A review of research on bullying and peer victimization in school: An ecological system analysis

Jun Sung Hong a,⁎, Dorothy L. Espelage b

a School of Social Work, University of Illinois at Urbana-Champaign, United States
b Department of Educational Psychology, University of Illinois at Urbana-Champaign, United States

ABSTRACT

Bullying and peer victimization in school are serious concerns for students, parents, teachers, and school officials in the U.S. and around the world. This article reviews risk factors associated with bullying and peer victimization in school within the context of Bronfenbrenner's ecological framework. This review integrates empirical findings on the risk factors associated with bullying and peer victimization within the context of micro- (parent–youth relationships, inter-parental violence, relations with peers, school connectedness, and school environment), meso- (teacher involvement), exo- (exposure to media violence, neighborhood environment), macro- (cultural norms and beliefs, religious affiliation), and chronosystem (changes in family structure) levels. Theories that explain the relationships between the risk factors and bullying behavior are also included. We then discuss the efficacy of the current bullying prevention and intervention programs, which is followed by directions for future research.

© 2012 Elsevier Ltd. All rights reserved.
1. Introduction

School bullying and peer victimization are major social problems affecting children and adolescents in all parts of the world. The serious consequences of bullying and peer victimization have generated considerable attention from the media and the public, as well as educators, school officials, researchers, practitioners, and lawmakers in recent years (Phillips, 2007). Concerns over bullying (i.e., suicide attributed to peer victimization) and school violence (e.g., school shootings) have led to an examination of risk factors associated with bullying and its impact on students (Smokowski & Kopasz, 2005). Previous studies have investigated the association between bullying behavior and individual characteristics (e.g., age, gender, and psychosocial problems), as well as direct relations (e.g., family and peer) and the school environment (see Espelage & Horne, 2008 for a review). Only a handful of researchers (primarily in other countries) have examined broader level factors that are associated with bullying behavior (e.g., Barboza et al., 2009), such as neighborhood environment and cultural influences. Because effective bullying prevention and intervention strategies require targeting the multiple contexts, understanding the ecological system levels that influence and/or inhibit bullying and peer victimization in school is imperative (Espelage & Horne, 2008; Garbarino & deLara, 2002; Limber, 2006).

The focus of this article is to examine factors associated with bullying and peer victimization within the context of Bronfenbrenner’s most recent ecological framework (Bronfenbrenner, 1994). Although significant advances have been made in research on bullying and the importance of understanding the ecological factors influencing this behavior, studies conducted in the U.S. have been limited in scope, compared to research in other countries (Espelage & Horne, 2008). Therefore, much of the research reviewed in this study includes findings in other countries.

1.1. Definition and types of bullying

The word ‘bullying’ has been commonly used in English speaking countries. The World Health Organization (2002) recognizes bullying behavior as the intentional use of physical and psychological force or power, threatened or actual, against oneself, another person, or against a group or community that either results in or has a high likelihood of resulting in injury, death, psychological harm, mal-development, or deprivation. Bullying has been operationalized in many ways, and how it is conceptualized varies by researchers (Espelage & Swearer, 2003) and by countries. To illustrate, Smorti, Memesini, and Smith (2003) compared how bullying is defined and conceptualized in five countries (i.e., Italy, Spain, Portugal, England, and Japan). The researchers found that there were notable differences among the countries and concluded that when one tries to translate 'bullying' from English to other languages, there is no single word that captures the exact, precise meaning.

In contrast, a number of researchers in the U.S. have attempted to define bullying. For example, Smith, Schneider, Smith, and Ananiadou (2004) defined bullying as “a particularly vicious kind of aggressive behavior distinguished by repeated acts against weaker victims who cannot easily defend themselves” (p. 547). The term ‘bullying’ was originally coined by Daniel Olweus, a pioneering researcher on bullying and peer victimization in Norway and has been borrowed by many American researchers (Atlas & Pepler, 2001; Ballard, Argus, & Remley, 1999; Juvonen, Graham, & Shuster, 2003; Nansel et al., 2001; Pellegrini, 2002; Twemlow, Sacco, & Williams, 1996). Olweus identifies a bully as someone who directly (e.g., pushing, shoving, hitting, kicking, or restraining another) or indirectly (e.g., teasing, taunting, threatening, calling names, or spreading a rumor) causes, or attempts to cause fear, discomfort, or injury upon another person (Olweus, 1993, p. 9).

Researchers have also identified several major characteristics of bullying behavior, which encompass different subcategories. Other researchers have referred to bullying as involving both ‘overt’ and ‘covert’ acts of aggression (e.g., Crick, Casas, & Ku, 1999; Espelage & Horne, 2008). Griffin and Gross (2004) categorized bullying and aggressive behaviors as reactive (“a defense reaction to a perceived threatening stimulus and is accompanied by some visible form of anger”; Price & Dodge, 1989, p. 456), proactive (“unprovoked aversive means of influencing or coercing another person and is more goal-directed than reactive aggression”; Price & Dodge, 1989, p. 456), overt (confrontational behavior directed towards another individual or a group of individuals; Griffin & Gross, 2004), and relational (a type of behavior that involves excluding someone from a social group, spreading rumors, keeping secrets, or humiliating someone in a social setting; Griffin & Gross, 2004). One recent study includes a new typology of bullying called punking (Phillips, 2007). Punking refers to a practice involving verbal and physical violence, humiliation, and shaming in public, which is perpetrated against a particular male student(s) by another male student(s). This term is synonymous with bullying and is used most commonly among high school boys.

1.1.1. Bystanders

The term ‘bystander’ refers to a viewer, observer, witness, and passerby (Twemlow, Fonagy, & Sacco, 2004). Past studies have primarily examined the bully–victim dyad. However, recent studies (e.g., Smith et al., 2004) suggest that most youth are neither ‘pure bullies’ nor ‘pure victims.’ Salmivalli, Lagerspetz, Bjorqvist, Osterman, and Kaukiainen’s (1996) study was the first to extend the dynamics of bullying victimization by including bystanders who were characterized as ‘outsiders’ (i.e., those who are not involved) or ‘defenders’ (i.e., those who help the victims). When bullying occurs in school, some students are directly involved while others witness the incident (Atlas & Pepler, 2001).

Bystanders play multiple roles in bullying situations. Bystanders are characterized as standing around and watching fights without helping the victim. They enjoy watching fights, often encouraging the bully. They also help the bully by warning them if an adult is coming (Smith, Twemlow, & Hoover, 1999). On the contrary, some
bystanders sympathize with the victim and disapprove of bullying (Gini, Pozoli, Borghi, & Franzoni, 2008), and these attitudes are moderated by age (Seals & Young, 2003) and by gender (Hoover, Oliver, & Hazler, 1992; Seals & Young, 2003). In terms of age, children's negative attitudes towards bullying decrease as they get older. Ironically, older children are also more likely to support the victims than younger children. In terms of gender, girls are more likely to be empathic and supportive of the victims, while boys believe that victims ‘deserved what happened to them’ (Rigby, 1997). Although bystanders play a major role in bullying dynamics, there have relatively few studies in the U.S. that focus specifically on the role of bystanders. To illustrate, a recent meta-analysis on bullying prevention and intervention programs found that only three of the sixteen identified programs targeted and evaluated bystander behavior (Merrell, Gueldner, Ross, & Isava, 2008).

1.2. Prevalence

1.2.1. School district

Findings from several studies suggest that adolescents commonly experience bullying, particularly in middle school. Bosworth, Espelage, and Simon (1999) examined bullying behavior among 558 sixth- to eighth-grade students at a large middle school located in a major Midwestern metropolis. They reported that 81% of the students reported being victimized by their peers, and 7.7% reported frequently bullying someone in school. Haynie et al.'s (2001) study, which consisted of 4263 middle school students in one Maryland school district, found that 24.1% of students reported bullying a classmate or peer at least once during the past year, with 16.7% bullying one or two times and 7.4% bullying three or more times. A total of 44.6% reported being bullied, at least once during the past year; of these, 13.7% indicated being victimized once or twice, and 30.9% being victimized three or more times. Seals and Young's (2003) study, which includes a sample of 1126 student population in seventh- to eighth-grade in five school districts located in Mississippi, found that 24% of the students reported being involved in bullying as a perpetrator or victim. Klemek, Marrocco, Kleinman, Schonfeld, and Gould's (2007) study, which examined the association between bullying, depression, and suicidal behavior among high school students in six New York school districts, found that 9% reported frequent victimization, and 13% reported bullying others.

Bullying is also a serious problem among elementary school-age children. Orpinas, Horne, and Staniszewski's (2003) study, which describes the development and evaluation of a bullying prevention program in a large, public elementary school, found that 32% of children in kindergarten through second grade reported exhibiting at least one aggressive behavior in school. Among children in third- to fifth grade, 80% committed one aggressive act, and 28% committed ten or more aggressive acts. Glew, Fan, Karon, Rivara, and Kernic's (2005) study, which investigated the prevalence of bullying among elementary schools in an urban, West Coast public school district, report that 22% of children surveyed were involved in bullying, as a victim, bully, or both. In sum, the prevalence of bullying is high for children of all educational levels.

1.2.2. Nationwide

Findings from national surveys also suggest that bullying behavior is common in American schools. The National Institute of Child Health and Human Development (2001) of the National Institute of Health estimated in 2001 that approximately 5.7 million American children in grades six to ten have experienced or witnessed bullying in their school. One in four children reported being victimized by their peers or classmates every month; one in five children bullied a classmate; and one in three children experienced being a victim, a perpetrator, or both. According to the National Youth Violence Prevention Resource Center (n.d.), 13% reported bullying other students, 11% were targets of bullies, and 6% were identified as both victims and perpetrators of bullying. The U.S. Department of Education also found that 24% of public schools reported that bullying was a daily or weekly occurrence during 2005–2006 years (Indicators of School Crime and Safety, 2007).

2. Ecological risk/protective factors for bullying and peer victimization

Understanding factors that predict bullying behavior in school necessitates a close examination of the complex inter-relationships between the individual and the environment. The ecological system theory contends that bullying victims and perpetrators are part of the complex, interrelated system levels that place them at the center and move out from the center to the various systems that shape the individual — that is micro-, meso-, exo-, macro-, and chronosystem levels (Bronfenbrenner, 1994). This assertion is related to studies that consistently found that youth who are involved in bullying in school experience problems in multiple areas, such as the family, peer group, school, and neighborhood/community (Sweare & Espelage, 2004). The following sections examine bullying perpetration and victimization within the micro-, meso-, exo-, macro-, and chronosystem levels of Bronfenbrenner’s (1994) ecological model.

2.1. Youth characteristics

2.1.1. Age

It is important to assess youth characteristics in our understanding of bullying behavior. Socio-demographic characteristics, such as age, gender, and race/ethnicity are frequently examined predictors of bullying behavior in school. A number of researchers have found that the frequency of bullying increases during middle school years and decreases during high school years (Espelage & Horne, 2008; Nansel et al., 2001; Pellegrini & Bartini, 2000; Smith, Madsen, & Moody, 1999). Elementary school students are also more likely to report being victimized by their peers in school than older students (Beran & Tuty, 2002). O'Connell, Pepler, and Craig's (1999) study, which investigated bullying incidents on the school playground, found that older boys (grades 4–6) were more likely to participate in bullying than were younger boys (grades 1–3) and older girls. Younger children and older girls were also more likely to intervene on behalf of bullying victims than were older boys. Findings from these studies shed light on why middle school students are more likely than elementary school students to experience bullying and perceive their school as unsafe, as a number of studies have shown (Astor, Meyer, & Pitner, 2001; Dinkes, Kemp, Baum, & Snyder, 2009; Kasen, Berenson, Cohen, & Johnson, 2004). Early adolescence is a critical period where youth explore their new social roles and their pursuit of status among their peer groups, which can motivate aggressive behavior, especially for students making the transition from elementary to middle school (Pellegrini, 2002). On the contrary, a more recent research found that middle school students reported less physical, verbal, and relational victimization than elementary school students (Varjas, Henrich, & Meyers, 2009).

2.1.2. Gender

Many studies report that boys in general are more likely to engage in bullying than girls (Espelage, Bosworth, & Simon, 2000; Nansel et al., 2001; Rigby, 1997; Ross, 1996; Seals & Young, 2003; Varjas et al., 2009). Past findings also indicated that boys are commonly victims and perpetrators of direct forms of bullying, while girls experience indirect bullying (e.g., social rejection, relational aggression) (Olweus, 1993; Varjas et al., 2009). However, findings on gender differences in bullying involvement have been mixed, and more recent studies (e.g., Barboza et al., 2009; Goldstein, Young, & Boyd, 2008) report that gender was not a significant predictor. Interestingly, recent studies also found that relational aggression is not exclusively a female...
form of aggression (Swearer, 2008), and there is little gender difference in relational aggression (Goldstein et al., 2008). Of note, a recent meta-analysis indicated negligible gender differences on measures of indirect aggression (Card, Stucky, Sawalani, & Little, 2008). Researchers caution against making any conclusions about gender differences in bullying behavior, and assert that gender may not necessarily be a significant predictor for bullying behavior (Espegeland, Mebane, & Swearer, 2004).

Scholars in recent years have also investigated the association between gender and sexual bullying behavior and found that girls are at-risk of sexual bullying victimization (Pellegrini, 2002; Shute, Owens, & Slee, 2008). Hegemonic masculinity, a socially constructed form of masculinity, might explain males' tendency to engage in physically aggressive and sexually harassing behaviors (Bender, 2001). Shute et al. (2008) examined whether females' experiences in bullying victimization by boys were sexual in nature. The researchers found that victimization of girls by boys was an everyday occurrence, and the behaviors were overwhelmingly sexual in nature, which were verbal (indirect) rather than physical (direct). Feminist theorists have long asserted that because males are considered the more aggressive gender, most of the research studies on bullying found that boys exhibit higher levels of aggressive behavior than girls (Espegeland et al., 2004). Feminist theorists also argue that male youth engage in gendered harassment by objectifying their female peers through discussions about sexual acts they wish to or have engaged in (Meyer, 2008).

2.1.3. Race/ethnicity

A limited number of recent studies also investigated the association between race/ethnicity and bullying behavior in school (Hanish & Guerra, 2000; Mouttapa, Valente, Gaharher, Rohrbach, & Unger, 2004; Qin, Way, & Rana, 2008; Seals & Young, 2003). Bullying associated with racial/ethnic minority status has been found to increase the likelihood of school adjustment and mental health problems (DuBois, Burk-Braxton, Swenson, Tevendale, & Hardesty, 2002). However, findings have been inconsistent (e.g., Barboza et al., 2009; Spriggs, Iannotti, Nansel, & Haynie, 2007; Vervoort, Scholte, & Oberbeek, 2008). One study (Hanish & Guerra, 2000) compared the experiences in peer victimization of African American, Hispanic/Latino, and non-Hispanic White elementary school children in urban schools. The researchers report that Whites are significantly at higher risk of victimization than African Americans and Hispanic/Latinos. Another study (Nansel et al., 2001) found that Hispanic/Latino youth reported marginally higher involvement in bullying perpetration than Whites, while African Americans reported a higher level of peer victimization than youth of other races. On the contrary, Seals and Young’s (2003) study found that race/ethnicity was not a significant predictor. Findings from these studies suggest that racial/ethnic minority status was not a significant predictor for bullying and peer victimization in school.

For Hispanic/Latino and Asian youth, immigrant status and language/cultural barriers appear to be significant predictors for peer victimization in school (Mouttapa et al., 2004; Peguero, 2009; Qin et al., 2008). For instance, Mouttapa et al.’s (2004) study, which consisted primarily of Hispanic/Latino and Asian sixth graders in a California school, found that bully victims were disproportionately Asians. A longitudinal study on first- and second-generation Chinese American students by Qin et al. (2008) found that beliefs about academic ability, immigrant status, language barriers, within-group conflicts, and physical appearances made Asian students frequent targets of bullying victimization. Peguero (2009) also found from a sample of Hispanic/Latino and Asian immigrant students that first-generation immigrant students and Hispanic/Latino third-plus generation immigrant students are frequently victimized by their peers at school, which may be explained by segmented assimilation theory. This theory posits that the process of assimilation among immigrants in the U.S. generates various social, economical, and educational outcomes (Zhou & Xiong, 2005). According to this theory, the process of assimilation is segmented into three categories of adaptation: 1) assimilation into the dominant (White) middle class, 2) preservation of cultural traditions and ethnic ties, and 3) downward assimilation (Peguero, 2009). In public schools where substance use, violence, and inter-racial/ethnic conflicts are rampant, opportunities for immigrant youth and children of immigrants to succeed educationally are substantially diminished (Hirschman, 1996). These youth run the risk of dropping out of school, using alcohol and drugs, being exposed to delinquency, and becoming victims of violence (e.g., bullying) as they experience the process of assimilation (Peguero, 2009).

Collectively, the association between race/ethnicity and bullying is complex (Espegeland & Swearer, 2003) and appears to be influenced by the racial/ethnic composition of the classroom, school, or community (Juvenile, Nishina, & Graham, 2001). For instance, Vervoort et al. (2008) found that racial/ethnic minority status was not a predictor of bullying perpetration. Interestingly, however, peer victimization was more prevalent in ethnically heterogeneous classrooms. It appears that the prevalence of bullying and peer victimization across race/ethnicity is less relevant than how racial/ethnic dynamics influence the content of bullying (Espegeland & Swearer, 2003).

2.1.4. Sexual orientation

Bullying occurs even more frequently among lesbian, gay, bisexual, transgender, and question (LGBTQ) youth in American schools than youth who identify as heterosexual. A recent nationwide survey of LGBTQ youth reports that nearly 40% indicated experiencing physical harassment at least once because of their sexual orientation and 64.3% report feeling unsafe at their school because of their sexual orientation (Kosciw, 2004). In addition, Rivers (2001) reported that 82% of British LGBT students reported name-calling with a majority of it being homophobic in nature and 60% reported being assaulted. According to a 2003 survey of Massachusetts high school students, individuals who identified as gay, lesbian, and bisexual were nearly five times as likely as students who identified as heterosexual to report not attending school because of feeling unsafe (Hanlon, 2004). In addition, Birkett, Espegeland, and Koenig (2009) found that LGBTQ students reported being bullied and being the targets of homophobic victimization more frequently than their heterosexual peers. With questioning students reporting the highest levels of bullying. Surprisingly, the perpetration of homophobic victimization may not indicate the presence of homophobic attitudes. Although the social context is a significant factor in explaining students’ use of homophobic teasing, evidence suggests that aggressive social climates were found to have a stronger association with increased use of homophobic teasing than homophobic social climate (Poteat, 2008).

2.1.5. Health status

Health status of youth can also enhance or mitigate their experiences in bullying at school. A limited number of research conducted in other countries have examined the association between obesity and peer victimization (Griffith, Wolke, Page, Horwood, & ALSPAC Study Team, 2005; Janssen, Craig, Boyce, & Pickett, 2004; Kukaswadia, 2009). One study conducted in Canadian schools with a representative sample of 5749 boys and girls found that overweight and obese youth were more likely to bully other students than normal weight students (Janssen et al., 2004). Other studies also report that overweight and obese youth of both genders are at increased risk of peer victimization in school (e.g., Kukaswadia, 2009). Griffith et al.’s (2005) cohort study of obese adolescents in British schools found that obese boys were significantly more likely to be both victims and perpetrators of bullying, while obese girls were victims. Findings from these studies indicate that obesity is a salient predictor for bullying behavior in school. To our knowledge, however, there have been no studies to date in the U.S. that examine the relationship between health conditions, such as obesity and bullying.
2.1.6. Depression and anxiety

Studies consistently report that psychosocial problems, such as depression and anxiety are common symptoms experienced by both male and female victims of bullying (Espelage, Bosworth, & Simon, 2001; Espelage & Swearer, 2003; Kaltiala-Heino, Rimpela, & Markkanen, 2001). Interestingly, other researchers have also examined depression and anxiety as predictors of bullying victimization (Espelage et al., 2001; Kumpulainen, et al., 2002; Hymie et al., 2001; Kumpulainen, et al., 2007; Schwartz, McFadyen-Ketchum, Dodge, & Bates, 1999). The researchers theorize that depressed or anxious behaviors could make the child an easy target for bullying victimization, as they appear to be more vulnerable than children without history of depression. The researchers theorized that depressed or anxious behaviors could make the child an easy target for bullying victimization, as they appear to be more vulnerable than children without history of depression. The researchers theorized that depressed or anxious behaviors could make the child an easy target for bullying victimization, as they appear to be more vulnerable than children without history of depression. The researchers theorized that depressed or anxious behaviors could make the child an easy target for bullying victimization, as they appear to be more vulnerable than children without history of depression. The researchers theorized that depressed or anxious behaviors could make the child an easy target for bullying victimization, as they appear to be more vulnerable than children without history of depression.

2.1.7. Learning/developmental disabilities

Research suggests that youth with learning and developmental disabilities are at-risk of peer victimization (Baumeister, Storch, & Geffken, 2008; Humphrey, Storch, & Geffken, 2007; Marini, Fairbairn, & Zuber, 2001; Saylor & Leach, 2009; Thompson, Whitney, & Smith, 1994). A growing body of empirical evidences found that children and adolescents with observable disabilities in segregated settings are more likely to be victimized by their peers in school than those with non-observable disabilities (see Rose, Monda-Amaya, & Espelage, 2011 for a review). Rose et al. (2011) purport that children and adolescents with disabilities experience victimization in school because they may be too passive or exhibit responses that may reinforce bullying behavior. Kaukiainen et al. (2002) on the other hand report that while learning disability was not related to victimization, bullying perpetration was. The researchers theorize that children and adolescents with learning disorders have difficulty in interpreting verbal and non-verbal communication and have poor social skills, which can hamper their ability to effectively negotiate peer relations. This can lead to the use of aggressive behavioral tendencies. However, Marini et al. (2001) note that reports of bullying incidents are difficult to identify for youth with disabilities since these youth are less likely to receive abuse awareness and response information, which makes detection and reporting of bullying a major concern.

2.1.8. Intelligence

Intelligence has also been found to be associated with bullying behavior, as indicated by a limited number of research findings (Peterson & Ray, 2006; Woods & Wolke, 2004). In a sample of 1016 school children in U.K., Woods and Wolke (2004) report that academically high achieving students are at an elevated risk of experiencing relational aggression (e.g., social exclusion) from their peers. The researchers however found no relations between high academic achievement and physical aggression. Peterson and Ray (2006) also found in a sample of 432 intellectually gifted eight graders in eleven American schools that 67% of these youth had experienced name-calling (e.g., ‘geek’, ‘nerd’) mostly due to their appearance and intellectual ability. Interestingly, the researchers also report that 28% of gifted youth also participated in bullying, which might support Sutton, Smith, and Sweetenham's (1998) theory that bullies or ‘ring leaders’ are socially intelligent and are skilfully manipulative in peer group situations.

2.1.9. Poverty status

Poverty status has been found to be a risk factor for violence exposure in low-income communities (Chauhan & Reppucci, 2009; Halliday-Boykins & Graham, 2001). Until recently, however, there have been relatively few empirical studies in the U.S. that have examined poverty as a risk factor for bullying and peer victimization (Carlson, 2006; Curtner-Smith et al., 2006; Unnever & Cornell, 2003). These studies found that impoverished youth were significantly more likely to be exposed to peer violence in school (Carlson, 2006), and to identify with a culture of bullying (Unnever & Cornell, 2004). They were also less likely to receive empathy from their mother, which can mitigate the likelihood of aggression (Curtner-Smith et al., 2006). Low-income youth are more likely to hold positive attitudes toward peer aggression (Unnever & Cornell, 2004).

International research findings on the association between poverty and bullying, on the other hand, have been inconsistent (Chaux, Molano, & Podlesky, 2009; Due et al., 2009). In a multilevel study of socio-economic inequality and bullying behavior among youth in 35 countries, Due et al. (2009) found that youth from families of low socio-economic status reported becoming a bullying victim. On the contrary, Chaux et al.'s (2009) study of bullying among 1000 schools in Colombia found that higher level of bullying in schools was related to better socio-economic status, where schools in affluent areas may reinforce inequality among students. This study concludes that aggressive and violent behaviors among youth stem from structural inequality rather than poverty status.

2.2. Microsystem

The most direct influences in bullying behavior among youth are within microsystem, which is composed of individuals or groups of individuals within immediate settings (e.g., home, school) with whom youth have interactions. The microsystem level analysis suggests that assessment of risk factors for bullying behavior needs to consider parent–youth relationships, inter-parental violence, peer relationships, school connectedness, and school environment.

2.2.1. Parent–youth relationships

Parent-level factors, such as negative adult influences (Espelage et al., 2001), lack of parental involvement (Barboza et al., 2009; Flouri & Buchanan, 2003; Georgiou, 2009), and lack of parental support (Holt & Espelage, 2007), have been found to be associated with bullying perpetration. Studies also have found an association between negative family interactions (Duncan, 2004; Spriggs et al., 2007) and child maltreatment (Bolger & Patterson, 2001; Duncan, 1999; Schwartz, Dodge, Pettit, & Bates, 1997; Shields & Cicchetti, 2001; Yodprang, Kunig, & McNeil, 2009) and bullying victimization. Shields and Cicchetti’s (2001) study found that child maltreatment places both boys and girls at-risk for peer victimization. Maltreatment may contribute to the development of peer interaction styles that are common among bully victims (Duncan, 2004). Maltreated children may feel powerless, as they are unable to protect themselves from harm’s way (Finkelhor & Browne, 1985).

Few studies also found variations in the association between parent–youth relationships and bullying behaviors among youth when controlling for socio-demographic characteristics (e.g., gender and race/ethnicity). The association between parent–youth relationships and bullying may differ for boys and girls. For example, youth are likely to become victims if the mother hinders the development of autonomy in boys or connectedness in girls (Duncan, 2004). Boys with overprotective mothers are likely to be victimized by their peers due to difficulty in exploring and experiencing new situations alone or with peers. Because they are sheltered from negative experiences, skills necessary for handling and resolving conflicts are not developed. Boys who are unable to develop a sense of autonomy necessary for obtaining and maintaining their status in their peer group are
likely to be bullied and rejected by their peers, as a consequence. Girls on the other hand are likely to be bullied if their mothers are emotionally abusive, hostile, and distant. These girls have difficulty learning proper social skills because their mothers failed to model healthy interpersonal skills. They become victims due to poor emotional regulation and communication problems (Duncan, 2004).

The association between parent–youth relationships and bullying also vary by race and ethnicity. One study (Spriggs et al., 2007) reported that lack of parent–youth communication and interactions were associated with bullying among Whites, African Americans, and Hispanics. However, the researcher also found that living with two biological parents was a protective factor against bullying behavior among White youth only.

Attachment theory, which hypothesizes that the quality of attachment to caregivers affect their interpersonal relationships in later years (Monks et al., 2009), can explain why lack of parent–youth relationship and interaction can influence bullying behavior. Children at early ages with secure attachments with their parents can relate more positively with others (Kennedy & Kennedy, 2004). Those without secure attachments with their caregivers are likely to develop poor social skills, which can result in peer conflicts and peer rejection. A lack of secure attachments can also lead to problem behaviors during childhood, such as aggressive behaviors in school.

2.2.2. Inter-parental violence

Relatively few scholars shed light on witnessing violence between parents at home as a risk factor for peer conflicts (see Corvo & deLara, 2010 for a review; McCloskey & Stuewig, 2001), such as aggression and bullying among youth (Baldry, 2003; Bauer et al., 2006; McCloskey & Lichter, 2003). These studies found that youth who are exposed to inter-parental violence at home are likely to engage in bullying in school, as well as become victims of bullying. Baldry’s (2003) study, which investigates the association between inter-parental violence and bullying in a sample of Italian youth, found that both boys and girls who witnessed violence between their parents were significantly more likely to bully their peers compared to those who were not exposed to inter-parental violence. Using a community-based sample of 112 children ages 6–13, Bauer et al. (2006) examined the relationship between childhood behaviors and exposure to intimate-partner violence at home. Results from the study indicate that children who witnessed inter-parental violence at home were at an increased risk of becoming victims of bullying at school. The relationship between inter-parental violence and bullying behavior can be explained by social learning theory, which purports that children learn behaviors through observation and role modeling (Monks et al., 2009). Children may learn to accept bullying and aggression as legitimate ways to interact with their peers by observing violence in the family.

2.2.3. Peer relationships

Adolescence is a period where friendships and peer support are essential. Adolescents seek autonomy from their caregivers and turn to their friends and peers for social support. Thus, it is no surprise that negative peer relationships and lack of peer support are significant risk factors for bullying behavior. Researchers argue that bullying is a group process, and have called for bullying prevention and intervention programs that target the peer group level (Salmivalli, 2009).

A number of researchers (Barboza et al., 2009; Boulton, Trueman, Chau, Whitehead, & Amatya, 1999; Espelage et al., 2001; Garandeau & Emmons, & Blatt, 1997). These findings demonstrate the importance of school environment on youths’ psychosocial functioning (Espelage & Swearer, 2003). On the contrary, Pellegrini and Bartini’s (2000)
study, which longitudinally examined bullying behavior and peer affiliations among youth making transitions from elementary to middle school, found that school environment had minimal impact on bullying behavior. Additional research is needed to examine school environmental factors as predicting bullying.

2.3. Mesosystem

Mesosystem level requires an understanding of the inter-relations among two or more microsystems, each containing the individual (Bronfenbrenner, 1979, 1986). Although family and peer are the principal contexts where human development occurs, they are but two of several contexts where developmental processes can and do occur (Bronfenbrenner, 1986). Teachers’ involvement is a relevant mesosystem level risk factor for bullying in school. Experiences in one microsystem (i.e., youth–teacher) can influence the interactions in another (i.e., youth–peer).

Due to frequent interactions between students and teachers in school, it is necessary to understand teachers’ attitudes and involvement. Given their contribution to school culture, teachers and school officials can influence students’ relationships with their peers and their perceptions of school environment (Lee, 2009; Olweus, 1992). One study for example found that teachers’ involvement in their students’ academic and social lives significantly decreased students feeling unsafe in their school (Hong & Eamon, 2011). A study by Rigby and Bagshaw (2003), which asked 7,000 middle school students whether their teachers intervene in bullying incidents, found that 40% responded “not really” or “only sometimes interested” in determining these behaviors. As a consequence, students do not seek help from their teachers, as a number of studies have shown (Craig, Henderson, & Murphy, 2000; Fekkes et al., 2005). Researchers also found that help seeking varied when youth demographic characteristics are considered. Waasdorp and Bradshaw (2009), for example, found that among African American youth, girls are more likely to report to their teachers when they are victimized by their peers, whereas boys seek another adult figure. It is also important to note that students are more willing to seek help from teachers or school officials when teachers intervene in students’ peer conflicts (Aceves, Hinshaw, Mendoza-Denton, & Page-Gould, 2009).

2.4. Exosystem

Exosystem considers aspects of the environment beyond the immediate system containing the individual. According to this system, individual’s development is influenced by events occurring in settings in which the individual is not present (Bronfenbrenner, 1979). This level is composed of interactions between two or more settings, but the individual is in only one of the settings (Bronfenbrenner, 1994). Media and neighborhood environments are two exosystem level factors. For example, exposure to media violence and neighborhood environmental factors, both of which may or may not directly contain the youth but can affect them, could negatively influence how youth interact with their peers in school.

2.4.1. Exposure to media violence

Recent events (e.g., school shootings) brought much research attention to the relationship between media violence and aggressive behavior among adolescents (Anderson & Bushman, 2001; David-Ferdon & Hertz, 2007; Huesmann, Moise-Titus, Podolski, & Eron, 2003; Williams & Guerra, 2007; Zimmerman, Glew, Christakis, & Katon, 2005). Researchers consistently find that youths’ exposure to violence on television (Huesmann et al., 2003), video games (Anderson & Bushman, 2001), and the internet (Williams & Guerra, 2007) increases the likelihood of aggressive thoughts and behaviors. As previously discussed, social learning theory provides explanations for these findings. Youth who observe a model acting violently in the media are likely to engage in aggressive peer interactions. Huesmann et al.’s (2003) longitudinal study, which investigated relations between exposure to television violence at ages six to ten and later aggressive behavior among a sample of children growing up in the 1970s and 1980s, found that exposure to television violence predicts aggressive behavior for both male and female adolescents. Findings from the study also suggest that identification with aggressive characters on television and perceived realism of television violence are significant risk factors for aggressive behavior.

In recent years, internet (or cyber) bullying, which refers to the use of internet through which harm or discomfort is inflicted at a specific person or group of persons (Williams & Guerra, 2007), also drew media and research attention. As increasing numbers of youth have access to the internet, instant messaging, chat rooms, and blogs, internet bullying has emerged as a new form of cruelty among youth (Williams & Guerra, 2007). This type of bullying is significantly related to students’ beliefs approving bullying behavior, negative school climate, and negative peer support (Williams & Guerra, 2007).

2.4.2. Neighborhood environment

Because schools are embedded in neighborhoods, an unsafe neighborhood environment can influence bullying behavior due to inadequate adult supervision or negative peer influences. There are relatively few studies (Bacchini, Esposity, & Affuso, 2009; Espelage et al., 2000; Khoury-Kassabri, Benbenishy, Astor, & Zeira, 2004; Nansel, Overpeck, Haynie, Ruan, & Scheidt, 2003; Swearer & Doll, 2001; Wennek Totura et al., 2008) that have investigated how bullying behavior is influenced by experiences in environments outside of school, such as neighborhoods. Nevertheless, researchers consistently found an association between neighborhood violence and bullying behavior. Youth residing in unsafe neighborhoods are likely to experience bullying victimization (Khoury-Kassabri et al., 2004), and these neighborhoods may reflect a larger social environment where bullying and violence occurs (Espelage et al., 2000). Researchers need to further examine the association between neighborhood environment and bullying.

2.5. Macrosystem

The macrosystem level is regarded as a cultural “blueprint” that may determine the social structures and activities that occur in the immediate system level (Bronfenbrenner, 1994). The macrosystem level refers to, for example, cultural beliefs, opportunity structures, and hazards, which ultimately affect the particular conditions and processes that occur in the microsystem (Bronfenbrenner, 1994). Behaviors are embedded within the culture of the organization and there is a major need to understand the organization rather than merely the individuals (Monks et al., 2009). Within the context of bullying, two types of macrosystem level factors are identified here: cultural norms and beliefs, and religion.

2.5.1. Cultural norms and beliefs

‘Culture’ is a broad and complex phenomenon, conceptualized in many different ways by social scientists (Bond, 2004). As noted by Roffey (2000), culture influences the way people behave. Within the context of culture, aggressive behavior may be constructed for the purpose of coercion which one exercises against another. Although there has been a vast amount of literature on aggressive behaviors within certain cultures, there have been few cross-cultural studies, which conceptualizes and measures aggression so that comparisons across different cultures can be meaningful (Bond, 2004).

Relatively few scholars in the U.S. have found that students’ culturally prescribed pro-social attitudes and beliefs toward violence contribute to bullying behavior (Bosworth et al., 1999; McConville & Cornell, 2003). Sociological theorists assert that school norms especially in developed countries help perpetuate inequality, alienation,
aggression, and oppression among the students in relation to their race/ethnicity, gender, and socio-economic background (Leach, 2003). Walton (2005) also argues that bullying is a social and political construction, which results from broader level social oppression. Leach (2003) examined the role of school and peer group cultural norms in constructing gender identity among youth in Zimbabwe, Malawi, and Ghana within the context of gendered bullying. The author argued that bullying behaviors of boys against girls and younger students in school is a part of a school cultural norm, which upholds masculinity through male competition and sexual prowess. Dominance theorists may also argue that bullying is perceived as a deliberate strategy that is used to attain dominance and power among students (Espelage & Swearer, 2003).

2.5.2. Religion

Even fewer studies have examined the association between religious affiliation and aggression (Abbotts, Williams, Sweeting, & West, 2004; Ellison, Bartkowski, & Segal, 1996; Petts, 2009). However, the results from the existing studies were inconsistent. Studies find that religious affiliation can either be a risk or protective factor for bullying behavior. Ellison et al. (1996) reported that parents with conservative, religious beliefs are likely to employ physical punishment more frequently than those without religious affiliation, which was related to children's aggressive behavior. Abbotts et al. (2003) found that youth who frequently attend church experience more frequent bullying and teasing. A more recent study (Petts, 2009), however, found that children of mothers with higher levels of religious participation were less likely to experience bullying.

3. Discussion

The emergence and continuation of bullying perpetration and victimization are best explained through the social–ecological model given the complexity of how individual characteristics such as aggression are largely influenced by social contextual environments that children and adolescents are exposed to. Unfortunately, the complexity of the etiology of bullying and peer victimization is not necessarily reflected in the school- or community-based interventions to prevent bullying involvement among American students. The disconnect between the empirical support for the social–ecological model of bullying and the current prevention efforts is substantial and in many ways explains the lack of efficacy data in the bullying literature.

3.1. Bullying prevention and intervention programs

More specifically, to date, there have been three meta-analyses conducted in the last six years to evaluate what is occurring in school-based bullying prevention programs. For the most part, these programs focus on shifting the school climate such that bullying is not tolerated, and providing students with knowledge about bullying, the consequences of such behavior for all involved, and the importance of being an effective defender or bystander for targeted peers. Regrettably, many of these programs have not considered other relevant ecological levels that have profound impact on school climate, such as neighborhood, cultural norms and beliefs, and religion. Consequently, results of these meta-analyses suggest that these programs have had a limited impact on reducing bullying in schools. First, Smith et al. (2004) evaluated 14 whole-school anti-bullying programs and found small effects. These programs were all based on the Olweus Bullying Prevention Program (OBPP; Olweus, 1993), which has yet to demonstrate consistent efficacy within U.S. schools (as measured by positive findings published in peer-reviewed journals). Results yielded moderate effect sizes on self-reported victimization that students experienced from bullies (e.g., being teased, called names, shoved or hit) and small to negligible effects on self-reported bullying perpetration (e.g., teasing, name-calling, hitting or pushing). A more recent meta-analytic investigation of 16 studies published from 1980 to 2004 yielded similarly disappointing results regarding the impact of anti-bullying programs (Merrell et al., 2008). This meta-analysis included data from over 15,000 students (grades kindergarten to 12) in Europe, Canada, and the U.S. Positive effect sizes were found for only one-third of the study variables, which primarily reflected favorable changes in knowledge, attitudes, and perceptions of bullying. No changes were found for bullying behaviors. Despite the rather disheartening results of these two meta-analyses, a third recent meta-analysis by Ttofi, Farrington, and Baldry (2008) has yielded mixed results. In a report for the Swedish National Council for Crime Prevention, they evaluated 44 bullying intervention studies, of which the majority was based on the Olweus Program. Results indicated that bullying and victimization were reduced by 17–23% in experimental schools compared to control schools. Ttofi et al. (2008) found a dosage effect; the more elements included in a program, the greater likelihood of reducing bullying. The researchers also noted that anti-bullying programs were more efficacious in smaller-scale European studies and less effective in the U.S. Ttofi et al. (2008) suggest that greater success was achieved with older (i.e., ages eleven and older) students.

With an eye toward the future, it is important to note that these meta-analyses indicate that programs that include ecologically-based components will likely show promising results even with the U.S. context, such as: 1) parent training/meetings, 2) improved playground supervision, 3) classroom management, 4) teaching training, 5) classroom rules, 6) whole-school bullying policy, and 7) cooperative group work. Because bullying is maintained by social and tangible reinforcers, effective prevention must be predicated in peer- and school-level interventions that shift power dynamics and the value placed on contingencies (Whittet & Dupper, 2005). A social–ecological approach dictates that responses to bullies need to rely less on the traditional punitive approach, and more on targeting the patterns of behavior of both bullies and their victims, with attention to the noninvolved bystanders of the schools as well as the classroom–school climate and other influences such as family, community, and society (Furlong, Morrison, & Grief, 2003; Orpinas & Horne, 2006).

3.2. Directions for future research

Researchers over the past few decades have made tremendous strides in enhancing our understanding of bullying and aggressive behaviors among children and adolescents in school.
However, considering the limited impact of intervention programs in preventing and reducing bullying behavior in school, it is important to assess the risk factors that contribute to this behavior across multiple ecologies. This can be achieved through multiple methodologies (e.g., teacher reports, peer nomination reports), and behavioral observation, in addition to self-report surveys, the most commonly used assessment tool (Espelage & Swearer, 2003). Use of ecologically-based assessment tools that draw upon multiple methodologies are essential for effectively implementing and evaluating bullying prevention and intervention programs. These tools can assess and promote problem-solving, empathy, and social skills among bully victims, perpetrators, and bystanders, but will also assess key aspects of the larger environments of schools, neighborhoods, and other contexts.

As our review suggests, racial/ethnic minorities, LGBTQ students, students with health problems, students with learning/developmental disabilities, and low-income students are at an elevated risk of bullying victimization in school. Furthermore, research findings have indicated that the prevalence of bullying is higher for LGBTQ students (Kosciw, 2004; Rivers, 2001) and for students with learning/developmental disability (see Rose et al., 2011 for a review) than for students in the general population. Regrettably, less research attention has been given to bullying among these populations (see also Hong, 2009). Are these students bullied and rejected by their peers because they are different? Additional research on the experiences in bullying and peer victimization among this population within multiple contexts is needed. Researchers focusing on these populations also must consider whether assessment tools, such as survey instruments are appropriate and sensitive to special populations and the nuances of studying subpopulations and contexts.

And finally, bullying prevention and intervention programs need to consider the social ecology of bullying behavior and efficacy of bullying prevention and intervention programs must be thoroughly evaluated. According to Leff (2007), participatory action research, which combines scientific methods and prior studies with feedback from relevant stakeholders (e.g., teachers, school staff members, and community leaders), can help ensure that prevention and intervention efforts are evidence-based and informed by the needs of the local community. Participatory action research can also facilitate collaborations between researchers, students, parents, teachers, school staff members, and community members to enhance a positive school environment and prevent bullying and peer victimization. However, participatory action research may be a daunting task for school staff and parents in low-income schools where they may have had negative experiences with researchers and research projects (Fantuzzo, Coolahan, & Weiss, 1997). Nevertheless, reducing the incidence of bully in school requires an ecological approach in intervention design and evaluation. After all, bullying is a complex social phenomenon that is embedded in a number of systems, which may inadvertently reinforce and maintain bullying interactions (Pepler, Craig, Charach, & Ziegler, 1993).

In summary, this article has reviewed the vast amount of literature that has implicated how multiple social contexts influence bullying involvement. Although our homes, schools, and neighborhoods may never be completely bully-free environment, we can do much to assist students break out of the bullying and peer victimization cycle (Swearer & Doll, 2001). The first step is to take the ecological model seriously and begin to create new programs or to modify existing bullying prevention programs that target more than individual characteristics and consider the complex interrelations between the individual and the various system levels. In doing so, we can help develop a healthy school environment.

References


