



Addressing school bullying: Insights from theories of group processes[☆]

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ABSTRACT

In order to enhance efforts to address bullying in schools, and in response to the limited success of school-based anti-bullying programs to date, this paper considers bullying as a group phenomenon and explores theories of group processing that can inform future prevention and intervention efforts. Moving beyond efforts to reduce bullying by enhancing bystander responses, we consider research and theory addressing peer group socialization processes, the role of teachers as an “invisible hand” in structuring peer groups, social interdependence as applied to the design of cooperative learning environments, and collective efficacy. Although these theories are not in themselves developmental, and address group processes that operate across ages, they can inform both future prevention and intervention efforts and applied developmental research that explores the age-related contextual and individual factors that contribute to school bullying.

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Bullying is recognized as a significant problem in schools worldwide (e.g., Jimerson, Swearer & Espelage, 2010; Pepler & Craig, 2008; Smith, Pepler & Rigby, 2004; Smith et al., 1999), with attention to bullying often borne of tragedy (Cullen, 2009; Godfrey, 2005; Marr & Fields, 2001; see also *Submit the Documentary*, www.submitthedocumentary.com; *Bully Movie*, www.bullymovie.com). Over the past few decades, increasing pressure has been placed on schools to address the issue and many have taken up the challenge, with no shortage of anti-bullying programs available (see Rigby, 2012; Sullivan, 2011 for overviews). Despite these efforts, rates of traditional forms of bullying appear to be declining only slightly (Currie et al., 2012; Finkelhor, Turner, Ormrod & Hamby, 2010; Rigby & Smith, 2011), and online bullying appears to be on the rise (Jones, Mitchell & Finkelhor, 2013). Although “evidenced-based practice” has become familiar mantra in education (e.g., Slavin, 2002), school-based anti-bullying interventions have met with mixed success. On the positive side, a handful of programs that address bullying and victimization in different ways have documented significant, positive outcomes (e.g., Cross, Hall, Hamilton, Pinabona & Erceg, 2004; Frey, Hirschstein, Edstrom & Snell, 2009; Olweus, 1993; Salmivalli, Kärnä & Poskiparta, 2010a, 2010b), with whole-school approaches seen as most effective (Vreeman & Carroll, 2007). However, demonstrated effectiveness in one context is no guarantee of success elsewhere (e.g., see Olweus, 1993, 1994 versus Roland, 2000, or Hanewinkel, 2004). Moreover, despite the documented

efficacy of some programs, overall effect sizes have been small to negligible (Merrell, Gueldner, Ross & Isava, 2008; Smith, Schneider, Smith & Ananiadou, 2004), with one recent meta-analysis indicating reductions of only 17–23% on average in experimental schools, relative to comparison schools (Tofi & Farrington, 2011). Thus, although there appear to be multiple ways to address bullying, and some demonstrated success in doing so, we have not yet identified all of the critical components of effective anti-bullying efforts, and need to remain open to new and different approaches to addressing this complex problem.

In their review of research on school bullying, Swearer, Espelage, Vaillancourt and Hymel (2010) offer several reasons for the lackluster results reported for school-based anti-bullying programs to date (e.g., insensitivity of measures, implementation fidelity and dosage, etc). Two of the reasons they offered stand out as particularly significant – that anti-bullying interventions have not been well grounded theoretically, and have not seriously considered the social ecology in which bullying takes place. Accordingly, in this paper, we explore research and theory that focuses on group processes underlying bullying and how these can inform school-based anti-bullying efforts. We begin with a brief review of research that emphasizes peer group factors, and especially the role of bystanders, on bullying behavior. Expanding this focus, we then consider theories of group processes and peer socialization, and how each can provide insights and new directions for anti-bullying pre/intervention efforts. Specifically, we consider Harris' (1995, 1998/2009) Group Socialization Theory, recent research on teachers and classroom dynamics by Farmer et al. (2013), Deutsch's (1949, 1962) theory of social interdependence, as applied to cooperative learning (e.g., Johnson & Johnson, 2009), and, finally, Sampson's (e.g., Sampson, Raudenbush & Earls, 1997) theory of collective efficacy. These theories are not in themselves developmental. Rather, they are based on group processes that appear to operate across the life span,

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in part in response to a fundamental need for all human beings (regardless of age) to feel a sense of belonging (Baumeister & Leary, 1995). We believe that a better understanding of these processes can impact both educational practice and applied developmental research on school bullying.

Peer processes in bullying

Scholars have increasingly argued for a social-ecological framework (Bronfenbrenner, 1979) in understanding school bullying (e.g., Espelage & Swearer, 2004, 2010; Hong & Garbarino, 2012; Swearer et al., 2012), within which bullying, like other aspects of human behavior and development, reflects a bidirectional interaction between the individual and the environmental systems in which he/she functions (family, neighborhood, school, community, society, etc.). Consistent with this framework is research focused on the role of the peer group in supporting bullying. For example, the rates of bullying vary as a function of the overall social climate of a school (e.g., see Gendron, Williams & Guerra, 2011; Guerra, Williams & Sadek, 2011; Marsh et al., 2012; Richard, Schneider & Mallet, 2012; Wang, Berry & Swearer, 2013), and the degree to which peer norms support bullying/aggression (e.g., Craig & Pepler, 1997; Salmivalli & Voeten, 2004).

Bullying has long been considered a group phenomenon (e.g., Olweus, 1993; Salmivalli, 2001). Observational research by (Craig & Pepler, 1997; Craig, Pepler & Atlas, 2000; Pepler, Craig & O'Connell, 2010) showed that peer bystanders are present in 85–88% of bullying incidents, although they seldom intervene on behalf of the victim and are as likely to support the bullying (see also Doll, Song & Siemers, 2004; Pellegrini & Long, 2004; Salmivalli, Lagerspetz, Bjorkqvist, Osterman & Kaukiainen, 1996). When peers do intervene on behalf of victims, bullying is observed to stop within just a few seconds 57% of the time (Hawkins, Pepler & Craig, 2001). Given such evidence, peer bystanders have come to be viewed as a critical focus in anti-bullying efforts (e.g., Hazler, 1996; Salmivalli et al., 2010a, 2010b). Unfortunately, studies show that, with age, bystanders are increasingly passive in their responses to bullying (Marsh et al., 2011; Trach, Hymel, Waterhouse & Neale, 2010). Moreover, even if effective, there may be emotional costs to witnessing bullying for the bystander (Bonanno & Hymel, 2006; Rivers, 2012; Rivers, Poteat, Noret & Ashurst, 2009). Although efforts to encourage prosocial bystander intervention holds promise for anti-bullying initiatives, telling kids to “stand up” ignores other group processes that contribute to bullying, ones that adults can potentially influence. We suggest that, it is not just about changing bystander responses, but more about shifting group norms and group dynamics to create a sense of community in which bullying is less likely to happen in the first place. To understand these processes, we first consider how peers socialize one another, based on Harris's (1995, 1998/2009) Group Socialization Theory.

Group Socialization Theory

Based on decades of research in social psychology, Group Socialization Theory (Harris, 1995, 1998/2009) posits that, when individuals (of any age) are put into groups, certain group processes naturally emerge. First, *between group processes* begin to operate, inevitably leading individuals in a group to behave in ways that favor their own group and discriminate against other groups. Specifically, *group contrast effects* reflect a natural tendency to emphasize the differences between groups, often in the service of enhancing self-esteem by viewing one's own group as “better”. Over time, these group contrast effects serve to widen (perceived) differences between groups, as similarities are underemphasized (Harris, 1995; Jetten, Spears & Manstead, 1997). Differences gradually become more pronounced and group norms become more extreme, creating an “us” versus “them” mentality, and laying the foundation for further discrimination based on group differences. The classic *Robbers Cave Experiment* of the 1950s (Sherif, Harvey, White,

Hood & Sherif, 1961; Sherif, White & Harvey, 1955) offers an excellent example of group contrast effects, when two seemingly identical groups of boys at a summer camp became increasingly distinct over time as the norms and behaviors set by each group became more pronounced and group differences widened. The “Rattlers” were expected to handle scrapes and bruises without complaint; the “Eagles” began to pray as a group.

Group contrast effects are crucial to the development of group norms and identity, and are typically based on the most salient characteristic that distinguishes two groups. In elementary school, for example, the most noticeable characteristic is gender; during adolescence, sex differences are second to race, age, and social class when groups are being formed (see Harris, 1995, 2009). The resulting within-group favoritism and out-group discrimination are surprisingly easy to elicit once people are placed in groups, which led social psychologist Henry Tajfel (1982), who first identified this phenomenon, to conceptualize it as the *minimal in-group paradigm*. We suggest that this natural, and potentially adaptive, between-group process affords ample opportunities for interpersonal aggression, and allows individuals to justify bullying simply because a peer is not a member of the same group.

Concurrently, two major *within group processes* also operate within groups. One reflects the tendency for group members to become more similar over time, what Harris (1995) referred to as *within group assimilation*. Group members gradually think, feel, and behave in ways consistent with the group prototype or norm (actual or perceived), resulting in increased similarity, and consistent adherence to group standards of behavior (e.g., Berger & Rodkin, 2012 on group effects on prosociality and aggression). If an individual strays too far, other group members are quick to reinforce these norms (Adler, Kless & Alder, 1992), although the tactics through which conformity is maintained often overlap with behaviors that some classify as bullying. The boys in the *Robbers Cave Experiment* would tease group members who did not conform to expected behavior (Sherif et al., 1961). According to Harris (2009, p.158) “laughter is the group's favorite weapon: it is used around the world to keep nonconformers in line. Those for whom laughter alone does not do the job – those who don't know what they're doing wrong or who will not or cannot conform – suffer a worse fate, expulsion from the group.” To avoid such consequences group members increasingly conform to the shared identity and the resulting enhanced within-group similarity serves to further intensify ingroup biases and outgroup discrimination. The more individuals identify with the group, the more they are willing to defend it against other groups and against nonconformers. Indeed, students will attribute blame to a victim for ignoring group norms and view the bully as reinforcing those norms (Tershjo & Salmivalli, 2003).

Perceptions of group norms also impact how peer witnesses respond to bullying. Pozzoli and Gini (2010) demonstrated that children were more likely to intervene on behalf of victims when they felt normative pressure to do so. However, group norms and expectations are often implicit rather than explicit, leaving a lot of room for misinterpretation and misperception. Children who overestimate their peer group's support for bullying report more willingness to join in the bullying and less effort to defend the victim (Sandstrom, Makover & Bartini, 2013). As well, such norms are often inferred on the basis of peer behavior. For example, Gini, Albiero, Benelli and Altoe (2008) and Gini, Pozzoli, Borghi and Franzoni (2008) have shown that when peer bystanders were more passive in their responses to bullying, children were more likely to blame the victim and to like them less.

Taking this one step further, Paluck and Shepard (2012) argued that the public behavior of well connected and highly visible group members, called *social referents*, provide implicit, but influential cues regarding perceived group norms. In a high school field study aimed at addressing peer bullying, social referents were asked to discuss and write essays about their experiences with bullying, and five were chosen to read their essay aloud to the group. By systematically changing the public behaviour of selected social referents, and applying the

principles of group processes, they were able to change the perceived norms of the group as well as levels of harassment. As Paluck and Shepherd suggest, the more we understand these social group processes, the more opportunities we have to change both group norms and individual behavior. Clarifying and publically discussing peer norms regarding bullying may also serve to reduce misperceptions and the passive bystander responses they seem to engender. Such influences may be easier to achieve with younger students, as Sandstrom et al. (2013) found that fourth graders reported more prosocial attitudes for both self and others than eighth graders.

The operation of within-group assimilation processes, however, does not mean each member of the group is the same. Individuals still create their own role within the group. A parallel process of *within group differentiation* also emerges when individuals function within groups, reflecting social comparison processes and the development of group status hierarchies based on the nature, priorities and values of the group. As the capacity for social comparison increases (Ruble, Boggiano, Feldman & Loebel, 1980), children's ability to gauge their own status within the group gradually improves. For those who are more socially central within a group, the competition to gain and maintain status increases (Faris & Felmler, 2011). Social Norms Theory (Blumenfeld, 2005) suggests that peer victimization may serve to reinforce social norms and maintain the hierarchy of the group. Individuals who challenge the hierarchy are likely to experience resistance from group members and potentially bullying. Consistent with these arguments are findings that some bullying reflects efforts to maintain one's status or social dominance within the peer group (see Garandeau, Wilson & Rodkin, 2010; Rodkin & Ryan, 2012), and such behavior is evident as early as preschool (see Pellegrini et al., 2010).

Farmer et al. (2006) offer a number of practical strategies that promote positive classroom communities and downplay status in social hierarchies. For example, creating opportunities for favourable group relationships (e.g., cooperative small-group assignments or games) and offering positive social consequences for exemplary displays of positive group interactions (e.g., free-time, special activities) can help to foster positive group dynamics in the classroom. Specific strategies may also be implemented at the individual level for those students who bully others. For example, teachers may offer constructive consequences (e.g., anger management training instead of suspension) when students behave aggressively in order to teach and reinforce new interpersonal skills (Farmer et al., 2006). Teachers who understand the operation of peer social ecologies are better able to structure the social environment in ways that minimize or eliminate bullying behavior (see Rodkin & Gest, 2011; Rodkin & Ryan, 2012).

Teachers as the “invisible hand”

Bullying most often occurs within a peer context, and schools are one of the most significant and consistent peer contexts in children's lives and a cost-effective arena in which to address bullying. By implication, teachers are often responsible for bullying pre-/intervention efforts in schools. While administrators wield an important influence on group norms at school and district levels, teachers are in a unique position to impact the classroom peer group and to serve as a particularly powerful force in influencing student behavior (Harris, 1995, 2009). To do so, however, teachers need to understand how groups operate and how they can influence group processes. In a special issue of the *Journal of Applied Developmental Psychology* on teachers and classroom social dynamics, Farmer, McAuliffe Lines and Hamm (2011) argue that teachers influence peer relationships *directly* by imparting information about social rules, and also *indirectly*, as an “invisible hand” that guides how children form their own rules and norms within their peer groups. Specifically, they proposed that teachers guide and direct peer relations in three major ways: (1) in their role as an adult authority on social rules and a facilitator of social skill development; (2) through teacher-student relationships; and (3) as a classroom leader.

Teachers as facilitators of social development

Farmer et al. (2011) propose that teachers can foster children's internalization of prosocial values by scaffolding instruction and/or structuring classroom activities to meet the social and behavioral needs of students, promote positive interactions, and provide opportunities for students to develop, practice and apply prosocial skills. To do so effectively, teachers first need to develop their own social and emotional competencies, including awareness of self and others' needs and experiences, skill in peaceful conflict resolution and responsible decision-making, cultural sensitivity, the capacity to develop and maintain healthy relationships, and the ability to regulate emotions in healthy ways (see Jennings & Greenberg, 2009).

Another quality of effective teaching is the ability to match the classroom environment to fit the needs and developmental level of the students. Eccles characterized this as *stage-environment fit*, which has been shown to lead to positive developmental outcomes (Eccles & Midgley, 1989; Eccles et al., 1993). For example, in the early grades, as children are developing emotional regulation and self-control skills, those who are not able to inhibit disruptive behaviours are more likely to be rejected by peers (Bierman, 2004). Such students may benefit from direct instruction in specific social skills and from opportunities to practice and apply their newly acquired skills before stable perceptions and reputations become firmly established within the group. Several websites have been developed that identify and evaluate social and emotional learning programs in order to assist educators in fostering positive social development across grade levels, including the Collaborative for Academic and Social-Emotional Learning Safe and Sound Guide (see www.casel.org), University of Colorado's Blueprints for Healthy Youth Development (www.colorado.edu/cspv/blueprints/), the Institute of Education Sciences' What Works Clearing House (www.ies.ed.gov/ncee/wwc/findwhatworks.aspx), and the Canadian Best Practices Portal (www.cbpp-pcpe.phac-aspc.gc.ca/interventions).

According to Eccles (1999), the preadolescent period is particularly salient for stage-environment “matching”, given evidence that peer friendships remain relatively stable between grades 4 and 11 (Berndt, 1982), and that the behavioral patterns that are established within peer groups during the transition to middle school are particularly important for later psychosocial adjustment (Erath, Flanagan & Bierman, 2008; Hamm, Farmer, Dadisman, Gravelle & Murray, 2011). Thus, early adolescence, prior to the transition into middle or high school, may be a particularly crucial time for peer-group focused bullying pre-/intervention efforts. To effectively impact peer group functioning during this period, teachers need to have a solid grounding in social and emotional development, including theories of child development, the impact of group dynamics on individual functioning and the role that teachers and other adults can take to minimize unhelpful group processes. Unfortunately, such a focus is not often emphasized in current teacher training programs (see Schonert-Reichl, Hanson-Peterson & Hymel, in press).

Teacher-student relationships

As Rita Pierson argues in her 2013 TED talk, “every kid needs a champion” (see www.ted.com). Consistent with a large body of research demonstrating the positive effects of teacher-student (T-S) interactions on child development (Pianta, Hamre & Stuhlman, 2003; Wentzel & Looney, 2007), Farmer et al. (2011) underscore the importance of teachers' relationships with their students for children's social development, as they establish the context for the social environment of the classroom and model the type of relationships students may establish with one another. Teachers can model positive relationship skills in a variety of ways, including monitoring their own verbal (e.g., tone of voice, language) and nonverbal (e.g., body language, eye contact) communication with students, sharing their own social and emotional experiences and how they addressed or resolved them constructively, etc.,

but the relationship that teachers establish with their students is particularly critical.

The impact of T-S relationships is evident even in the earliest years of school. Indeed, Hamre and Pianta (2001) found that T-S relationships in kindergarten predicted both behavioural and academic outcomes in Grade 8 (grades, achievement test scores, work habits, and discipline records). Subsequently, Hamre and Pianta (2005) showed that teacher support in first grade moderated student risk for school difficulties in early childhood. Similarly, Mikami, Griggs, Reuland and Gregory (2012); Mikami et al. (2013) found that teachers who demonstrated emotionally supportive relationships with students through frequent, *public*, positive, one-on-one interactions, even with difficult or unpopular students resulted in greater peer preference for children previously at-risk for peer exclusion. With regard to bullying and peer harassment, T-S relationships have been found to mediate the associations between peer bullying and quality of life (Flaspohler, Elfstrom, Vanderzee, Sink & Birchmeier, 2009), classroom concentration (Boulton et al., 2012), and perceived safety in the classroom (Boulton et al., 2009). Close and supportive T-S relationships have also been shown to reduce the impact of peer victimization on school liking (Troop-Gordon & Kuntz, 2013). Finally, T-S relationships may be particularly important for vulnerable youth, including low achieving students (e.g., Hughes, Hee Im & Wehrly, 2014) and sexual minority youth (e.g., Darwich, Hymel & Waterhouse, 2012).

Troop-Gordon and Kuntz (2013) suggest that informing teachers about the impact of close T-S relationships on student outcomes may empower and motivate them to establish warm relationships with at-risk students. Once aware of their importance, the next step for teachers is to develop and maintain positive relationships with their students. To do so, teachers need to be willing to get to know students beyond their academic skills and classroom behavior, a task which can be initiated rather simply through positive conversations about things that the student is interested in or good at. Sadly, not all teachers believe it is their responsibility to develop positive relationships with their students, and some teachers express concern that such relationships might negatively impact achievement (see Davis, 2006). However, the evidence to date indicates that positive T-S relationships actually enhance academic engagement and performance in both primary and secondary students (Allen et al., 2013; Hughes, 2011).

With regard to the present focus on group processes, T-S interactions appear to be especially important in influencing peer perceptions of and liking for particular classmates. Hughes et al. (2014), for example, showed how uneven T-S interactions within a classroom impact peer liking for classmates, with an even distribution of teacher attention allowing all students the opportunity to be viewed positively by their peers, and an uneven distribution contributing to social dominance hierarchies. How teachers respond to student behavior is also important. In an experimental study in which children viewed a videotape of a teacher providing different types of feedback (neutral, positive, negative, corrective, or a combination) to a student exhibiting negative classroom behaviors, White and Kistner (1992) found that students judged the misbehaving child more harshly when the teacher provided negative, dispositional feedback about their behavior. More recently, Mikami et al. (2012) showed that, when teachers provided greater emotional support, students demonstrated more open and flexible (less stable) peer social preferences over the school year, perhaps counteracting the effects a negative reputation. Further research is needed to identify the mechanisms through which T-S relationships influence peer perceptions and preferences, but their importance is clear.

Teachers as classroom leaders

Like Harris (1998/2009), Farmer et al. (2011) consider teachers to be leaders of the classroom social system who manage student interactions and activities. To do so effectively, teachers must understand how the structure of the classroom and its daily activities contribute to the social dynamic between peers, and use that knowledge to influence student

social adjustment and academic engagement. For example, teachers can establish a positive, prosocial classroom environment through the instructional strategies and structures they establish, including things like class meetings (e.g., Child Development Project, 1996), restorative justice practices (e.g., see Morrison, 2007), and/or collaborative group work (described in further detail below). Teaching leadership may be particularly important for bullying interventions, especially given the power differential that characterizes bullying, making it difficult for victims to address the problem without assistance.

In a recent study, Hamm et al. (2011) reported that teachers' attunement to peer group affiliations was significantly related to student perceptions of school efforts to protect them from bullying. Unfortunately, teachers generally are not very accurate at estimating how much bullying occurs (Holt & Keyes, 2004; Leff, Kupersmidt, Patterson & Power, 1999). To empower teachers with the skills needed to effectively address bullying, Farmer et al. (2013) emphasize the importance of training teachers to understand and positively influence the social dynamics of their classrooms. To this end, Farmer, Hamm, and colleagues have developed the SEALS program, with a goal of helping teachers develop awareness of classroom social dynamics and the skills that promote positive student development and supportive contexts. For example, in the SEALS program teachers gain knowledge about social roles and dynamics (e.g., how to identify leaders, bullies, and victims), and the importance of intervening in the social dynamics of the classroom. Teachers are trained to effectively engage students during classroom instruction (e.g., peer modeling techniques, individualized routines for off-task students), and are taught proactive classroom management strategies (e.g., constructive consequences, group contingencies) in order to foster positive behaviours in the classroom. Initial reports indicate that students in schools with teachers who participated in the SEALS training reported less encouragement of, and greater peer protection against bullying (Farmer et al., 2013). As classroom leaders, teachers also have the capacity to influence group functioning through the ways that they structure the classroom learning environment, as described in the next section.

Cooperative learning structures

Over the past 35 years, Johnson and Johnson (1978, 1999, 2005, 2009) have explored how classroom learning structures directly impact, not only how students learn, but also how they establish and maintain peer relationships, how they feel about their teacher and school, and how they feel about themselves. Specifically, Johnson and Johnson distinguish three types of learning structures that teachers establish in their classrooms in terms of how much each structure fosters social interdependence among students - competitive, individualistic, and cooperative. Based on social interdependence theory (Deutsch, 1949, 1962), Johnson and Johnson emphasize how an individual student's outcomes are affected by their own and others' actions either positively, negatively, or not at all. In *competitive learning structures* students compete against one another to achieve learning goals, inherently fostering negative interdependence among students - only a limited number of students will be successful at the expense of others' failure. In *individualistic learning structures* (mastery learning), students work alone to meet personal learning goals that are independent of other students' goals, with no need for social interaction or interdependence; each student succeeds or fails based solely on his/her own efforts. Finally, in *cooperative learning structures*, small groups of students work together to leverage their own and each other's strengths to meet a common (superordinate) learning goal, thereby requiring positive interdependence among members.

Meta-analytic studies have long documented the benefits of cooperative learning structures, relative to individualistic (mastery) or competitive structures, in promoting higher achievement (e.g., Johnson, Maruyama, Johnson, Nelson & Skon, 1981) as well as more positive interpersonal relations (e.g., Johnson, Johnson & Maruyama, 1983). Yet,

despite these demonstrated benefits, cooperative learning structures have not been fully embraced by educators for a number of reasons, including beliefs about the value of competition in preparing students for a competitive world, and experiences with poorly structured cooperative learning activities, raising concerns about student “hitchhikers” or “slackers” who fail to acquire the knowledge emphasized in these lessons (see Hymel, Zinck & Ditner, 1993). Professional development activities that translate research findings regarding the superiority of cooperative learning structures for both academic and social student outcomes may help to dispel myths about the ‘value’ of competition, but teachers may also benefit from direct training on how to establish effective cooperative learning structures in their classrooms (e.g., www.co-operative.org OR www.kaganonline.com).

More recently, Johnson and Johnson (2012) suggest that these learning structures implicitly communicate civic values to students that have important implications for how groups function. Specifically, in competitive learning environments, the implicit value communicated is that student success is contingent on beating out others. Through competitive learning structures, educators implicitly condone students obstructing others in achieving their goals, inadvertently priming the learning context to be one where bullying and harm-intended aggression are more likely to occur. In an individualistic learning environment, the implicit value is that student success depends entirely on one's own effort. Other students' actions and goals do not necessarily interfere with achieving one's own goals, nor do they positively impact them. In contrast, in a cooperative learning environment, educators can intentionally structure shared learning goals to positively influence the classroom social community and teach civic values that encourage group support in order for all to succeed. Through cooperative learning, students are implicitly taught that the success of the group is dependent on shared contribution and effort, and that, although everyone is different and brings unique skills, each person is valued and contributes in some way to the success of the group (Johnson & Johnson, 2012). In such a strength-based and collaborative environment, prosocial behaviours become normative.

Consistent with these arguments, Choi, Johnson and Johnson (2011a, 2011b) demonstrated that, as children's exposure to cooperative learning increased, so did prosocial behaviour, while aggressive, harm-intended behavior decreased. In contrast, student competitiveness was associated with greater harm-intended aggression. With regard to bullying per se, Jones, Bombieri, Livingstone and Manstead (2012) found that 10- to 13-year-old students who were briefly exposed to a cooperative, neutral or competitive norm in a game situation subsequently expressed less pride and more anger and regret about a hypothetical bullying they supposedly witnessed. Further research is clearly needed to explore the links between cooperative learning environments and bullying. However, in cooperative contexts, as students develop a genuine sense of care and respect for their peers, and as power differentials are limited or minimized, opportunities for bullying would be expected to decrease. Positive social interdependence may not be enough, however. It is possible for students to work towards a shared goal without necessarily developing supportive relationships. Drawing on research from sociology and criminology that underscores the importance of creating communities in which members share a sense of trust and mutual support, we now turn to the theory of collective efficacy.

Collective Efficacy

Collective Efficacy Theory, as proposed by Sampson and colleagues (Sampson & Raudenbush, 1999; Sampson et al., 1997), is rooted in Bandura's social cognitive theory of human agency (2000, 2001), which considers each person's capacity to influence his or her environment and produce social change. Bandura distinguished three forms of human agency: *personal agency*, wherein the individual acts directly on his/her environment to produce change; *agency by proxy*, whereby the individual engages someone else to exercise change on their behalf; and *collective*

agency, which involves coordinated, interdependent efforts geared towards achieving a common goal. The former has received the most attention in the bullying literature, with interventions aimed at increasing individual self-efficacy in order to prevent the negative outcomes associated with victimization (DeRosier, 2004), and promote bystander intervention (Andreou, Didaskalou & Vlachou, 2007; Salmivalli, Poskiparta, Ahtola & Haataja, 2013). However, it is the latter aspect of human agency that forms the basis of collective efficacy theory, and that can inform anti-bullying interventions from a group dynamics perspective.

Collective efficacy is an emergent group-level property that reflects a group's ability to work together to achieve a common goal based on their “shared beliefs in their collective power to produce desired results” (Bandura, 2000, p.75). By this definition, collective efficacy is comprised of a combination of a) each members' perception of their capacity to effectively perform their assigned role, and b) their perceptions of overall group functioning and their collective ability to accomplish a specific goal. In applying the concept of collective efficacy to explain neighborhood crime rates, Sampson et al. (1997) distinguished two separate components of collective efficacy. First, for individuals to be able to work together effectively, they must share a sense of belonging to the community they seek to protect, which Sampson and colleagues termed *social cohesion and trust*. The second quality of effective groups, *informal social control*, reflects a willingness of group members to intervene on behalf of the common good. Adapting this model to the school setting, Williams and Guerra (2007, 2011) examined the impact of collective efficacy on rates of bullying over a school year, assessing student perceptions of the level of social cohesion and trust among students and adults at school, as well as the perceived willingness of peers and adults to intervene or provide support if another student is being bullied. As the theory would suggest, collective efficacy was negatively correlated with student reports of bullying (Williams & Guerra, 2007, 2011), and positively associated with adolescent reports of having defended a victimized peer (Barchia & Bussey, 2011). Interestingly, social cohesion and trust was a stronger predictor of bullying than student and adult informal social control (Trach, Hymel & Shumka, 2013; Williams & Guerra, 2011), suggesting that trust and support among members of group may be more important than perceived willingness to intervene.

Through its emphasis on group functioning, collective efficacy theory provides several important implications for the development of anti-bullying programs. One proposition is that successful bullying prevention efforts must include a focus on building a positive climate within schools, characterized by feelings of safety, security, and belonging of all members of the school community. Various aspects of school climate have been found to be associated with lower rates of bullying, and are recommended as targets for intervention in schools hoping to improve their social-emotional climate, including communicating high academic standards, fostering positive and caring relationships among students, increasing students' perceptions of teachers as caring, supportive, and respectful, establishing clear behavior expectations and consequences for bullying, facilitating students' feelings of safety at school, and increasing the perceived effectiveness of anti-bullying efforts (Elsaesser, Gorman-Smith & Henry, 2013; Gregory et al., 2010; Lee & Song, 2012; Ma, 2002; Richard, Schneider & Mallet, 2012; Trach et al., 2012). In a recent research-to-practice article, Allen et al. (2013) explored the social-emotional climates of classrooms at the secondary level associated with higher student achievement. Laughing with students in prosocial contexts, greeting students as they enter the classroom, asking about events outside of the classroom, and providing students with opportunities for positive peer interactions were all found to help to foster a positive classroom climate.

Summary and conclusions

Our review focuses on the ways in which school-based anti-bullying efforts might be enhanced by understanding the processes and

mechanisms through which the peer group influences the behavior of individuals. The group processes reviewed here (Harris, 1995, 2009), including *group contrast effects* that can foster ingroup favoritism and outgroup discrimination, *within group assimilation* that leads to behaviors that encourage conformity to group norms and expectations, and *within group differentiation*, that establishes and maintains social hierarchies within groups, all reflect normative, adaptive, social mechanisms that are evident in all human groups. At the same time, they also provide opportunities for peer bullying and victimization, often in the service of maintaining established group structures. Adults who work with children and youth need to understand these processes and utilize such knowledge to influence groups, using an “invisible hand” (Farmer et al., 2011), to create educational contexts that foster acceptance and inclusion of all classmates. Initial research on the SEALS program (Farmer et al., 2013; Hamm et al., 2011) has provided some promising results in this regard.

Teachers are also able to reduce the likelihood of peer bullying and enhance positive bystander responses through the implicit values that they communicate via the learning structures they establish in their classrooms (Choi et al., 2011a, 2011b; Johnson & Johnson, 2012) and through efforts to foster a sense of collective efficacy among students (Barchia & Bussey, 2011; Williams & Guerra, 2007, 2011). Both social interdependence theory and collective efficacy theory suggest that efforts to reduce bullying must rest on a foundation of social support, both among students and between students and school staff, creating an atmosphere in which the contributions of all classmates are respected, and in which there is a felt sense of cohesion and trust, and the belief that others are willing to help if help is needed. These concepts are reminiscent of Garbarino's (1999) call to expand one's ‘moral circle’ or ‘circle of caring’, and what Thornberg (2010) termed ‘tribe caring’. Essentially, the ‘moral circle’ distinguishes those who are seen as deserving of protection, forgiveness or aid, and those against whom the individual can morally justify harm or lack of support, with different sets of moral principles applied to those within and outside the circle. The challenge is to expand these “circles of caring” to include all people within the students' communities, both at home and school, within one's neighborhood, city, country, and even the world (i.e., recognizing the shared humanity of all people). Such efforts may be effective in reducing *between group contrasts* (Harris, 1995, 2009) that enhance the likelihood of ingroup favoritism and outgroup discrimination.

Importantly, although these processes are not themselves developmental, and are evident in human groups of all ages, applied developmental research is needed to determine the contexts and developmental ages at which they are most readily influenced. For example, teachers' capacity to influence group processes may be greater during the elementary school years, prior to the age when bullying reaches a peak (e.g., Currie et al., 2012; Vaillancourt et al., 2010) and peers become a priority (Bukowski, Brendgen & Vitaro, 2006), and in contexts in which students function in a single, stable classroom group. In high schools, where students move from classroom to classroom throughout the day, such efforts may be more effective in more stable group contexts such as clubs, sports teams or after school programs, or may need to be adapted to support whole school efforts to create a caring learning context.

Another challenge for future research is to examine how these group dynamics play out in an online context, and whether in-group/out-group processes also impact youths' online bullying experiences. To our knowledge, only one study to date has investigated the effect of group processes on student's reactions to cyberbullying. Using hypothetical scenarios, Jones, Manstead and Livingstone (2011) found that, as with traditional bullying (Jones, Manstead & Livingstone, 2009), feeling a sense of group membership with a target of cyberbullying resulted in stronger feelings of anger toward the perpetrator, which was subsequently associated with more willingness to tell a teacher and apologize to the victim. Given the complex social dynamics involved in online

relationships, additional research investigating these group processes in an online context is clearly needed.

Applied developmental research is also needed to identify the developmental assets and challenges that enhance or inhibit such group processes. For example, given evidence that children who bully peers are more likely to justify and rationalize their behavior through a process of moral disengagement (Gini, Pozzoli & Hymel, 2014), and that tendencies to morally disengage are believed to emerge gradually with repeated experiences (Bandura, 1999), research is needed to determine optimal ages at which educators are able to enhance students' sense of social responsibility and collective efficacy. We hope that the present paper serves as a catalyst for such research with a goal of increasing the effectiveness of efforts to reduce school bullying.

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