainen, 1996). For example, Craig and Pepler (1997) videotaped aggressive and socially competent Ca-

nadian children in Grades 1 through 6 on the playground; peers were involved in bullying in an astounding 85% of bully episodes. Among other things, this involvement consisted of actively participating in the episode (30%), observing the interaction (23%), and intervening (12%). Furthermore, peers were coded as being respectful to the bully in 74% of the episodes, but respectful to the victim in only 23% of the episodes. Observational methods provide invaluable data about how students interact; however, observations need to be conducted across a long period of time and in a variety of settings (e.g., gym, lunchroom, different classrooms) to assess the situational and contextual variables that contribute to bullying (Pellegrini, 2002). For example, if the behavioral observations suggest that bullying frequency is greatest in the lunchroom, training of lunchroom supervisors is warranted. In addition, a student might not bully his or her peers unless he or she is in a classroom with a new teacher who is struggling with classroom management. Thus, the environment may either encourage or inhibit the bullying interaction and these fluctuations in the social environment may affect the outcome of behavioral observations.

Need for innovative assessment methods. In recent years, human subjects review boards and federal funding agencies in the United States have placed great restrictions on the collection of behavioral observations as active parental consent is becoming mandatory in many school districts. As previously noted, Canadian researchers have videotaped bullying on the playground, and based on these studies have obtained empirical support for the social-ecological perspective (discussed more completely later) of bullying. A method that has yet to be used in the area of bullying is the Experience Sampling Method (ESM; Csikszentmihalyi & Larson, 1987). ESM is a method of recording daily events during brief periods of time and is a method for assessing attitudes and behaviors "in real time." This methodology typically involves "beeping" a participant at random or predetermined times throughout the day with a programmed wrist-watch or a pager, which elicits a signal to

prompt the participant to complete the Experience Sampling Form (ESF). Upon receipt of the signal, the participant completes the ESF, which is designed specifically to address the objectives of a particular research study. Typically, the ESF includes questions about the respondent's location, social context, activity, thought content, and affect. For bullying research, questions related to bullying and peer victimization could be included.

Because videotaping and other observational measures present both ethical and methodological challenges to the assessment of bullying within American schools, many researchers rely on self-, teacher-, and peer-reports, which fail to assess repetition, a characteristic that distinguishes bullying from other forms of aggression (Lane, 1989; Olweus, 1993; Smith & Thompson, 1991; Solberg & Olweus, 2003). Although survey instruments have several advantages over observational measures (e.g., inexpensive, more efficient data collection, less obtrusive), integrating survey research with assessments that more closely examine these behaviors as they unfold in a time-sensitive manner will enhance our understanding of bullying. Given that these methods may be impractical for school psychologists, this call for innovative assessments is directed primarily at researchers.

Insight 2: Bully-Victim Behaviors Fall Along a Continuum: Debunking the Dyadic Bias

Current methods of assessing and categorizing students into static groups such as "bullies" and "victims" have also been called into question. This assessment approach assumes that bullies and victims fit into a categorical, dichotomous, bully or victim dyadic pattern. Much of the recent research on bullying has challenged this assumption (Bosworth, Espelage, & Simon, 1999; Olweus, 1994; Schwartz, Dodge, Pettit, & Bates, 1997; Slee, 1995; Solberg & Olweus, 2003; Swearer, Song, Cary, Eagle, & Mickelson, 2001). This research supports a conceptualization of bullying behaviors as dynamic rather than static and argues that students' involvement falls on a continuum. Students can be involved as a bully, a

victim, a bully-victim, and/or a bystander. The examination of bullying along a continuum represents a significant departure from the standard practice of identifying students who repeatedly victimize their peers and are known as the "bullies" or those students who are the "victims." This continuum perspective recognizes that students tease their peers in more subtle ways and on a less regular basis; however, these less frequent behaviors still have serious effects on their targets, and thus, are worthy of exploration. Furthermore, recent research (Salmivalli et al., 1996; Swearer et al., 2001) suggests that students have different bullying and victimization profiles. That is, students are no longer classified as only victims or bullies, but can be classified as bullies, aggressive bullies, victims, bully-victims, bystanders, and normal controls. Given recent studies showing bullying is a group phenomenon (see Long & Pellegrini, 2003; Rodkin & Hodges, 2003), it is necessary to abandon the dyadic bias toward bullying and attend to the various roles that students play (e.g., bystander, reinforcer; Salmivalli et al., 1996) and recognize the diversity of experiences along the bully/victim continuum.

Insight 3: Relational Aggression Does Not Account for Sex Differences in Aggression

For decades, males have been considered the more aggressive sex. In hundreds of studies, research on aggression has found that, as a group, boys exhibit significantly higher levels of aggression than girls (for review see Coie & Dodge, 1998). Recently, however, researchers have questioned whether males are in fact more aggressive than females. Historically, many studies on aggression have excluded girls from the sample (Crick & Rose, 2001) and have defined aggression as overtly physical or verbal, but have failed to consider more subtle, covert forms. Some have posited that if aggression was defined as different types of aggressive acts, the relationship between sex and aggression would become less clear (Crick & Grotpeter, 1995).

As such, several different terms are used to describe covert types of aggression, including indirect aggression and relational aggression.

Indirect aggression is defined as "social manipulation, attacking the target in circuitous ways" (Oesterman et al., 1998, p. 1). Relational aggression includes "behaviors that are intended to significantly damage another child's friendships or feelings of inclusion by the peer group" (Crick & Grotpeter, 1995, p. 711). These include behaviors such as spreading rumors, excluding peers from one's social group, and withdrawing friendship or acceptance.

During the last 8 years, a plethora of studies have investigated relational aggression across the early school years into adolescence. Relational aggression has been shown to be more prevalent among girls than boys because boys typically engage in more overtly physical and verbal forms of aggression (e.g., Crick, 1996; Crick, Casas, & Mosher, 1997; Crick & Grotpeter, 1995; Rys & Bear, 1997). Different measurement techniques have been used, including peer-reports, teacher-reports, self-reports, and naturalistic observations. Crick and Grotpeter (1995) conducted one of the first studies examining relational aggression and in many ways opened the door for future research on this type of aggression. The study included 491 third through sixth graders, from four public schools in a midwestern town. A 19-item peer nomination instrument was used to assess relational aggression, overt aggression (defined as physical and verbal), prosocial behavior, and isolation. Peer nomination scores were used to classify students into four groups: relationally aggressive, overtly aggressive, both overtly and relationally aggressive, and nonaggressive. No sex difference was indicated in the number of students who were classified in the nonaggressive group: 73.0% of the boys evaluated and 78.3% of the girls fell in this group. However, statistically significant sex differences were found for the overtly aggressive group: 15.6% of the boys and .4% of the girls were in this group. Furthermore, the relationally aggressive group consisted of 2.0% of the boys and 17.4% of the girls. The remaining children (9.4% of the boys, 3.8% of the girls) were placed in the relationally and overtly aggressive group.

A second study (Rys & Bear, 1997) attempted to replicate the findings of Crick and Grotpeter (1995). Rys and Bear assessed rela-

tional aggression among other forms of aggression in 131 third graders and 135 sixth graders, from nine elementary schools and five middle schools in the mid-Atlantic public school system. Given their goal of replicating the Crick and Grotpeter study, they used the same peer nomination measure to assess children's aggressive and prosocial behaviors. Although boys were more overtly aggressive than girls and girls were more prosocial than boys, no sex differences in relational aggression were found. Similarly, findings in a study of 268 middle school students also indicated no significant sex differences on relational aggression when implementing the Crick and Grotpeter (1995) relational aggression scale (Espelage et al., 2003). These contradictory findings indicate that future research needs to explore the construct of relational aggression as well as the associations to relational victimization.

Insight 4: Need to View Bullying From a Social-Ecological Perspective

Drawing upon Bronfenbrenner's (1979) pioneering work on ecological systems theory, bullying and peer victimization has been conceptualized from a social-ecological perspective (Dishion et al., 1995; Swearer & Doll, 2001). From this theoretical framework, bullying is an ecological phenomenon that is established and perpetrated over time as a result of the complex interplay between inter- and intra-individual variables. Individual characteristics are considered jointly influenced by a variety of ecological contexts, including peers, families, schools, and community factors. Studies have identified individual characteristics associated with bullying that are important targets of intervention. However, studies have also clearly documented that the actions of peers, teachers and other adults at school, physical characteristics of the school grounds, family factors, cultural characteristics (e.g., race, ethnicity), and even community factors are implicated in the development and maintenance of bullying. Against the backdrop of the ecological framework, it is imperative that researchers and school personnel understand the complex ecological systems in which bullying and victimization occur. This ecology

needs to be a foundation of prevention and intervention programs.

Individual Characteristics

Sex differences have been the focus of much research on bullying and peer victimization. However, several other key factors have consistently emerged in the literature as important individual characteristics of students who bully their peers.

Race/ethnicity. A few studies shed light on the role of race/ethnicity or race on bullying, but also point to the dearth of literature in this area. In their large-scale survey of approximately 16,000 U.S. youth, Nansel et al. (2001) found that Hispanic youth reported bullying others only *marginally* more than White or Black students, whereas Black youth reported being bullied significantly more than Whites or Hispanics. In contrast, Graham and Juvonen (2002) found that African Americans were more likely to be nominated as aggressive than Latino and multiethnic urban middle school students. In a study of Asian and White children aged 9-15 years (Moran, Smith, Thompson, & Whitney, 1993), no differences emerged between these two groups on frequency of bullying others or being bullied; however, 50% of the bullied Asian children (compared to none of the White bullied children) were called names because of their skin color. Collectively, the relation between race/ethnicity and bullying is complex and is potentially influenced by the racial/ethnic composition of the classroom, school, or community (Juvonen, Nishina, & Graham, 2001). Furthermore, it appears the prevalence of bullies across race/ethnicity is perhaps less important than how racial dynamics influence the content of the bullying.

Age. Although aggression is often described as a stable trait over the course of childhood and adolescence, there is strong support that bullying might have a different trajectory (Farrington, 1991; Goldstein, 1994; Loeber & Stouthamer-Loeber, 1998). In fact, the more typical trajectory of bullying from a developmental perspective is an increase and peak during early adolescence, and a decrease in bullying during the high school years (Nansel

et al., 2001; Pellegrini & Bartini, 2001; Smith, Madsen, & Moody, 1999). It is therefore important for prevention and intervention efforts to be directed at the transition from elementary to middle school. In addition to considering sex, age, and race/ethnicity influences on bullying, other individual characteristics have been identified as potential correlates that should be considered in school-based prevention and intervention programs.

Anger. Anger has consistently emerged as an important correlate of bullying. In a study of 558 middle school students, anger was found to be the strongest predictor of bullying (Bosworth et al., 1999). Anger was also a significant predictor of an increase in this behavior over a 6-month period; that is, students who were the angriest in the fall semester reported an increase in bullying over the school year (Espelage et al., 2001). These findings, combined with the consistent relation between aggression and anger (Huesmann, 1994), suggest that anger management training might be beneficial for some students who bully their peers.

Depression. Depression has been found to be a common mental health symptom experienced by male and female victims of bullying (Callagan & Joseph, 1995; Kaltiala-Heino, Rimpela, Marttunen, Rimpela, & Rantanen, 1999; Kumpulainen, Räsänen, & Puura, 2001; Neary & Joseph, 1994). Furthermore, Craig (1998) found higher depression levels for girls in comparison to boys who were victimized. Depression is not, however, unique to victims only. Clinically elevated depression levels have been found for both male and female students who bully their peers (Austin & Joseph, 1996; Slee, 1995). Bully-victims, those students who bully and have been bullied, have also been found to have higher rates of depression than bullies (Austin & Joseph, 1996) and in other studies, bully-victims report higher depression levels than victims (Swearer et al., 2001). Kaltiala-Heino et al. (1999) assessed the relationship between bully/victim status and depression and suicidal ideation among adolescents aged 14 to 16. The authors reported that after controlling for age and sex, bully-victims exhibited the highest risk for depression, fol-

lowed by victims, and then bullies. Bully-victims were also the most at-risk group for suicidal ideation. The high occurrence of suicidal ideation among participants along the bully/victim continuum is not surprising considering that bullying is not a static event, but rather it occurs as repeated events over time (Hazler & Carney, 2000). Additionally, findings from a recent analysis of school shootings from 1974 to 2000 indicate that 78% of the attackers had a history of suicide attempts or suicidal thoughts and 61% had a history of serious depression (Vossekuil et al., 2002).

Anxiety. Anxiety is also a salient mental health concern for bullies, victims, and bully-victims. There is a paucity of research conducted specifically on anxiety and bullying, and the research that is available has yielded inconsistent findings. Some studies find that victims of bullying have higher rates of anxiety than bullies (Craig, 1998; Olweus, 1994; Slee, 1994), whereas others find that bullies and victims report similar levels of anxiety (Duncan, 1999). To complicate the picture, bully-victims have also been found to have higher levels of anxiety when compared to bullies or victims (Duncan, 1999; Swearer et al., 2001). Researchers have found that victims of bullying display increased rates of school refusal (Salmon, James, Cassidy, & Javaloyes, 2000), school absenteeism (Slee, 1994), somatic symptoms (Rigby, 1996), and physical health complaints (Williams, Chambers, Logan, & Robinson, 1996), which may reflect the victim's desire to avoid school. Furthermore, being bullied may lead to anxious behaviors, which perpetuate victimization experiences and subsequently lead to greater anxiety (Roth, Coles, & Heimberg, 2002).

Empathy. Many bullying prevention programs include empathy training based on the extensive literature documenting the role of empathy in suppressing aggression (Miller & Eisenberg, 1988). Research suggests that self-declared bullies sometimes report feeling sorry after bullying their peers (Borg, 1998); however, many bully prevention and intervention programs assume that these students lack empathy. It is plausible that the relation be-

tween empathy and bullying might vary depending on the component of empathy being measured and the type of aggression under study. Therefore, the implementation of empathy training based on the assumption that bullies do not possess empathy is unwarranted. The focus for prevention and intervention should not be solely to eradicate bullying, but to foster more prosocial and respectful behaviors among all students. For example, although unable to partial out the unique effects of empathy training, the *Second Step* violence prevention program has been efficacious in reducing aggressive behaviors and increasing prosocial behaviors (Frey, Hirschstein, & Guzzo, 2000).

One of the only studies that *specifically* addresses empathic responding and bullying behavior was conducted by Endresen and Olweus (2001). Four large representative samples of Norwegian adolescents, ranging in age from 13 to 16 years, completed the Empathic Responsiveness Questionnaire (Olweus & Endresen, 1998) and two subscales taken from the Olweus Bully/Victim Questionnaire (Olweus, 1989, 1996), including the Positive Attitude to Bullying (5 items) and the Bullying Others (4 items) scales. The empathy measure consists of 12 items comprising three subscales, including an empathy distress subscale (e.g., "It often makes me distressed when I see something sad on TV"), a sympathetic reaction toward girls subscale (e.g., "When I see a girl who is hurt, I wish to help her"), and a sympathetic reaction toward boys subscale (e.g., "Seeing a boy who is sad makes me want to comfort him"). Students indicate on a 6-point scale whether the item applies to them, from *not at all* through *applies exactly*.

Results indicated that girls reported higher total levels of empathic responsiveness, including greater levels of emotional distress and more empathic concern (for boys and girls) than boys in the sample. Effect size data suggested that these sex differences were strong. With respect to the association of empathic responsiveness and bullying others, the correlations were relatively weak between bullying and empathy ($r_s = -.06$ to $-.17$) for girls, and slightly lower for boys ($r_s = -.02$ to $-.19$). They

did find, however, that a positive attitude toward bullying mediated the association between empathic concern and the frequency of bullying others. In other words, respondents with high levels of empathic concern tended to view bullying as negative and therefore bullied others less. This mediation was found for both boys and girls. This study highlights the importance of considering attitudes toward bullying in understanding how empathy relates to this subset of aggression.

Normative beliefs toward bullying.

Empathy is intricately related to a student's view of aggression and bullying. That is, if a student feels that bullying is "part of growing up" or "harmless," he or she is less likely to feel upset when bullying or observing others being bullied. Indeed, a positive attitude toward aggression is highly associated with the propensity to bully others (Bentley & Li, 1995; Endresen & Olweus, 2001; Pellegrini, 2002). Bentley and Li (1995) found bullies (Grades 4–6) were more likely to hold beliefs supportive of aggression than were students who did not bully. Whereas this is not a surprising finding, it suggests a need to identify environmental factors that foster a proviolence attitude in schools and to recognize bullying as a marker for more serious aggressive behaviors (Nansel, Overpeck, Haynie, Ruan, & Scheidt, 2003). In addition, given that not all students are the "school yard bullies," and some may take on roles such as bystanders, it is important to understand how beliefs supportive of violence and empathy for students relate along the bully-victim continuum.

Social skill deficit versus theory of mind.

One of the most influential explanatory models of aggression is based on social information processing (Crick & Dodge, 1994; Dodge & Coie, 1987). This model posits that impairment in social problem solving is implicated in the development of aggression. Specifically, aggressive individuals are more likely to show encoding problems such as hostile attribution error, and deficits at the level of representation, such as a poor understanding of others' mental states (Crick & Dodge, 1994). However, more recently, scholars have begun

to question whether this model applies to all types of aggression, especially bullying. Given that bullying includes indirect forms of aggression, such as lying and spreading rumors that lead to the victim's exclusion from the group, and that physical violence is in most of the cases carefully planned, it is plausible that at least some bullies have a social understanding of their behavior.

Following this logic, Sutton and colleagues (Sutton, Smith, & Swettenham, 1999) challenged a social skills deficit model approach to bullying, and emphasized that some bullies understand other people very well and may use this understanding to their own advantage. These authors conceptualize their arguments using the framework of *theory of mind*, a concept that refers to one's ability to attribute mental states to others and oneself (Leslie, 1987). Using this framework, the authors contend that some bullies may possess a theory of mind because they target vulnerable children who will tolerate victimization and who are not likely to receive support from peers (Salmivalli et al., 1996). More research is needed on theory of mind and bullying in order to substantiate the claims made by Sutton and colleagues. Until then, there is at least preliminary evidence that not all children and adolescents who bully their peers lack social skills (Garbarino & DeLara, 2002; Sutton et al., 1999).

Future research on individual characteristics. Despite a wealth of information on individual characteristics that are influential in the social-ecological model of bullying, what is often missing from these investigations is the consideration of how certain variables such as sex, race, prior victimization, internalizing psychopathology, or attributions mediate or moderate the association between bullying/victimization and these psychological outcomes. Future research should address these multivariate influences and should examine these influences over time.

Peer-Level Characteristics in the Bullying Dynamic

Peers have long been implicated in influencing children's and adolescent's social

behavior (see Hartup, 1983 for a review). Given the social-ecological perspective that individual characteristics of adolescents interact with group-level factors, many scholars have turned their attention to how peers contribute to aggression and bullying (Espelage et al., 2003; Long & Pellegrini, 2003; Pellegrini & Long, 2002; Rodkin, Farmer, Pearl, & Van Acker, 2000; Rodkin & Hodges, 2003). Several theories are receiving increased attention in the literature and are discussed briefly next.

Homophily hypothesis. Peer group membership becomes extremely important during late childhood and early adolescence (Eccles, Wigfield, & Schiefele, 1998; Rubin, Bukowski, & Parker, 1998). It is during this developmental time period that peer groups form based on similarities in propinquity, sex, and race (Cairns & Cairns, 1994; Leung, 1994), and groups tend to be similar on behavioral dimensions such as smoking behavior (Ennett & Bauman, 1994) and academic achievement (Ryan, 2001). This within-group similarity is called *homophily* (Berndt, 1982; Cohen, 1977; Kandel, 1978). Although the homophily hypothesis has been supported in studies of overt, physical aggression among elementary school students (Cairns, Leung, & Cairns, 1995), only one study included an examination of the homophily hypothesis of bullying. In a study of middle school students, social network analysis (SNA) was used to identify peer networks and hierarchical linear modeling (HLM) was employed to determine the extent to which peers influenced each other in bullying their peers. Results supported the homophily hypothesis for bullying and fighting among sixth-eighth graders over a 1-year period (Espelage et al., 2003). The effect was stronger for bullying than fighting, suggesting that peer influence plays a bigger role for low-level aggression than fighting. Put simply, students tended to hang out with students who bullied at similar frequencies, and students who hung out with students who bullied others reported an increase in bullying over the school year. Although males in this sample reported slightly more bullying than females, the homophily hypothesis for bullying was supported for both male and female peer groups. These findings

suggest that prevention efforts should incorporate a discussion with students about the pressure they experience from peers to engage in bullying and the real barriers to stand up to this powerful social influence.

Dominance theory. Early adolescence is also a time in which bullying increases (Pellegrini, 2002; Pellegrini & Long, 2002; Smith et al., 1999). A potential explanation for this increase is dominance theory. Dominance is viewed as a relationship factor in which individuals are arranged in a hierarchy in terms of their access to resources. Pellegrini (2002) argues that the transition to middle school requires students to renegotiate their dominance relationships, and bullying is thought to be a deliberate strategy used to attain dominance in newly formed peer groups. In an empirical test of dominance theory of proactive aggression and bullying, Pellegrini and Long (2002) found, at least in one sample, that bullying was used more frequently by boys who targeted their aggression toward other boys during this transition. Certainly, this research supports the idea that males engage in more bullying than girls during the transition to middle school, but it also highlights the importance of studying this increase as a result of the complex interaction among the need for dominance, changes in social surroundings and peer group structure, and the desire to interact with the opposite sex.

Attraction theory. Attraction theory posits that young adolescents in their need to establish separation from their parents become attracted to other youth who possess characteristics that reflect independence (e.g., delinquency, aggression, disobedience) and are less attracted to individuals who possess characteristics more descriptive of childhood (e.g., compliance, obedience) (Bukowski, Sippola, & Newcomb, 2000; Moffitt, 1993). These authors argue that early adolescents manage the transition from primary to secondary schools through their attractions to peers who are aggressive. In their study of 217 boys and girls during this transition, Bukowski and colleagues found that girls' and boys' attraction to aggressive peers increased upon the entry to middle

school. This increase was greater for girls, which is consistent with Pellegrini and Bartini's (2001) finding that at the end of middle school girls nominated "dominant boys" as dates to a hypothetical party. This theory, along with the homophily hypothesis and dominance theory, demonstrate the complex nature of bullying during early adolescence and underscores the need to move beyond descriptive studies of bullying among boys and girls.

Familial Characteristics

Literature on aggression and familial factors has provided considerable support for the association between general aggressive behavior in youth and lack of family cohesion (Gorman-Smith, Tolan, Zelli, & Huesmann, 1996), inadequate parental supervision (Farrington, 1991), family violence (Thornberry, 1994), hostile discipline techniques (Loeber & Dishion, 1983), and poor modeling of problem-solving skills (Tolan, Cromwell, & Braswell, 1986). Additionally, high levels of family conflict and parental problems such as drug use and incarceration are correlates of aggression in youth (Henggeler, Schoenwald, Borduin, Rowland, & Cunningham, 1998). These complicated family dynamics illustrate the complex etiological influences on bullying behaviors.

Moreover, investigations in other countries have found significant associations between familial characteristics and bullying behavior (Berdondini & Smith, 1996; Bowers, Smith, & Binney, 1994; Olweus, 1980, 1993). Several of these studies document the association between parenting styles, family environment, and bullying. For example, based on studies with Scandinavian youth, Olweus (1980, 1993) concluded that families of boys who bullied were often described as lacking in warmth, used physical violence within the family, and failed to monitor children's activities outside the school. Bowers and colleagues (1994) found support for this finding but added that family members of bullies had high needs for power. Families of victims have been found to be cohesive yet enmeshed and might include an overcontrolling mother (Berdondini & Smith, 1996; Bowers et al., 1994).

Increasingly more research is being conducted on the role of siblings in bullying. In a study in which 375 rural middle school students were surveyed, Duncan (1999) reported that 42% often bullied their siblings and 30% of the sample with siblings were frequently abused by their siblings. Closer examination of these victimization experiences revealed that 22% were often hit or pushed, 8% were often beat up, and 8% were scared they would be hurt badly. This study also demonstrated the concordance between participants' bullying peers at school and bullying siblings at home; 57% of school bullies and 77% of school bully-victims also bullied their siblings.

Research on bullying and victimization in youth seems to support a connection between family environment and bullying behaviors. Families high in conflict, who engage in bullying and aggressive behaviors in the home, and who value aggression as a functional means to an end, are likely to have children who value the utility of bullying behaviors. Given that these behaviors are learned in the home, it is likely that these behaviors will be played out in the school setting. What school conditions are likely to facilitate bullying behaviors?

School Factors in the Bullying Dynamic

School climate. School climate factors are important in considering how students' beliefs about violence, role modeling from adults, and personality characteristics lead to bullying. If students attend schools in which bullying behaviors are accepted by adults and peers, it is plausible that they will engage in more of these behaviors. The social climate of the school will influence students' engagement in aggressive behaviors (Baker, 1998).

Although there are several studies that have examined school climate and student behavior, there is less research available examining bullying behavior and school climate. In one of the first studies to examine the prevalence of bullying with the U.S., Nansel et al. (2001) found that students who reported bullying others had a significantly poorer perception of school climate than students who were victims of bullying or students who were both

bullies and victims. However, a limitation of this study is that school climate was only a small component of the overall survey administered to the students.

In one of the only comprehensive studies of bullying among middle school students where schools were a unit of analysis, results suggest that schools with less bullying are characterized by positive disciplinary actions, strong parental involvement, and high academic standards (Ma, 2002). In a study conducted by Kuperminc, Leadbeater, Emmons, and Blatt (1997), middle school boys who held more positive perceptions of school climate tended to have fewer externalizing behaviors (e.g., aggressive, delinquent behavior). Findings from this study suggest that student perceptions of school climate may impact boys' behavioral and emotional adjustment. In a follow-up study, Kuperminc, Leadbeater, and Blatt (2001) found that middle school youth with high levels of self-criticism did not show expected increases in internalizing and externalizing problems when they perceived a positive school climate, indicating that school climate plays an important role in the psychosocial functioning of students. Unfortunately, a paucity of research on bullying and school climate has been conducted, and virtually no studies have examined school climate variables and bullying.

Orpinas, Home, and Staniszewski (2003) attempt to fill this void by examining the effects of a bully prevention program at the elementary school level. Kasen and colleagues found that differences in the social and emotional features of schools were related to changes in behavioral problems, anxiety and depressive symptoms, and alcohol use in students who remained in these schools over a 2-year interval (Kasen, Johnson, & Cohen, 1990). In a more recent study, Kasen and colleagues investigated long-term effects of school and child characteristics (Kasen, Cohen, & Brook, 1998). High academic achievement and aspirations and a learning-focused school setting acted as deterrents against school dropout and deviant behavior seven years later in young adulthood. However, the dearth of literature in this area makes it difficult to translate these findings to research on bullying. Prevention

and intervention programs need to consider the school climate as a potential contributing factor in promoting or inhibiting bullying (see Leff et al., 2003). Students need to be asked whether they feel like they belong and are respected at the school, how teachers and administrators view bullying, how reports of such behavior are handled, and how much the administration models and promotes respect for diversity in their school. These factors play an instrumental role in the manner in which students treat each other.

Researchers have asserted that best practice dictates that bullying prevention and intervention programs involve all levels of the social ecology including the student involved in the bully/victim continuum, the school, the family, and the community (Horne, Bartolomucci, & Newman-Carlson, 2003; Larson, Smith, & Furlong, 2002; Olweus, Limber & Mihalic, 1999; Swearer & Doll, 2001). Although this makes solid clinical and research sense, what do we know about the relationship between school climate and bullying? How might the interaction between the student involved in bullying and the school climate of a particular school serve to encourage or inhibit bullying behaviors?

Teachers' attitudes. To develop a more thorough conceptualization of the environments in which youth are educated, it is necessary to increase our understanding of teachers' attitudes and behaviors related to bullying and victimization. In particular, teachers might foster bullying by failing to either promote respectful interactions among students or speak out against teasing and other behaviors consistent with bullying. Bullying is a major problem, yet only limited research has addressed teachers' roles in bullying dynamics. Extant studies have documented that teachers (a) tend to report lower prevalence rates of bullying than do students (e.g., Stockdale, Hangaduambo, Duys, Larson, & Sarvela, 2002), (b) do not always correctly identify bullies (e.g., Leff et al., 1999), and (c) typically do not feel confident in their abilities to deal with bullying (e.g., Boulton, 1997). Teachers might not only be unaware of the extent to which bullying occurs in their schools, but might be unwilling to intervene should they

recognize instances of bullying. Therefore, interventions should include an assessment of teachers' attitudes toward bullying and how they relate toward students. Education about bullying for teachers is also necessary. In fact, this training should extend to preservice teachers (Boulton, 1997), lunchroom supervisors (Boulton, 1996), and school bus drivers. A "train-the-trainers" model of education can facilitate the training of all school staff (see Olweus, Limber, & Mihalic, 1999 for a description).

Community Factors: It Does Take a Village to Reduce Bullying

Given the complexity surrounding bullying behaviors, prevention and intervention efforts need to include not only the individual, peer group, family, and school, but also the community. Our communities are rich environments comprising neighborhoods, churches, after-school programs, recreational centers, libraries, and community centers. Often, schools can partner with these groups and organizations in order to reduce bullying. Wraparound services can help families utilize community services. An example of effectively utilizing community resources to reduce antisocial behavior is multisystemic treatment (MST; Henggeler et al., 1998).

Future Research Directions

Previous research paves the way for future directions in bullying research. Where do educators and researchers need to go from here? Clearly, serious definitional and methodological issues need to be addressed in order to better assess bullying. The relationship among bullying, sexual harassment, and racial harassment needs to be resolved. Recently, much attention in the popular press has been given to gay, lesbian, bisexual, and transgendered (GLBT) youth and bullying. Bullying needs to be examined within special populations such as GLBT youth, students in special education, and ethnically diverse youth. Are students bullied because they are different? How might a school climate that respects diversity inhibit bullying behaviors? Is there a relationship between acceptances of differences and a willingness to intervene in bully-

ing episodes? Less attention has been given to how components of the social ecology interact to foster or inhibit bullying. For example, only a handful of studies examine the connection between sibling bullying, school bullying, and peer victimization. Even fewer studies evaluate the school factors that interact with individual characteristics, peer dynamics, and family experiences of students. Finally, research needs to evaluate bullying prevention and intervention programs more completely. Are school-wide interventions such as the Olweus Bullying Prevention Program necessary? Or, can schools develop a system of universal, selected, and targeted interventions (Sugai, Sprague, Horner, & Walker, 2000) to effectively target bullying?

Conclusion

A great deal about the bullying phenomenon has been learned in the past two decades; however, much is still unknown about this complex dynamic. The knowledge base has been guided by international research efforts and recent work conducted by American researchers. Research consistently suggests that bullying is a complex interaction that needs to be studied using multivariate methods. Developmental differences must be taken into account as students progress through the school system. These developmental issues are particularly important for effective bullying prevention and intervention programming. Additionally, the nature and influence of the various systems (i.e., family, peer group, school) that affect students' behavior must be examined. This special series in *School Psychology Review* attempts to address some of these issues in bullying research.

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