ABSTRACT

Title of Document: BULLYING AND EXCLUSION IN INTERGROUP CONTEXTS: THE RELATION BETWEEN SOCIAL REASONING, SOCIAL INFORMATION PROCESSING, AND PERSONAL EXPERIENCE

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As many as 77% of children and young adolescents are bullied (Hoover, Oliver, & Hazler, 1992), with short- and long-term negative consequences for victims and victimizers (Hawker & Boulton, 2000). While physical bullying is the most visible method, exclusion is used frequently to bully (Seals & Young, 2003). Despite a strong theoretical link indicating that bullying falls squarely in the moral domain (Killen & Nucci, 1995; Smetana, 2006; Turiel, 1983; Wolke, Woods, Stanford, & Schulz, 2001), few studies have examined how children evaluate bullying from a moral perspective. Additionally, how moral reasoning is related to experiences with bullying has not been empirically tested, although theoretical work suggests that the two are influenced by social information processing (SIP; Arsenio & Lemerise, 2004).

Race/ethnicity may also influence evaluations of bullying. Little research has examined race/ethnicity as it pertains to bullying, however, except to determine

prevalence rates (Hanish & Guerra, 2000). While studies have found that race/ethnicity affects moral reasoning and decision-making (Dovidio & Gaertner, 1998; Lawrence, 1991; Margie, Killen, Sinno, & McGlothlin, 2005), race/ethnicity's impact on reasoning about bullying, especially exclusion as a form of bullying, is unknown.

The current study surveyed 265 European-American 6th and 9th grade boys and girls to examine the relation between children's social reasoning (SR), SIP, and personal experiences with bullying, and how children's SR and SIP is affected by the race/ethnicity of those involved. The survey assessed judgments, justifications, intent attributions, social goals, and response selection in same-race and cross-race peer interactions (European-American and African-American), and assessed personal bullying experiences.

Children with more bullying experience rated bullies' actions less wrong; were more likely to justify the bully's action by blaming the victim and less likely to consider the victim's feelings; attributed more hostile intent; chose more aggressive and less assertive responses; and chose more aggressive and less relational goals for victims. Participants were more likely to attribute aggressive goals to bullies and select aggressive goals for victims in same-race than in cross-race situations. Aggressive victim goals and aggressive responses partially mediated the relation between bullying experience and judgments, blaming victim justification, and victim's feelings justification.

BULLYING AND EXCLUSION IN INTERGROUP CONTEXTS: THE RELATION BETWEEN SOCIAL REASONING, SOCIAL INFORMATION PROCESSING, AND PERSONAL EXPERIENCE

By

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Dedication

This dissertation is dedicated to my father, Peter Geyelin, who believed in me, supported me, intellectually challenged me, inspired me, and most importantly, made me laugh.

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It would not have been possible for me to reach this goal without the help of many people. First, I want to thank my husband, Paul Margie, without whose encouragement, support, and love, I would never have even considered the idea of attending graduate school let alone have completed a dissertation. From the beginning he has taken a genuine interest in my interests and provided an important sounding board for my ideas. When I've needed an extra push to keep going, his intellectual curiosity and wonderful cooking have revived my energy. I thank him also for his expert editing skills. While he would deny it, I truly could not have done this without him.

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and motherhood, and her joyful willingness to babysit whenever and wherever needed.

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Chapter 1: Theoretical Rationale

Bullying is characterized by the repeated aggression of one child or a group of children towards another child (Espelage & Swearer, 2003; Graham & Juvonen, 2002; Olweus, 1994b). Being bullied in school is a common experience for as many as 77% of children and young adolescents (Hoover, Oliver, & Hazler, 1992). This behavior has short- and long-term negative consequences for the mental health and adjustment of both the victim and the victimizer (Coie & Dodge, 1998; Hawker & Boulton, 2000; Juvonen & Graham, 2001; Rubin, Bukowski, & Parker, 2006). These negative effects include depression, suicide ideation, poor self-esteem, and loneliness for victims, and conduct disorders, peer rejection, criminality, and antisocial behavior for bullies. A more complete understanding of the factors involved in a child's decision to bully will enable the design of more effective interventions to prevent or mitigate such behavior and treat its mental health consequences.

Existing research provides reliable data on the prevalence of bullying; the characteristics of bullies and their victims, families, and peer groups; and the mental health consequences of this behavior for bullies and for victims (for reviews, see Espelage & Swearer, 2003; Griffin & Gross, 2004; Smith, 2004). Researchers have focused less, however, on the relation between bullies' social cognitive mechanisms and his or her behavior (Camodeca & Goossens, 2005). In particular, researchers have not examined the relation between social and moral reasoning and bullying behavior, despite the fact that the manner in which children conceptualize social events is strongly related to how they behave in peer social situations that involve

harm to others, such as bullying, according to moral developmental theory (Arsenio & Lemerise, 2004; Piaget, 1932; Turiel, 1983).

In addition, while a number of studies report on the prevalence of victimization by children's race/ethnicity (i.e., Boulton, 1995; Hanish & Guerra, 2000; Mouttapa, Valente, Gallaher, Rohrbach, & Unger, 2004), few studies have examined how race/ethnicity enters into children's evaluations of bullying. Specifically, questions remain about how the race/ethnicity of children involved in bullying/victimization interactions impacts their thought processes and reasoning in such situations. This subject deserves further investigation because aspects of children's reasoning and processing of information concerning peer interactions have been found to differ depending on the race/ethnicity of those involved and the race/ethnicity of those evaluating the situation (Killen, Lee-Kim, McGlothlin, & Stangor, 2002; Margie, Killen, Sinno, & McGlothlin, 2005; McGlothlin & Killen, 2006; McGlothlin, Killen, & Edmonds, 2005). Yet, the question of how race/ethnicity interacts with children's social cognition in bullying situations is largely unexplored.

The current study addresses these gaps in our understanding of possible influences on bullying behavior described above, thereby increasing what is known about the social cognition of children who bully and the role of the racial/ethnic context on bullying interactions. This knowledge can eventually help interventionists to create more targeted and effective interventions to prevent or mitigate bullying behavior and thereby prevent or more effectively treat the negative mental health consequences of such behavior for both victims and victimizers.

The current study has two main goals. The first goal is to examine the relation between children's social reasoning (as defined by social cognitive domain theory; Killen & Nucci, 1995; Smetana, 2006; Turiel, 1983, 2006) about bullying situations; children's attributions of intent, social goals, and response selection (as defined by social information processing; Crick & Dodge, 1994) in bullying situations; and children's personal experiences with bullying and victimization. The second goal of the study is to examine the influence of the race/ethnicity of those involved in a bullying interaction on children's social reasoning and online processing concerning that interaction.

To achieve these goals, the current study focused specifically exclusion that is used to bully. Exclusion is a method of bullying that students report occurs as frequently as physical bullying (Seals & Young, 2003), but has not received as much research attention as other forms of bullying that are more easily perceptible by observers (i.e., physical, verbal). It is important to note that this study used the social reasoning paradigm for examining exclusion (i.e., Killen et al., 2002; Killen, Margie, & Sinno, 2006; Killen, Sinno, & Margie, 2007). This perspective is slightly different from exclusion viewed from a relational aggression perspective or an indirect bullying perspective. In the aggression literature, exclusion is considered one aspect of relational aggression, because it uses relationships, as opposed to physical means, to harm others (Crick, Casas, & Mosher, 1997; Crick & Gropeter, 1995). Studies of relational aggression, however, generally examine relational aggression as a whole instead of exclusion specifically. In the bullying literature, exclusion is often classified as a form of indirect bullying, because it can be used covertly to inflict

harm (Björkqvist, Lagerspetz, & Kaukiainen, 1992; Olweus, 1991). It can, however, also be used directly to inflict harm (Killen et al., 2002, 2006, 2007).

In contrast, the social reasoning literature has studied exclusion independently of other forms of harm and as a direct form of harm. This research has found that exclusion is an interesting context to examine from a moral reasoning perspective, because children and adolescents do not always perceive it as a straightforward moral issue (Killen et al., 2002, 2006, 2007). In addition, exclusion is an especially important context to examine in relation to race/ethnicity. Since explicit racial/ethnic prejudice and discrimination is not as socially acceptable as it once was, verbal and physical bullying against someone else of a different race/ethnicity is likely more frowned upon. But exclusion of someone of a different race/ethnicity may be seen as more acceptable, even though it can be just as harmful. Therefore, it is important to examine how reasoning, social information processing, experience, and race/ethnicity interact in relation to exclusion used to bully.

According to social cognitive domain theory, acts that involve intention to harm, like bullying, fall in the moral domain and are influenced by moral reasoning (Killen & Nucci, 1995; Smetana, 2006; Turiel, 1983; Wolke, Woods, Stanford, & Schulz, 2001). However, most research on children's social reasoning from a social cognitive domain perspective has focused on normative populations (for exceptions see Ardila-Rey, 2003; Astor, 1994; Smetana, Daddis et al., 1999; Smetana, Kelly, & Twentyman, 1984; Smetana, Toth et al., 1999). Studies on the social cognition of bullies and aggressive children have, on the other hand, concentrated on online social information processing (Arsenio & Lemerise, 2004; Crick & Dodge, 1994).

Recently, Arsenio and Lemerise (2004) have proposed a way to bring these two literatures together. Specifically, they suggest that social reasoning is a latent mental structure within social information processing (see Appendix A). In addition, they propose that examining how aggressive children reason about social situations as well as how they process information while engaged in a peer interaction will lead to a more complete explanation of their aggressive behavior (Arsenio & Lemerise, 2004). This, in turn, will make it possible to devise more effective and efficient interventions.

Studies of the social information processing of bullies have employed the Crick and Dodge (1994) social information processing (SIP) model. This model proposes that people employ six processing steps when making decisions in a social situation. Specifically, these steps are (1) encoding of social cues, (2) interpretation of cues, (3) clarification of social goals, (4) accessing or constructing responses, (5) making a decision about the response, and (6) enacting the behavior. The six processing steps are cyclical and can occur very rapidly. In addition, they are reciprocally influenced by one's "database" of social knowledge, which is composed of latent mental structures including memories of and schemata based on past social experiences.

Research on bullying and social information processing has found that bullies process social information differently than non-bullies, especially in Steps 2 (interpretation of cues), 3 (clarification of social goals), and 5 (response decision) of the SIP model. Specifically, concerning interpretation of cues (Step 2), bullies are more likely than non-bullies to attribute the cause of another's actions to external

factors and to interpret another's ambiguous intention as hostile (Camodeca & Goossens, 2005; Camodeca, Goossens, Schuengel, & Terwogt, 2003; Slee, 1993). In regards to Step 3 (social goals), bullies are more likely to value retaliation in response to a perceived wrong than are non-bullies (Camodeca & Goossens, 2005). And concerning Step 5 (response decision), bullies are more likely than non-bullies to choose aggressive solutions, to feel self-efficacious about behaving aggressively, to be confident in their use of verbal persuasion, and to decide not to use aggressive behavior because of fear of possible punishment (as opposed to the perceived wrongfulness of the behavior) (Camodeca & Goossens, 2005; Camodeca et al., 2003; Slee, 1993).

These studies have three main limitations, however. First, they only assess bullies' social information processing in provocative situations; in other words, they are designed to see what bullies would do if they were victims. How do children who bully others process social information when they are bullying? For instance, what are bullies' social goals as opposed to victims' social goals in a bullying situation? Second, these studies compare groups of children based on their status as bullies and victims. While this methodology captures those groups of children who bully or are victimized to the extreme, it fails to take into account the experiences of the majority of children. Many children likely bully or experience bullying in lesser amounts than someone who is classified in these studies as "bullies" or "victims", and these experiences likely impact their reasoning and processing concerning bullying situations. Therefore, it is important to examine a continuum of experience with

bullying and/or victimization (Espelage & Swearer, 2003). Third, these studies do not examine another important aspect of social cognition: social reasoning.

According to social cognitive domain theory, different domains of social knowledge develop from experience with different kinds of social situations (Turiel, 1983, 2006). How people reason and make decisions about a social situation depends on which domain they perceive the situation occupies (Turiel, 1983, 2006). While there can be other domains of social knowledge, social cognitive domain theory and research has focused on three in particular: moral, social-conventional, and psychological. The moral domain involves issues related to justice and the welfare of others; the social-conventional domain involves issues related to how groups establish regularities that maintain group functioning and create traditions and rituals to preserve group order; and the psychological domain refers to issues related to autonomy, individuality, and the self (issues that are not regulated by ethical principles or group customs). While there is a wealth of literature on social cognitive domain theory and social reasoning, most of it focuses on normative populations (for a review, see Smetana, 2006).

Very few studies have examined aggressive children's social reasoning from the perspective of social cognitive domain theory. Generally these studies have examined the social reasoning of juvenile delinquents and behaviorally disordered children, who exhibited a range of antisocial behaviors, just one of which was could be aggression (see Nucci & Herman, 1982; Tisak & Jankowski, 1996). More directly analogous to bullying, Astor (1994) compared the social reasoning of physically aggressive children and non-aggressive children. He found that physically aggressive

and non-aggressive children justify moral events using different aspects of the moral domain. Specifically, physically aggressive children were more likely than non-aggressive children to consider physical retaliation moral because it represents justice as opposed to moral because of the harm it inflicts on others (Astor, 1994).

While this research is an important first step towards understanding the social reasoning of aggressive children, it was limited in its focus on physical aggression. Research has found that there are a variety of ways that children can express their aggression (i.e., verbally, indirectly, relationally, and physically), and that as children get older, they are more likely to use non-physical forms of aggression (Craig, 1998; Crick & Grotpeter, 1995; Crick et al., 1999). Therefore, it is important to assess non-physical types of aggression as well, such as exclusion.

Arsenio and Lemerise (2004) proposed bringing together the literature on social information processing and the literature on social reasoning by examining social reasoning as a latent mental structure that interacts with social information processing to influence behavior. These connections have not yet been empirically tested. However, studies of another kind of latent mental structure—normative beliefs about aggression—and its relation to social information processing and behavior provide an empirical starting point for considering how social reasoning might be related to SIP and behavior. Specifically, these studies have found that children who were more accepting of aggressive retaliation were also more likely to attribute hostile intent in ambiguous situations, generate aggressive responses, and approve of aggressive solutions. These differences in social information processing predicted aggressive behavior, and mediated the relation between normative beliefs

about aggression and aggressive behavior (Bellmore, Witkow, Graham, & Juvonen, 2005; Zelli, Dodge, Lochman, Laird, & Conduct Problems Prevention Research Group, 1999).

The studies of normative beliefs about aggression, social information processing, and behavior have two main limitations, however. First, they focus on reactive aggression and do not examine proactive aggression, which is related to bullying (Arsenio & Lemerise, 2004). Therefore, their findings are not necessarily generalizable to bullying/victimization. Second, they only assess physical aggression. As mentioned earlier, other forms of aggression need to be examined.

Additionally, while normative beliefs about aggression are similar to social reasoning, there is an important distinction that warrants the examination of social reasoning specifically in relation to SIP and behavior. Normative beliefs refer to judgments about how good or bad it is to perform a specific action. Social reasoning includes both judgments about goodness/badness of an action as well as justifications of *why* the action is good or bad. Research has found that the justifications children use indicate how amenable their judgments are to change. Specifically, children who view something as wrong for social conventional reasons are more likely to change their opinion than are children who view something as wrong for moral reasons (Killen, Pisacane, Lee-Kim, & Ardila-Rey, 2001). Knowing how open children's views about bullying and victimization are to change will help interventionists design more effective intervention programs. Therefore, it is important to understand why children think an action is right or wrong (justifications) in addition to whether or not they judge the action to be a good or bad thing to do (judgments).

Another aspect of children's peer interactions that needs to be taken into account is the context within which these interactions occur. One such context is race/ethnicity, which is especially important to consider when examining peer interactions in a society as multicultural as that of the United States. Race/ethnicity has been examined as part of the literature on intergroup relations. The study of intergroup relations, which has been undertaken by social psychologists most extensively, entails the examination of judgments, attitudes, biases, and behavior of a member of one group towards a member of another group (Brown & Gaertner, 2001). Race/ethnicity is one way that people become divided into different groups. Members of the same racial/ethnic group are considered "ingroup" members while members of a different racial/ethnic group are considered "outgroup" members.

Even though research has found that racial/ethnic intergroup relations are related in important ways to children's and adults' attitudes and behavior towards others (Dovidio & Gaertner, 1998; Killen et al., 2006; Killen et al., 2007), intergroup relations are not often studied as a factor in children's negative peer interactions such as bullying. Intergroup relations may have important connections to bullying for at least two reasons. First, bullying involves an imbalance of power, with the bully being more powerful and victim being less powerful. Racism is also based on an imbalance of power, and therefore may play a role in bullying in cross-race interactions (Juvonen & Graham, 2001). Second, ingroup and outgroup bias can lead to discrimination, which can involve aggressive actions, such as bullying. To get at the root causes of bullying, therefore, the context of race/ethnicity needs to be examined.

Studies of bullying that include race/ethnicity as a variable have tended to focus on racial/ethnic differences in the prevalence of bullying/victimization. These studies' findings are mixed. Some have found racial/ethnic differences, such as that African-American, European-American, and Asian-American students are more likely to be victims than Latino students (Hanish & Guerra, 2000; Mouttapa et al., 2004), and that racial/ethnic minority children are more likely than racial/ethnic majority children to be victims but not more likely to be bullies (Wolke et al., 2001). The racial/ethnic composition of the school may also play a role. European-American children were more likely and African-American children were less likely to be victimized in heterogeneous schools (Hanish & Guerra, 2000).

Other studies report that African-American and European-American students are equally likely to be involved in bullying (Seals & Young, 2003), while Asian and White children in England are equally likely to be bullies or victims (Boulton, 1995). However, these same studies found that children's experiences of victimization differ based on their race/ethnicity. Specifically, racial/ethnic minority children reported being teased about their race/ethnicity more than their racial/ethnic majority counterparts and were more likely to believe that racial/ethnic minority children are bullied more than racial/ethnic majority children (Boulton, 1995; Siann, Callaghan, Glissov, Lockhart, & Rawson, 1994).

Only one study of bullying has examined how racial/ethnic factors other than just the race/ethnicity of the participant may play a role. This study examined the relation between ethnic identity and bullying/victimization experiences and attitudes (Nguy & Hunt, 2004). Its main finding was that racial/ethnic majority boys believed

most strongly that bullying would result in positive outcomes, while racial/ethnic minority students placed more importance than racial/ethnic majority students on the positive outcomes (i.e., feeling good about yourself; not getting bullied) but did not believe that bullying would achieve these outcomes.

Taken together, this research provides a starting point for the examination of bullying within the context of racial/ethnic factors. However, it still leaves much to explore. In particular, this research primarily examines prevalence rates. The context of race/ethnicity is complex, and variables and measures that go beyond simply the race/ethnicity of the participant need to be included. Specifically, the role that race/ethnicity plays in children's social reasoning and social information processing concerning bullying needs to be examined.

Some research has already examined how the context of race/ethnicity is related to children's and adolescents' judgments (Lawrence, 1991; Margie et al., 2005; McGlothlin & Killen, 2006; McGlothlin et al., 2005; Sagar & Schofield, 1980). These studies have taken the race/ethnicity of the participant into account and have employed measures that systematically vary the race/ethnicity of the characters, to see if judgments differ depending on the race/ethnicity of those involved in a peer interaction. Results show that children's judgments can differ depending on the race/ethnicity of the potential perpetrator and of the participant. For instance, European-American children tend to consider an African-American potential perpetrator to be "worse" than a European-American potential perpetrator for committing the same action (Lawrence, 1991; McGlothlin & Killen, 2006; Sagar & Schofield, 1980). Findings for minority children are more mixed, with some showing

that African-American children evidence no negative bias towards European-American potential perpetrators (Lawrence, 1991), and others showing that African-American children do have a negative bias towards European-American potential perpetrators (Margie et al., 2005; Sagar & Schofield, 1980). The racial/ethnic heterogeneity of the school environment may also play a role: European-American children in heterogeneous schools showed no negative bias in moral judgments about African-American potential perpetrators (McGlothlin et al., 2005) while those in homogeneous schools did (McGlothlin & Killen, 2006). These studies do not, however, tell us specifically how race/ethnicity may play a role in bullying situations.

Studies of social reasoning and race/ethnicity have focused on exclusion based on race/ethnicity and found that children and adolescents consider straightforward racial/ethnic exclusion of peers wrong for moral reasons (Killen et al., 2002; Phinney & Cobb, 1996). However, when exclusion is not as straightforward (i.e., because the peer won't fit in with the larger group of friends), children reason differently. For instance, they may use social conventional justifications, and put the good of the group above including someone of a different race/ethnicity (Killen et al., 2002).

While this research has examined more facets of the context of race/ethnicity than just the race/ethnicity of the participant, it also has its limitations. For instance, studies of judgments examined a wide variety of actions (from potential physical aggression to potential stealing). Studies that also examine justifications, on the other hand, focus only on one type of action—exclusion based on race/ethnicity. To understand the relation between the context of race/ethnicity and bullying behavior, measures need to be used that examine bullying specifically and not exclusion based

solely on race/ethnicity. In addition, both judgments and justifications need to be assessed, in order to gather answers both to *how* good/bad a particular instance of bullying is and *why*. Finally, these studies do not examine aspects of social cognition that are hypothesized to be directly related to children's behavior in a social situation, such as social information processing steps. Knowing the social information processing that occurs during cross-race interactions involving bullying in addition to the social reasoning will provide a more complete understanding of the predictors of bullying behavior.

Research on bullying and aggressive behavior using Crick and Dodge's (1994) social information processing (SIP) model, however, has not typically examined race/ethnicity as a factor. Two exceptions are the studies of normative beliefs about aggression, social information processing, and behavior (Bellmore et al., 2005; Zelli et al., 1999). Overall, neither study found racial/ethnic differences in the relations between normative beliefs, SIP, and behavior. Yet, one of them did find differences in approval of retaliatory aggression (African-Americans were most approving), aggressive reputations (European-Americans and African-Americans were highest), and the relation between normative beliefs and preference for hostile responses (less for African-Americans than all other groups) (Bellmore et al., 2005). These studies, however, only examined racial/ethnic differences based on the group membership of the participants; they did not use measures that assessed how participants' evaluations of aggressive situations may differ based on the race/ethnicity of others involved. In addition, as mentioned earlier, these studies did not delve into children's justifications, nor did they focus on bullying specifically.

The current study extended these literatures by (1) testing the theoretical relation between social reasoning, social information processing, and experience with bullying and victimization; (2) examining how the racial/ethnic composition of dyadic bullying interactions is related to social reasoning, social information processing, and experience with bullying/victimization; and (3) moving beyond physical aggression to examine exclusion used to bully. In addition, this study examined developmental and gender differences in the relation between reasoning, social information processing, and bullying/victimization experiences in intergroup situations.

To achieve these goals, the present study surveyed European-American boys and girls in 6th and 9th grades. Following the social psychology paradigm for research on intergroup relations and racial/ethnic bias, participants were from the majority racial/ethnic group (i.e., European-American). Both boys and girls were included since research has found differences in bullying prevalence and experience based on gender (Boulton & Underwood, 1992; Camodeca, Goossens, Terwogt, & Schuengel, 2002; Olweus, 1993; Whitney & Smith, 1993). Students in 6th and 9th grades were recruited, since research finds that bullying peaks in 6th grade and significantly declines by 9th grade (Espelage & Swearer, 2003; Nansel et al., 2001), and because children's social reasoning becomes more complex with age (Smetana, 2006). Participants completed a survey that assessed judgments, justifications, intent attributions, social goals, and response selection in same-race and cross-race peer interactions, and questions assessing bully and victim experiences (for the complete survey (girl version), see Appendix B). The races/ethnicities of the characters were

European-American and African-American, because of the historical imbalance of power and racially charged relationship between these two racial/ethnic groups.

As mentioned earlier, this study focused on a non-physical form of bullying: exclusion. The decision to focus on exclusion was made for three reasons. First, exclusion is a frequently used method of bullying, with 32% of children reporting that exclusion occurs sometimes or often in school, making exclusion as common a form of bullying as physical aggression (Seals & Young, 2003). Second, extensive research has shown that physical harm, a prototypical moral transgression, typically elicits moral justifications (Murray-Close, Crick, & Galotti, 2006; Smetana, 2006). Exclusion, however, is a multifaceted event that elicits multiple forms of social reasoning (Arsenio & Lemerise, 2004; Killen et al., 2006). It was anticipated that focusing on exclusion would maximize the likelihood of variety in judgments and justifications. Third, concentrating on one type of bullying made it possible to focus on systematic variations in the race/ethnicity of characters. Specifically, the scenarios represented all possible combinations of European-American and African-American characters (i.e., European-American as bully and European-American as victim, European-American as bully and African-American as victim, African-American as bully and European-American as victim, African-American as bully and African-American as victim). By holding type of bullying constant, direct comparisons could be made between racial/ethnic combinations of characters, to determine if social reasoning and/or social information processing differed depending on the race/ethnicity of victim and/or bully.

Based on the goals of the study and previous theoretical and empirical research, three related sets of hypotheses were developed. The first set examined the relations between aspects of social cognition (judgments, justifications, intent attribution, social goals, and response selection) and bullying/victimization experience. It was hypothesized that, while children overall would consider the bully's actions as wrong, children who bullied others more often would be more approving of the bully's actions. While differences in proportion of use of moral justifications were not expected (Astor, 1994), it was predicted that children with more bullying experience would be more likely to use moral justifications that blamed the victim, while children with less bullying experience would be more likely to use moral justifications that sympathized with the victim. Concerning the relation between aspects of social information processing and bullying/victimization experience, it was expected that, as with previous research, children who reported more experience with either bullying or victimization would be more likely to attribute hostile intent in ambiguous situations. In addition, more experience with bullying others was hypothesized to be positively related to selection of relational and protective goals for bullies, aggressive goals for victims, and aggressive responses, while more experience with being bullied was expected to be positively related to selection of protective goals for victims and avoidance responses. On the other hand, children with less experience with either bullying others or being bullied were expected to be more likely to select relational goals and assertive responses (Camodeca et al., 2003). Since previous studies have found that boys bully more often than girls (Boulton & Underwood, 1992; Camodeca et al., 2002; Olweus, 1993;

Whitney & Smith, 1993), it was expected that boys would report more experience overall with bullying than would girls.

The second set of hypotheses concerned how children's judgments, intent attributions, goals, and responses would differ depending on the racial/ethnic composition of the characters involved in the peer interactions. In particular, participants' judgments and intent attributions were expected to evidence an ingroup positive bias/outgroup negative bias, with participants rating ingroup (i.e., European-American) characters more favorably than outgroup (African-American) characters (Lawrence, 1991; Margie et al., 2005; McGlothlin & Killen, 2006; McGlothlin et al., 2005; Sagar & Schofield, 1980). In addition, it was hypothesized that participants would be more likely to attribute aggressive goals and responses to outgroup characters than to ingroup characters. Age differences were also hypothesized, with older participants expected to be more likely than younger participants to evidence a negative outgroup bias in their judgments, intent attributions, and selection of goals and responses.

Finally, the third set of hypotheses concerned the relation between social reasoning, social information processing, and personal experiences with bullying/victimization. Based on both theoretical models and extant research, it was hypothesized that one or more aspects of social information processing (i.e., intent attribution, social goals of bully, social goals of victim, response selection) would mediate the relation between social reasoning judgments and justifications and experience with bullying (Arsenio & Lemerise, 2004; Bellmore et al., 2005; Zelli et al., 1999).

Chapter 2: Background Literature

In this chapter, three areas of literature relevant to the design of this study will be examined. First, the existing literature on bullying, including definitions, prevalence, mental health consequences, and characteristics of bullies, their peers, and their families will be reviewed. This section provides the backdrop for the study, by showing what is already known about bullying, and evidencing the lack of research on bullying, social cognition, and race/ethnicity. Second, the theory and empirical research relevant to social reasoning and bullies' thought processes in social situations will be examined. Specifically, this section will describe social information processing, social cognitive domain theory, and a means of bringing these two models together to more completely explain social cognition. In addition, literature using these models to examine bullying or bullying-like behavior will be presented. Third, studies that have examined bullying, social reasoning, and social information processing in the context of race/ethnicity will be reviewed. Specifically, this section shows that work in this area is at an early stage, with most studies of bullying and race/ethnicity focusing on prevalence rates, studies of social reasoning focusing on exclusion based on race/ethnicity (but not in relation to bullying), and studies of social information processing rarely examining the context of race/ethnicity. Lastly, an overview of the purpose and design of this study and hypotheses will be presented.

Bullying

Definition

While there are multiple definitions of bullying in the literature, most of these definitions concur that peer victimization involves physically and/or verbally aggressive interactions between at least two individuals. This behavior is generally referred to as "bullying" when the bully/victimizer is the focus of research, whereas it is referred to as "peer victimization" or "peer harassment" when the experience is being examined from the victim's point-of-view (Hawker & Boulton, 2000; Juvonen, Graham, & Schuster, 2003; Smith, 2004). Bullying experiences are often distinguished from other aggressive peer interactions by their repeated occurrence between two people whose relationship is characterized by an imbalance of power (Espelage & Swearer, 2003; Graham & Juvonen, 2002; Olweus, 1994b).

Prevalence

Estimates of peer victimization suggest that 10% to 27% of children and young adolescents are repeatedly victimized by peers at school (Boivin, Hymel, & Hodges, 2001; Whitney & Smith, 1993), with some research finding that as many as 77% of adolescents report having been victimized at some point in their school career (Hoover et al., 1992). Bullies comprise approximately 7-15% of the sampled school-age population (Pellegrini, 1998). In a study in which 24% of students reported being directly involved in bullying/victimization experiences one or more times a week (10% as bullies and 13% as victims), students' perceptions of a bullying atmosphere were even higher with as many as 45% of students reporting that bullying occurred often in their school (Seals & Young, 2003). Boys are reported to be bullies more

often than girls (Boulton & Underwood, 1992; Camodeca et al., 2002; Olweus, 1993; Whitney & Smith, 1993).

A common reason children give for why they and others are bullied is because they seem "different", either in behavior or appearance (SCRE Centre, 1993; Terasahjo & Salmivalli, 2003). One visible way that children can differ is by race/ethnicity. There is evidence that children's likelihood of being victimized varies by race/ethnicity (Hanish & Guerra, 2000; Mouttapa et al., 2004; Wolke et al., 2001). While some studies have not found that children who are members of a racial/ethnic minority group are more likely to be victims of bullying (Boulton, 1995; Seals & Young, 2003; Siann et al., 1994), victims from racial/ethnic minority groups are more likely than victims from racial/ethnic majority groups to experience racial/ethnic harassment from bullies (Boulton, 1995; Hanish & Guerra, 2000). Research also suggests that discrimination, which is defined in the literature as negative behavior towards outgroups (Romero & Roberts, 1998) and therefore would include racial/ethnic harassment, is a common experience for children and adolescents, especially those from minority groups (Biafora et al., 1993).

Mental Health Consequences

The immediate and long-term negative effects of bullying on the mental health and well-being of both victims and victimizers can be serious (for reviews, see Coie & Dodge, 1998; Hawker & Boulton, 2000; Juvonen & Graham, 2001; Rigby, 2001; Rubin et al., 2006). Victims can exhibit a number of internalizing and adjustment problems, including suicide ideation, anxiety, loneliness, and poor academic performance, in addition to suffering from high levels of depression and

poor self-esteem both at the time of the victimization and years later (Boulton & Underwood, 1992; Bukowski & Sippola, 2001; Hawker & Boulton, 2000; Olweus, 1994b; Rigby, 2001). Further, peer victimization with a racial/ethnic component could have even more deleterious effects, since the experience of racial/ethnic prejudice and discrimination directly contributes to children and adolescents' emotional problems, high rates of depression, low self-esteem, and stress (DuBois & Hirsch, 1990; Simons et al., 2002; Szalacha et al., 2003; Taylor & Turner, 2002). Bullies are also at high-risk of experiencing mental health and adjustment difficulties, such as conduct problems, depression, and peer rejection, and are more likely than non-aggressive children to engage later on in delinquency, antisocial behavior, criminality, and drug and alcohol abuse (Coie, Dodge, & Kupersmidt, 1990; Coie, Terry, Lenox, Lochman, & Hyman, 1995; Deater-Deckard, 2001; Huesmann, Eron, & Dubow, 2002; Kjelsberg, 2002; Lahey, Loeber, & Quay, 1998; Olweus, 1994b; Seals & Young, 2003).

Personal, Peer, and Family Correlates

In addition to these mental health and adjustment problems, research on bullying has revealed personal, peer, and familial characteristics that distinguish victims and bullies from each other and from children not involved in victimization/bullying. For instance, victims tend to report low levels of self-esteem, be physically weak, and have poor social skills. They also are likely to be rejected by their peers, have friendships low in quality, generally not have many friends, and to have families that are over-protective. Bullies, on the other hand, are sometimes found to have high levels of self-esteem, tend to positively value aggression, have

friends who are also bullies, and come from families that are less affectionate, more violent, and permissive (Espelage & Swearer, 2003; Griffin & Gross, 2004; Smith, 2004).

Knowing these correlates of bullying helps to identify risk factors that can be addressed with interventions. However, it is also important to examine how children who bully think and are influenced by contextual factors to engage in hurtful behavior. Such information will help to determine if there are more direct influences on bullies' behavior that can be addressed in order to more effectively and efficiently change that behavior.

Social Reasoning

Social reasoning is likely an important influence on bullies' behavior, as suggested by social developmental theory (Killen & Nucci, 1995; Smetana, 2006; Turiel, 1983, 2006). Specifically, bullying is defined as intentional, aggressive, and hurtful behavior. In other words, a bully intends to harm his/her victim and uses aggressive means to do so (Wolke et al., 2001). These intentionally harmful interactions can be aggressive in a variety of ways, including physically, verbally, indirectly (using a third party to harm), or relationally (hurting another by damaging their relationships; Crick et al., 1999; Espelage & Swearer, 2003; Wolke et al., 2001). According to social cognitive domain theory (Killen & Nucci, 1995; Smetana, 2006; Turiel, 1983, 2006; Turiel, Killen, & Helwig, 1987), issues that involve intentional harm to others fall, by definition, in the moral domain and are influenced by moral reasoning, one aspect of social reasoning.

Despite these theoretical connections between bullying and morality, there is a lack of moral development research on aggressive behavior and its social reasoning correlates (Arsenio & Lemerise, 2004; Tisak, Tisak, & Goldstein, 2006; for an exception see Murray-Close, Crick & Galotti, 2006). Moral development research has focused on the social reasoning of children in general (Killen, 1991; Tisak, 1995; Tisak et al., 2006; Turiel, 2006), not on specific subgroups such as bullies or other aggressive children (for exceptions, see Astor, 1994; Nucci & Herman, 1982; Smetana, Daddis et al., 1999; Smetana et al., 1984; Smetana, Toth et al., 1999; Tisak & Jankowski, 1996). As noted above, research on bullying specifically has not focused on social cognition (for exceptions, see Camodeca & Goossens, 2005; Camodeca et al., 2003; Slee, 1993). Research on aggression more generally has examined the role of social cognition, but has focused on the social information processing steps that children go through during a social interaction and not on social reasoning (Arsenio & Lemerise, 2004; Crick & Dodge, 1994). Recently, a means of bringing these two literatures together to examine the relation between social reasoning, social information processing, and aggressive behavior has been suggested.

Specifically, Arsenio and Lemerise (2004) have proposed that fruitful lines of work could emerge from an integration of the study of children's social reasoning from the perspective of social cognitive domain theory and the study of children's online processing during social interactions as described by Crick and Dodge's (1994) social information processing (SIP) model. They suggest that the relation between social reasoning and children's aggressive behavior can be examined by

considering social reasoning as a latent mental structure that interacts with the social information processing steps laid out in Crick and Dodge's social information processing model.

Crick & Dodge's (1994) Social Information Processing (SIP) Model

Most of the studies that examine the social cognitive processes of bullies have drawn heavily on the findings from aggression research based on the SIP model initially proposed by Dodge (1986) and reformulated by Crick and Dodge (1994). This influential model of social information processing (Gifford-Smith & Rabiner, 2004) was designed specifically to examine the cognition of aggressive children in social situations. Originally, Dodge (1986) surmised that understanding the differences in the thought processes of aggressive versus non-aggressive children would provide insight into aggressive children's behavior and, ultimately, lead to the development of more effective interventions designed to change aggressive, maladjusted behavior (Crick & Dodge, 1994).

The Crick and Dodge (1994) model was developed to explain children's social adjustment by describing what children are thinking between the moment they receive information from a social situation (a social cue) to the moment they act on that information. The revised version of the model proposes that social information processing occurs in six steps: (1) encoding of cues, (2) interpretation of cues, (3) clarification of goals, (4) response access or construction, (5) response decision, and (6) behavioral enactment. The sixth step (behavioral enactment) leads to peer evaluation and response, which feeds back into the first step (encoding of cues). Each step can influence and be influenced by the child's "database" of social knowledge,

which is comprised of latent mental structures that include a child's memories of and schemata based on past social experiences. The steps are conceptualized to occur in a cyclical fashion. Research has found that aggressive children in general are more likely than non-aggressive children to attribute hostile intent to potential transgressors, have instrumental (rather than relational) goals, and prefer aggressive over nonaggressive responses (for reviews, see Crick & Dodge, 1994; Dodge & Schwartz, 1997; Lemerise & Arsenio, 2000).

Social Information Processing of Bullies

While the majority of social information processing research has focused on aggression more generally, a few studies have examined the social information processing of bullies specifically. This research has found that, overall, bullies process social information differently than victims and children not involved in bullying situations. Taken together, these studies have examined all steps of the Crick and Dodge (1994) model except for Step 6 (Behavioral Enactment), and have found that, except for Step 1 (Encoding of Cues), a child's status as bully, victim, or not involved is related to differences in social information processing.

For instance, Slee (1993) studied the social cognition of bullies, victims, and "normals" (neither bullies nor victims) in 10- to 12-year-old Australian children. Participants were asked to imagine that they were being picked on, both physically and verbally, by another child who was a bully and not liked by his peers. Although Slee (1993) did not explicitly employ the Crick and Dodge model of social information processing in the design of his study, he did examine aspects of social cognition that fit into the model. Specifically, causal attributions (Step 2), response

generation (Step 4), response evaluation and selection (Step 5), and outcome expectations (Step 5) were assessed. Results showed that bullies attributed the behavior of the imaginary bully to factors external to the bully (such as peer pressure), normals attributed the behavior to internal characteristics of the bully (such as personality), and victims attributed it to both internal and external factors. There were no statistically significant differences between the number of possible solutions each group generated, and all three groups chose non-aggressive solutions as their first choice for how to resolve the conflict. However, similar to studies with aggressive children (Crick & Dodge, 1994; Dodge & Schwartz, 1997; Lemerise & Arsenio, 2000), bullies' second-choice solutions were more likely to be aggressive than were victims' or normals' second-choice solutions. Finally, Slee (1993) found that bullies were more likely to fear getting in trouble for responding with aggression, whereas victims were more likely to fear retaliation for responding with aggression.

A more recent study explicitly examined aspects of Steps 2, 4, and 5 of Crick and Dodge's SIP model. As part of a larger longitudinal study, Camodeca, Goossens, Schuengel, and Terwogt (2003) used a peer nomination measure to categorize Dutch 3rd and 4th graders (ages 7.6 to 8.8 years) into four groups: bullies, victims, bully/victims (those who both bully and are bullied), and "not involved". Participants' attributions of intent (Step 2), response generation (Step 4), response selection (Step 5), and response evaluation (Step 5) were assessed. Camodeca et al. (2003) found that, in response to provocation, "not involved" children were more likely than bullies or victims (but not bully/victims) to provide assertive solutions (i.e., "I'd ask for an explanation"). Overall, though, "ask for help" was considered

the best way to deal with the provocation and was the most popular answer. In terms of response generation, participants' first response to the situation was more likely to be aggressive than subsequent responses. In other words, the children who initially suggested an aggressive response were also able to produce non-aggressive solutions when asked to generate multiple responses. Bully/victims were more likely than those "not involved" to attribute blame to and be angry at the potential perpetrator in ambiguous situations (Step 2), and to indicate that they would retaliate against the perceived perpetrator (Step 5).

Finally, Camodeca and Goossens (2005) examined Steps 1, 2, 3, and 5 of the Crick and Dodge model with a sample of Dutch 5th and 6th graders (mean age approximately 9.75 years). Participants were divided into six categories, based on peer report: bully, follower of the bully, victim, defender of the victim, outsider, and not involved. Using ambiguous stories, participants' ability to recall the story (Step 1), intent attribution (Step 2), goals (Step 3), and expression of emotion were assessed. Feelings of self-efficacy in enacting aggressive, inhibiting aggressive, and enacting assertive responses (Step 5) and what outcome children expected from their behavior (Step 5) were assessed using self-report questionnaires. Results showed that both bullies and victims attributed more hostile intentions to potential transgressors (Step 2), were more likely to value retaliation (Step 3), and were more likely to report feeling self-efficacious about behaving aggressively (Step 5) than were other children. Bullies, however, were more confident than victims in their use of verbal persuasion (Step 5). According to this study, then, bullies exhibit social information processing deficits both at the beginning and the end of the SIP process.

In sum, these studies indicate that bullies are more likely than other children to (1) attribute the cause of another's action to external factors, (2) interpret another's intention as hostile, (3) value retaliation in response to a perceived wrong, (4) choose aggressive solutions, (5) not use aggressive behavior because of fear of possible punishment, (6) feel self-efficacious about their ability to act aggressively, and (7) be confident in their ability to use verbal persuasion to get what they want.

While these studies provide a basis of information on the social information processing of bullies, they have limitations and gaps that need to be addressed. First, the studies generally use measures that assess children's social information processing in response to a bullying situation or other kind of provocation. In other words, they are gathering information about what children would do if they were victims. More needs to be known about what children would do if they were the bullies. For instance, what do children think bullies' reasons are for perpetrating the bullying behavior? Second, there is an aspect of the Crick and Dodge social information processing model that these studies of bullying have not taken into account. Specifically, the latent mental structures that influence the online processing of social information remain to be studied (Arsenio & Lemerise, 2004; Crick & Dodge, 1994). Differences in this database of social knowledge may explain why bullies, victims, and those not involved exhibit different patterns of social information processing. One aspect of this database that is proposed to have such an influence is social reasoning as defined by social cognitive domain theory (Arsenio & Lemerise, 2004).

Social Cognitive Domain Theory and Social Reasoning

Both social cognitive domain theory and social information processing are based on the premise that people develop social knowledge from social experiences. Social cognitive domain theory proposes specifically that different types of experiences lead to the development of domains of social knowledge and that people reason and make decisions about social situations depending on which domain(s) they perceive the situation to fit (Turiel, 1983, 2006). Originally, domain theory proposed three domains of social knowledge: moral, social-conventional, and psychological (Turiel, 1983, 2006). Definitions of the moral and social-conventional domains were drawn from moral philosophy, both ancient (i.e., Aristotle's Nicomachean Ethics) and modern (i.e., Dworkin, 1978; Gewirth, 1978; Rawls, 1971). The definition of the psychological domain was influenced by Erikson's theory of autonomy (Nucci & Turiel, 1978). Decades of empirical research support these definitions (for reviews, see Killen & de Waal, 2000; Killen et al., 2006; Killen & Nucci, 1995; Smetana, 2006; Tisak, 1995; Turiel, 2006).

The moral domain is based on "prescriptive judgments about how individuals ought to behave towards one another" (Tisak, 1995, p. 96). It includes situations that are related to justice and the welfare and rights of others (Turiel, 1983). Criteria used to define the moral domain include social interactions that are obligatory, universally applicable (i.e., considered to be right or wrong regardless of what society it occurs in), impersonal (i.e., not dependent on personal preferences), and not based on general consensus (Turiel, 1983).

On the other hand, social conventions are defined as "behavioral uniformities which coordinate interactions of individuals within social systems" (Turiel, 1983, p. 34). Issues and events categorized in the social conventional domain are generally agreed upon by members of a society, can differ from one society to another, and can change within a society based on the general agreement of its members. Judgments and concepts within the social conventional domain refer to regularities, norms, and customs that enable groups to function.

One aspect of social conventional reasoning that is relevant to work examining group membership is stereotyping. Recently, Killen and her colleagues have examined the ways in which social conventional reasoning encompasses stereotypic expectations as well conventions and customs (for reviews, see Killen et al., 2002, 2006). For instance, research with children regarding their evaluations of social situations involving racial/ethnic group membership has differentiated reasoning using customs and conventions ("he wasn't picked for the track team because he's a slow runner and that wouldn't be best for the team") from reasoning using stereotypic expectations ("they didn't let him into the music club because African-American and European-American people don't like the same music") even though both types of judgments are about group processes (Killen et al., 2002).

The psychological domain includes individuals' conceptions of psychological systems, such as personality, the self, and identity (Tisak, 1995). Research on the psychological domain has focused almost exclusively on reasoning concerning personal issues, i.e., social actions that to not involve harm to others or regulation by society. Such issues include choice of friends, choice of clothes, and decision to join

a club (Tisak, 1995). Studies of peer conflict focus on the moral and social-conventional domains because transgressions constitute codifiable rule violations.

As mentioned earlier, most research from a social cognitive domain perspective has examined social reasoning in normative populations of children and adolescents (Tisak et al., 2006). In social cognitive domain theory studies of non-normative populations, neglected and maltreated children (Smetana, Daddis et al., 1999; Smetana et al., 1984; Smetana, Toth et al., 1999), children with behavioral disorders (Arsenio & Fleiss, 1996; Nucci & Herman, 1982), juvenile delinquents (Tisak & Jankowski, 1996), and violently aggressive children (Astor, 1994) have been examined. While juvenile delinquents and behaviorally disordered children can be aggressive and be bullies, aggression and/or bullying is only one aspect of their antisocial behavior. For example, delinquents in Tisak and Jankowski's (1996) study had been convicted of non-aggressive (i.e., drug possession) as well as aggressive crimes, while behaviorally disordered children in Nucci and Herman's (1982) study exhibited behaviors ranging from clowning to depression to fighting. Bullies and bullying behavior specifically, however, have not been previously studied.

Because of its specific focus on aggressive behavior, the extant research on the social reasoning of violently aggressive children provides a basis for the development of studies examining bullying. In his study of violently aggressive children, Astor (1994) compared the social reasoning of physically violent (i.e., hit students and teachers, involved in knife fights) and non-aggressive second, fourth, and sixth graders. Each participant provided judgments and justifications concerning scenarios portraying unprovoked and verbally provoked physical violence between

siblings, parents and children, parents and parents, and peers. Results showed that, overall, violent and non-violent children considered unprovoked physical aggression wrong, and usually for moral reasons related to the harm inflicted on the victim. However, in reaction to the provoked situations, physically violent children were more likely to justify physical retaliation "as a form of reciprocal justice" whereas non-physically aggressive children considered the physical harm of hitting worse than the psychological harm caused by the provocation (Astor, 1994, p. 1054).

This research shows that aggressive children and non-aggressive children reason differently about social situations involving aggression. What remains to be known is how the social reasoning of bullies in particular may differ from other children. Also, Astor's study focused on physical aggression, both in the participants and in the scenarios. Bullying can entail a variety of forms of aggression, such as exclusion and verbal, in addition to physical. Non-physical forms of aggression also need to be examined. In addition, it could be that Astor found no differences in unprovoked aggression because the violent participants were all reactively aggressive. An examination of bullies, who can be reactively and proactively aggressive, may turn up different results.

Integrating SIP and Social Cognitive Domain Theory to Understand Bullying

Despite some theoretical differences between the social cognitive domain theory and the social information processing model, Arsenio and Lemerise (2004) outline an important and useful way that the two can be connected. Specifically, Arsenio and Lemerise (2004) propose that the domains of social reasoning described by social cognitive domain theory comprise a latent mental structure within the social

information processing model. As mentioned earlier, according to the Crick and Dodge (1994) model, latent mental structures interact with on-line processing during social situations to bring previous experience to bear on current interactions. Studies indicate that there are important relations between latent mental structures, on-line social information processing, and behavior (Bellmore et al., 2005; Zelli et al., 1999).

Because the database is the storage place for the knowledge that develops out of a child's social experiences, a wide variety of such knowledge can be subsumed under the label "latent mental structure". For instance, latent mental structures that have been examined through empirical research include children's attachment to their parents, internal working models of others and of relationships, and normative beliefs about aggression (Dodge & Rabiner, 2004; Gifford-Smith & Rabiner, 2004; Zelli et al., 1999).

Children's relationships with parents and peers and their internal working models based on these experiences are important influences on their processing of social information (Dodge & Rabiner, 2004; Gifford-Smith & Rabiner, 2004). Empirical research has found that children who generally perceive other people as hostile are more likely to make hostile attributions of others' intentions in ambiguous situations than are children who do not generally perceive others as hostile (Gifford-Smith & Rabiner, 2004). This relationship has been found for children who are insecurely attached to their parents (Cassidy, Kirsh, Scolton, & Parke, 1996), children who view significant others as hostile (Burks, Laird, Dodge, Pettit, & Bates, 1999), and nonaggressive children who were primed to view others' intentions as hostile (Graham & Hudley, 1994).

Research on normative beliefs about aggression, a latent mental structure similar to social reasoning, has found that aggressive children are more likely to believe that aggression is generally acceptable (Erdley & Asher, 1998; Huesmann & Guerra, 1997; Zelli et al., 1999). In addition, social information processing appears to play a role in the relation between normative beliefs about aggression and aggressive behavior. Zelli and colleagues (1999) found that 3rd graders who believed more strongly in the acceptability of retaliatory aggression were more likely than those who did not approve of retaliatory aggression to attribute hostile intent, access aggressive responses, and evaluate aggressive solutions positively in 4th grade. In turn, greater accessing of aggressive responses in 4th grade predicted more aggressive behavior in 5th grade. Zelli et al. (1999) also found that normative beliefs about retaliatory aggression predicted aggressive behavior, but this relation was mediated by children's hostile intent attribution (Step 2), aggressive response access (Step 4), and aggressive response evaluation (Step 5). Similarly, Bellmore and colleagues (2005) found that 6th graders' normative beliefs about retaliatory aggression were related to their aggressive reputations among peers and teachers, and that this relation was mediated by their hostile response selection (Step 5).

These studies show that there is a relation between latent mental structures, social information processing, and children's aggressive behavior. It is unclear, however, exactly how bullying behavior, as opposed to other forms of aggressive behavior, is related to latent mental structures and social information processing. Bellmore and colleagues only assessed reactive aggression. Therefore, their findings are not necessarily generalizable to bullies, who also act in proactively aggressive

ways (Arsenio & Lemerise, 2004). Proactive aggression is defined as unprovoked, unemotional aggression used to obtain a goal, while retaliatory or reactive aggression is defined as an emotional response to a perceived provocation (Dodge & Coie, 1987; Dodge & Schwartz, 1997). And, even though Zelli et al. (1999) used measures that assessed behavior that could be considered physically aggressive bullying, these measures did not capture the other ways that bullies can be aggressive, such as with exclusion.

In addition, while normative beliefs about aggression are similar to social reasoning, there are critical differences between these concepts that make it important to also examine social reasoning's relation to social information processing and behavior. Specifically, normative beliefs about aggression assess whether or not children think it is all right or not all right to act aggressively in different situations (i.e., is it okay to scream at someone because they said something bad to you?). Social reasoning goes beyond judgments (i.e., the question of "is it all right or not all right") by also exploring justifications (i.e., *why* something is acceptable or not). This "why" component is important because how children categorize behaviors can influence how amenable to change these behaviors are. For instance, a child who says that it is not all right to hit someone else only because there is a rule against it considers hitting to be a social conventional act. In other words, hitting is wrong because a particular society says it is wrong, but it would be okay in a different society where that same rule did not exist. A child who says that hitting is wrong because it hurts someone else considers it to be a moral act. In other words, it would not be all right to hit someone else in any society because it causes the victim harm.

Research has found that children are much less likely to change their judgments (i.e., say something is "not all right" after having said it was "all right") when they initially gave moral justifications, and much more likely to change their judgments when they initially gave social-conventional justifications (Killen et al., 2001). Interventions can benefit from knowing how social reasoning, social information processing, and bullies' behavior are related, since understanding how children reason about bullying situations will likely indicate how amenable to change their judgments, and perhaps behaviors, are.

In sum, the latent mental structure of social reasoning and its relation to aggressive social information processing and behavior is theoretically important, but has not yet been examined empirically. If social reasoning is related to social information processing and behavior, it is likely that this will be especially visible in bullies and in children's evaluations of bullying situations, since bullying has the strong moral component of "intention to harm." Understanding these basic connections will help explain how social reasoning affects social decision-making during a bullying situation, and will eventually help explain how social reasoning is related to bullying behavior. Investigating the relationship between reasoning and behavior allows mental health practitioners to see the root causes of problematic social behavior such as bullying, and devise more effective treatments and interventions. In essence, better understanding bullies' social reasoning and other thought processes may provide a means to more directly and effectively change their behavior (Crick & Dodge, 1994; Dodge, 1986)

The Context of Race/Ethnicity

Children's cognitive processes and peer interactions operate within a complex world. As such, it is important to take into account the context within which bullying occurs. An example of one important context that has been examined is friendship (Rubin et al., 2006). Another critical context that has not received as much attention is intergroup relations (Killen et al., 2002, 2006; McGlothlin et al., 2005). This includes how children view their ingroup (i.e., same race/ethnicity) and outgroup (i.e., other races/ethnicities), especially in terms of the race/ethnicity of the children involved in peer interactions.

Race/ethnicity may be a particularly important contextual factor to examine in relation to bullying, because bullying is defined as an aggressive relationship based on an imbalance of power. Historical and societal racial/ethnic inequalities and tension may contribute to peer victimization by helping to tip the balance of power in children's peer interactions (Graham & Juvonen, 2002). In fact, research on the prevalence of peer victimization has found that children's victimization experiences can differ based on their race/ethnicity (Hanish & Guerra, 2000).

In addition, intergroup relationships are important to understand because of the prejudice and discrimination that can result from ingroup bias and outgroup negativity (Dovidio & Gaertner, 1998). It is especially important to examine intergroup relations in the context of peer victimization, since prejudice and discrimination often can be acts of aggression (i.e., intentional verbal or physical harm). Further, studies report that experiencing prejudice or discrimination directly contributes to children and adolescents' emotional problems, high rates of depression,

low self-esteem, and stress (DuBois & Hirsch, 1990; Simons et al., 2002; Szalacha et al., 2003; Taylor & Turner, 2002). Research also suggests that discrimination is a common experience for children and adolescents, especially those from minority groups (Biafora et al., 1993). However, little is known about the role that intergroup relations play in children's bullying interactions, and specifically in their moral evaluations and social information processing of these interactions.

Race/ethnicity and Bullying

Prevalence by race/ethnicity. Research on race/ethnicity and bullying has tended to focus on the prevalence of bullying and victimization experiences by racial/ethnic group. Findings from these studies are mixed. Three studies have found that children's victimization experiences do differ depending on the race/ethnicity of the child. One of these studies also found that victimization rates also depend on the racial/ethnic composition of schools. First, in a longitudinal sample of Midwestern first through sixth graders, Hanish and Guerra (2000) found that, overall, African-American and European-American children were more likely than Hispanic children to have been victimized by peers. African-American children, however, were less likely than European-American and Hispanic children to be repeatedly bullied over time. In addition, European-American children who attended ethnically heterogeneous schools were more likely than European-American children who attended homogeneous schools to be victims, while attending an ethnically heterogeneous school decreased African-American children's likelihood of experiencing peer victimization. The racial/ethnic composition of the school had no effect on Hispanic students' experiences of victimization (Hanish & Guerra, 2000).

Second, Mouttapa et al. (2004) found that amongst Latino and Asian 6th graders in California, Asian students were more likely than Latinos to be victims. However, this study did not find differences in victimization rates based on the racial/ethnic composition of the schools. Specifically, Asian students were more likely than Latinos to be victims of bullying regardless of whether or not Asians were the racial/ethnic majority or minority in a school. Finally, Wolke and colleagues (2001) found that 6- to 8-year-old, racial/ethnic minority children in England and Germany were more likely than racial/ethnic majority children in those countries to be victims of bullying but not more likely to be bullies.

Other studies have found no differences in prevalence rates. For instance, Seals and Young (2003) found that 7th and 8th grade (12- to 17-year-old) African-American and European-American students in the United States were equally likely to be involved in bullying. Some of these studies, though, have found that children's experiences and perceptions of bullying can differ by race/ethnicity. Specifically, in a sample of 8- to 10-year-old Asian and White children in England, Boulton (1995) found that neither group was more likely to be nominated by peers as bullies or victims, and both groups were more likely to bully same-race children than other-race children. Asian children, however, were more likely than White children to be teased about their race/ethnicity. Similarly, Siann et al. (1994) found only small differences in reports of victimization experiences between racial/ethnic minority and majority children in English and Scottish elementary schools. Yet, racial/ethnic minority children were more likely than racial/ethnic majority children to believe that racial/ethnic minority children were bullied more than racial/ethnic majority children.

Racial/ethnic differences in attitudes. One study went beyond prevalence to look at how racial/ethnic factors may influence and be related to bullying. Specifically, Nguy and Hunt (2004) examined ethnic identification, bullying/victimization experiences, and attitudes towards bullying/victimization in a racially/ethnically diverse sample of Australian 7th through 10th grade boys and girls. No differences in the frequency of bullying others, the frequency of being bullied, the reasons for bullying, or attitudes towards victims were found between racial/ethnic majority (Anglo-Saxon) and racial/ethnic minority (non-Anglo-Saxon) participants. In addition, ethnic identity was not significantly related to bullying behavior by individuals or to bullying attitudes. However, racial/ethnic differences in attitudes towards bullying were found, with racial/ethnic majority males believing most strongly that bullying would result in positive outcomes (i.e., bullying makes you feel good about yourself; bullying prevents you from being bullied). Racial/ethnic minority students placed more importance than racial/ethnic majority students on the selected outcomes (i.e., feeling good about yourself; not getting bullied), but they did not believe that bullying would achieve these outcomes.

While Nguy and Hunt's (2004) study takes a more in-depth look at the complex ways race/ethnicity may be related to bullying, more studies are needed to clarify exactly how race/ethnicity may (or may not) influence bullying behavior. One area that warrants further examination is how race/ethnicity might be related, in bullying situations, to children's social cognition, specifically social reasoning and social information processing.

Race/ethnicity and Social Reasoning

The study of racial/ethnic issues from a moral developmental viewpoint has not received much attention until recently (Killen et al., 2006). Overall, research has examined either judgments or judgments and justifications concerning social situations involving European-American and African-American characters. As mentioned earlier, judgments are a rating of how good or bad an action is, while justifications go beyond the basic judgment of goodness/badness to the reasons why someone judges an action to be good or bad.

Judgments. Studies examining the relation of race/ethnicity to judgments (but not justifications) in social situations involving people of different races/ethnicities have found that children's judgments of how good or bad a potential perpetrator is depends on the race/ethnicity of the potential perpetrator. For instance, Lawrence (1991) examined 6- to 9-year-old children's judgments concerning ambiguous peer interactions involving same-race pairs of children (i.e., two European-American children, two African-American children). Results showed that European-American children judged the actions of African-American characters more negatively than the actions of European-American characters, while African-American children showed no bias in their moral judgments (Lawrence, 1991). Sagar and Schofield (1980) also found that European-American children evidenced a negative bias towards African-American characters. Specifically, in a sample of sixth-grade boys, European-American participants judged the African-American characters in same-race and cross-race interactions more negatively than the European-American characters. Contrary to the findings from the other study, however, African-American children

evidenced bias as well. In particular, they judged African-American characters more negatively than the European-American characters (Sagar & Schofield, 1980).

More recent studies have found that children's judgments may differ based on their race/ethnicity, the race/ethnicity of the characters in the measures, and the racial/ethnic diversity of their school environment. Recruiting participants from the same heterogeneous schools, Margie et al. (2005) found that racial/ethnic minority children (African-American, Asian-American, and Latino) considered European-American perpetrators worse than African-American perpetrators for committing the same action, while McGlothlin et al. (2005) found that European-American children did not judge European-American and African-American characters differently for the same actions. On the other hand, research using the same measures with European-American children in homogeneous schools found that African-American characters were judged more negatively than European-American characters for the same actions (McGlothlin & Killen, 2006).

While this research indicates that children's judgments concerning peer interactions can differ based on the racial/ethnic context in which they are made, it is still unknown how aggressive behaviors and bullying in particular may be influenced by the race/ethnicity of those involved.

Judgments and justifications. Research on social reasoning and race/ethnicity has focused on children's and adolescents' reasoning about situations involving exclusion based on race/ethnicity (Killen et al., 2002, 2006). Specifically, Killen and colleagues (2002) asked European-American, African-American, Asian-American, and Latino 4th, 7th, and 10th graders whether or not it would be wrong to exclude an

African-American from friendship, from a club, or from school, just because of his/her race/ethnicity. The majority of participants in the study judged it wrong to exclude someone based solely on race/ethnicity, giving mostly moral reasons (i.e., it would be unfair). However, Killen et al. (2002) also found that participants' justifications of these situations varied. While children and adolescents generally considered exclusion based solely on race/ethnicity to be wrong, in some more complex situations they might decide that the functioning of the group is more important than including someone of a different race/ethnicity. Issues of group functioning are multifaceted, therefore, children and adolescents weigh a number of considerations when determining when to include or exclude someone. In addition, Killen et al. (2002) found that children and adolescents were more likely to say that excluding someone from friendship involved personal choice even if the only reason the person was being excluded was because of race/ethnicity. Generally, though, when it comes to issues of exclusion based solely on race/ethnicity, children and adolescents deem it wrong for moral reasons to exclude someone (Killen et al., 2002; Phinney & Cobb, 1996).

These studies indicate that children reason about issues involving race/ethnicity in complex ways. However, this research has only examined how children reason about situations involving the exclusion of someone based on their race/ethnicity. Their findings may be applicable to bullying, since exclusion is one way that children can be victimized. However, direct examination of exclusion that is perpetrated in a bullying situation as well as exclusion that is not explicitly based on race/ethnicity also need to be examined in the context of children's race/ethnicity, as

does their relation to social information processing within these situations, in order to more fully understand the variety of influences on bullying behavior. More complete understanding of these influences will assist in designing more effective interventions.

Race/ethnicity and Social Information Processing

Studies employing the Crick and Dodge (1994) Social Information Processing model have generally not taken the context of race/ethnicity into account. Two exceptions are the studies described earlier that examined the relation between normative beliefs about aggression, social information processing, and aggressive behavior. Zelli et al. (1999) and Bellmore et al. (2005) did not find racial/ethnic differences in the relations between normative beliefs, SIP, and behavior when comparing European-Americans and African-Americans (Zelli et al., 1999) and European-Americans, African-Americans, Latinos, and Asian-Americans (Bellmore et al., 2005). Bellmore and colleagues (2005), though, did find that African-American participants were more likely than the other racial/ethnic groups to approve of retaliatory aggression, and European-Americans and African-Americans had more aggressive reputations than Asian-Americans and Latinos. Also, African-Americans evidenced a weaker relation between normative beliefs about aggression and hostile response selection than did European-Americans, Asian-Americans, and Latinos. Neither of these studies, though, incorporated race/ethnicity into the measures to examine how participants' evaluations of aggressive situations may differ based on the race/ethnicity of those involved. Nor did they examine how justifications, in

addition to judgments, are related to social information processing and aggressive behavior.

However, children's interpretations of intent (Step 2 of the SIP model) in cross-race ambiguous peer conflict situations have been examined. Research has found that children's intent attributions differ depending on the race/ethnicity of the characters in the situations, the race/ethnicity of the participant, and the heterogeneity of the schools participants attend (Margie et al., 2005; McGlothlin & Killen, 2006; McGlothlin et al., 2005). Specifically, European-American 1st and 4th graders attending racially/ethnically homogeneous schools interpreted African-American potential perpetrators as committing a transgression more often than European-American potential perpetrators (McGlothlin & Killen, 2006). European-American, African-American, Asian-American, and Latino first and fourth graders attending racially/ethnically heterogeneous schools, on the other hand, did not initially interpret the actions of potential perpetrators differently based on the race/ethnicity of the potential perpetrators (Margie et al., 2005; McGlothlin et al., 2005).

These studies provide evidence that race/ethnicity plays a role in how children process information within a social situation. No research to date, however, has examined how the race/ethnicity of those involved in a social interaction, and in a bullying situation in particular, is related to children's social information processing in addition to social reasoning. In a multicultural society like the United States', understanding the role that race/ethnicity plays in children's reasoning about moral events and in social decision-making is a critical part of promoting children's mental health. A rigorous understanding of the role of race/ethnicity in bullying will serve as

a key part of the foundation of treatments and interventions that combat the mental health consequences of such aggression by being able to target interventions, if needed, to the specific needs of children based on their race/ethnicity.

Overview of Present Study

Purpose

The purpose of the current study was to examine two factors that influence social interactions and may have important implications for understanding bullying: social reasoning and the race/ethnicity of the children involved. The few studies that have examined bullying and social cognition show that bullies, victims, and those not involved process information in social situations differently. One aspect of social cognition that these studies have not examined, however, is social reasoning. Theoretically, bullying is influenced by social reasoning (Arsenio & Lemerise, 2004). However, research on social reasoning has focused primarily on studying the social cognition of normative populations without examining differences between children based on their experiences, and in particular, their experiences with bullying and victimization. The one study that examined social reasoning in aggressive children found that physically violent children reason about physical violence differently than non-violent children (Astor, 1994). While bullying involves aggression, it is a distinct type of aggressive behavior characterized by repeated aggressive acts towards a victim and an imbalance of power between victim and victimizer (Espelage & Swearer, 2003; Graham & Juvonen, 2002; Olweus, 1994b). Therefore, it is unknown if the differences found between violently aggressive and non-aggressive children exist in bullies versus non-bullies, or in situations involving non-physical forms of

aggression. Whether or not social information processing mediates this relation is also unknown (Arsenio & Lemerise, 2004).

In addition, bullying research has not examined the possible role that the context of race/ethnicity may play. Studies have focused primarily on determining racial/ethnic differences in victimization experiences. In one study, adolescents' attitudes towards bullying varied by race/ethnicity (Nguy & Hunt, 2004). However, this research has not examined how the race/ethnicity of those involved in a bullying situation may influence the interaction; and specifically, how race/ethnicity may influence the social reasoning or social information processing of the children involved. Studies have found that the race/ethnicity of those involved in peer conflict situations are related to differences in social reasoning and social information processing. But no studies have examined how these factors interact in bullying situations.

To address these gaps in the literature, the current project examined the following specific research questions: (1) How are children's varying levels of experience as bullies and victims related to their intent attributions in ambiguous situations, and to their judgments, justifications, social goals, and selection of responses during bullying situations? (2) What influence does the race/ethnicity of those involved in a bullying interaction have on children's social reasoning and online processing concerning these interactions? (3) Do aspects of social information processing mediate the relation between social reasoning about bullying and bullying experience?

Design

To examine these research questions, 265 European-American 6th and 9th graders, approximately evenly divided by gender, were surveyed. Following the social psychology paradigm for research on intergroup relations and racial/ethnic bias, participants were from the majority racial/ethnic group (i.e., European-American). To examine possible age-related changes in children's reasoning and experiences with bullying exclusion, children and adolescents in 6th and 9th grades were recruited. These age groups were chosen because (1) bullying peaks in 6th grade and declines by 9th grade (Espelage & Swearer, 2003; Nansel et al., 2001), and (2) children and adolescents at these ages are able to competently complete the same survey. Both boys and girls were included in the sample since research has found differences in bullying prevalence and experience based on gender.

All participants completed a survey that assessed children's *Attributions of Intent* in same-race and cross-race situations, *Evaluations of Exclusion Bullying* in same-race and cross-race situations, and *Bully/Victim Experience* during the current school year (see Appendix B for the complete measure.) The three sections were presented in the same order for all participants. Assessments were arranged from most ambiguous (*Attributions of Intent*), to hypothetical questions about bullying (*Evaluations of Exclusion Bullying*), to most direct questions about bullying (*Bully/Victim Experience*). This order was chosen to minimize the possibility that participants' interpretations of the ambiguous situations would be influenced by the hypothetical bullying situations, and that their interpretations of either the ambiguous

or hypothetical situations would be influenced by the direct questions about bullying and victimization.

The *Attributions of Intent* measure included four ambiguous scenarios, which involve either destruction or dirtying of a peer's property, adapted from an established and widely used measure of intent attribution (Dodge, 1980; see also Dahlberg, Toal, Swahn, & Behrens, 2005). Each scenario was represented with a short written description and a picture illustrating a potential transgression between two children (i.e., one student spills milk on another). To incorporate the context of race/ethnicity, the race/ethnicity of the characters was systematically varied, as has been done in previous studies of cross-race peer interactions (Lawrence, 1991; Margie et al., 2005; McGlothlin & Killen, 2006; McGlothlin et al., 2005; Sagar & Schofield, 1980). Specifically, for *Attributions of Intent*, all potential victims were portrayed as European-American (since the measure requests participants to imagine themselves as the victim, and all participants were European-American), while two scenarios portrayed European-American potential perpetrators and two portrayed African-American potential perpetrators. Participants were asked to choose from a list of four possible reasons (two hostile, two non-hostile) why the potential perpetrator did what they did. In addition, participants indicated if they considered the potential perpetrator's actions on purpose or accidental.

To assess children's *Evaluations of Exclusion Bullying*, participants were presented with four scenarios involving exclusion used to bully. The scenarios and follow-up questions were developed by drawing on situations and questions used in published studies on bullying, social reasoning, and social information processing

(i.e., Astor, 1994; Killen et al., 2002; Rigby & Slee, 1993; Tisak, 1995; Turiel, 1983). All scenarios were in-school peer interactions. For example, in the lunch table situation, one character tries to sit down and eat lunch with a group of kids, but is told by one of the kids sitting at the table that s/he can't sit there even though there are empty seats. To fit the definition of bullying, as opposed to aggression more generally, the scenario also mentions that this has been happening repeatedly (i.e., for the past few weeks). As with *Attributions of Intent*, each scenario was accompanied by a picture in which the race/ethnicity of the bully and the victim were systematically varied. For *Evaluations of Exclusion Bullying*, though, all possible combinations of European-American and African-American bully and victim were presented. Specifically, two of the situations were same-race (either both bully and victim were European-American or both were African-American) and two situations were cross-race (European-American bully, African-American victim; African-American bully, European-American victim). Questions following each scenario assessed children's judgments, justifications, social goals of the bully, response selection, and social goals of the victim.

Finally, the last section of the survey assessed children's *Bully/Victim Experiences*, using 21 questions about personal experiences with peers. Approximately half of these questions, which were adapted from well-established measures of bullying and victimization experience (Bendixen & Olweus, 1999; Bentley & Li, 1995; Olweus, 1993, 1994a, 1994b; Rigby & Slee, 1995b), asked participants to indicate how often they experienced physical, verbal, and exclusion bullying and victimization. An example of this kind of question is "Since the

beginning of the school year, how often have stronger or more popular kids said mean things to you, teased you, or called you names (NOT in a joking way)?". As seen in this example, these questions directly measured bullying, as opposed to aggression, since they specify that the behavior involves an imbalance of power and because they allow for measurement of frequency. To minimize the possibility that the bully/victim questions could make participants feel unhappy, 10 positive and filler questions, such as "Since the beginning of this school year, how often have you participated in school-related after-school activities?", were interspersed among the bully/victim items.

Hypotheses

Based on previous theoretical and empirical research, three related sets of hypotheses were developed. The first set examined the relations between aspects of social cognition (judgments, justifications, intent attribution, social goals, and response selection) and bullying/victimization experience. The second set concerned how children's judgments, intent attributions, goals, and responses would differ depending on the racial/ethnic composition of the characters involved in the peer interactions. And finally, the third set concerned the relation between social reasoning, social information processing, and personal experiences with bullying/victimization in intergroup contexts.

Bully/Victim Experience predicts Social Reasoning and SIP

First, hypotheses about overall gender and grade differences in bullying experience were predicted. Based on previous research, gender differences in bullying status were expected, with boys more likely to be categorized as bullies than

girls (Boulton & Underwood, 1992; Camodeca et al., 2002; Olweus, 1993; Whitney & Smith, 1993). Similarly, since bullying tends to peak in 6th grade and decline by 9th grade (Espelage & Swearer, 2003; Nansel et al., 2001), 6th graders were expected to report more experience bullying this school year than 9th graders.

Next, predictions about differences in social reasoning based on bullying and victimization experience were made. Concerning the relation between judgments and bullying, it was hypothesized that, overall, children will consider it bad to bully another child. This was based on social cognitive domain theory research that finds that children, even aggressive children, generally do not condone harm towards others (Astor, 1994; Killen & Nucci, 1995; Tisak, 1995; Turiel, 1983). However, it was also expected that children who have more experience bullying others would be less likely to rate bully's actions as wrong. Regarding justifications, it was hypothesized that participants with more experience bullying others would be more likely to use moral justifications that blame the victim, and less likely to use moral justifications that take the victim's feelings into account (Astor, 1994; Menesini et al., 2003). In addition, it was expected that more experience bullying others would positively predict use of stereotype justifications.

Third, hypotheses about the relations between bullying and victimization experience and aspects of social information processing were set. It was expected that, like aggressive children (Crick & Dodge, 1994), children with more experience bullying would be more likely to attribute hostile intent to potential perpetrators in ambiguous situations. In addition, it was predicted that more experience being bullied would also positively predict hostile intent attribution. Concerning social

goals of bully, it was hypothesized that less experience bullying others would positively predict selection of aggressive goals; more experience bullying others would positively predict selection of relational goals and selection of protective goals. For social goals of victim, it was hypothesized that children with more experience bullying others would also be more likely to select aggressive goals for victims; that children with more experience as victims would be more likely to choose protective goals; and that children with less experience bullying others or being bullied would be more likely to select relational goals (Camodeca & Goossens, 2005; Erdley & Asher, 1996). Similar patterns were predicted for response selection. Specifically, children with more bullying experience were expected to be more likely to choose aggressive responses; less experience as either a bully or a victim was hypothesized to be associated with selection of assertive responses; and more experience being bullied was expected to positively predict selection of avoidance responses (Camodeca et al., 2003; Crick & Dodge, 1994; Slee, 1993).

Social Reasoning and SIP: Grade, Gender, and Race/Ethnicity

The second set of hypotheses concerned differences in social reasoning and social information processing based on the race/ethnicity of the characters involved in the peer interactions, and the grade and gender of the participant. Specifically, participants' judgments were expected to evidence an ingroup positive bias/outgroup negative bias, with participants rating ingroup characters more favorably than outgroup characters. In other words, participants were expected to rate the actions of African-American bullies worse than those of European-American bullies (Lawrence, 1991; Margie et al., 2005; Sagar & Schofield, 1980). Concerning justifications, 9th

graders were expected to be more likely than 6th graders to use social conventional reasoning and stereotype reasoning (Horn, 2003; Killen et al., 2002).

For social information processing, it was hypothesized that participants' intent attributions would evidence an ingroup positive bias/outgroup negative bias, with participants rating ingroup characters more favorably than outgroup characters (Margie et al., 2005; McGlothlin & Killen, 2006; McGlothlin et al., 2005). Therefore, participants were expected to attribute more hostile intent to African-American characters. In addition, 9th graders were expected to be more likely than 6th graders to evidence a negative outgroup bias in their intent attributions. For both social goals of bully and social goals of victim, it was hypothesized that participants would evidence racial/ethnic bias and be more likely to attribute aggressive goals to outgroup characters than to ingroup characters. It was also expected that 9th graders would be more likely than 6th graders to evidence a negative outgroup bias in their selection of aggressive goals for bullies or for victims. As with social goals, it was predicted that participants would be more likely to attribute aggressive responses to outgroup characters than to ingroup characters. Similarly, 9th graders were expected to be more likely than 6th graders to evidence a negative outgroup bias in their selection of aggressive responses.

Mediation: Social Reasoning, SIP, and Bullying Experience

Finally, because social reasoning domains develop from experience with different kinds of social situations, and because behavior enactment is a social information processing step that is theorized to interact with latent mental structures, it was predicted that there would be a relation between bullying experience and social

reasoning (Arsenio & Lemerise, 2004; Zelli et al., 1999). Because social reasoning is theorized as a latent mental structure that interacts with aspects of social information processing to produce behavior, it was hypothesized that the relation between social reasoning and behavior would be mediated by social information processing. Specifically, it was expected that one or more aspects of social information processing would mediate the relation between social reasoning judgments and justifications and bullying experience. Based on previous studies, it was hypothesized that intent attribution and aggressive responses would be mediators of the relation between social reasoning and bullying behavior (Belmore et al., 2005; Zelli et al., 1999).

Chapter 3: Methodology

Sample

Participants were 141 European-American 6th graders (78 girls and 63 boys; Mean age = 11.71 years, SD = .37) and 124 European-American 9th graders (46 girls and 78 boys; Mean age = 14.92 years, SD = .36). Participants were recruited from private and public schools in Washington, DC, Anne Arundel County, MD, and Montgomery County, MD. European-American students were the majority racial/ethnic group at all schools. Based on information from school administrators, students are primarily from middle- and upper-income families.

Based on an apriori power analysis (Cohen, 1992), the sample size is more than adequate to detect a medium effect with $\alpha = .05$ for ANOVAs with four groups and for regression analyses using as many as eight factors.

Measures

Participants completed a survey that consisted of three sections: (1) *Attributions of Intent*, (2) *Evaluations of Exclusion Bullying*, (3) *Bully/Victim Experience*. (See Appendix B for the complete measure, and Tables 1-4 for coding details.)

Attributions of Intent

Four ambiguous scenarios, which involve either destruction or dirtying of a peer's property, were used to assess children's attributions of intent. Each scenario was represented with a short written paragraph describing and a picture illustrating a potential transgression between two children (i.e., one student spills milk on another). The scenarios were adapted from an established and widely used measure of intent

attribution (Dodge, 1980; see also Dahlberg et al., 2005). Traditionally, the characters in the pictures are portrayed as European-American. In the current study, the race/ethnicity of the characters was systematically varied. Since the assessment requires the participant to imagine themselves as the potential victim, and all participants were European-American, all potential victims were portrayed as European-American. For each type of potential transgression (i.e., property dirtied and property destroyed), one scenario had a European-American potential transgressor and the other scenario had an African-American potential transgressor (see Table 5). This is the same format as the ambiguous picture measure used by Margie et al. (2005), McGlothlin and Killen (2006), and McGlothlin et al. (2005). European-American was chosen because of its status as the majority group in the United States and because it is the participants' ingroup. African-American was chosen because it is one of the largest minority groups of children in the United States, comprising approximately 16% of the under-18-year-old population (Child Trends, 2003), and because of the history of discrimination and prejudice against African-American people in the United States.

Two questions followed each scenario. First, participants were asked why the potential transgressor did what they did (i.e., spill milk on your back, break your cell phone). Four answers were provided, two of which were hostile (i.e., because she was mad at you) and two of which were non-hostile (i.e., she slipped on something). Second, participants were asked if the potential transgressor's actions were on purpose or accidental. Hostile and "on purpose" responses were coded as "1", while non-hostile and "accidental" responses were coded as "0".

Evaluations of Exclusion Bullying

An additional four scenarios assessed children's social reasoning, social goals, response generation, and response selection concerning situations involving exclusion used to bully. The scenarios and follow-up questions were developed by drawing on situations and questions used in published studies on bullying, social reasoning, and social information processing (i.e., Astor, 1994; Killen et al., 2002; Killen & Stangor, 2001; Rigby & Slee, 1993; Tisak, 1995; Turiel, 1983).

In order to examine the context of race/ethnicity, the race/ethnicity of the bullies and victims were systematically varied. Specifically, all possible combinations of European-American and African-American characters were represented (i.e., European-American as bully and as victim, European-American as bully and African-American as victim, African-American as bully and European-American as victim, African-American as bully and as victim; see Table 6). Holding type of bullying constant made it possible to directly compare racial/ethnic combinations of characters, to determine if social reasoning and/or social information processing differed depending on the race/ethnicity of victim and/or bully.

Participants were presented with written and pictorial representations of exclusion used to bully in four peer situations: (1) playing basketball on the playground at school, (2) sitting at a particular table for lunch, (3) joining a music club, and (4) going to the mall after school with a group of fellow students. In each situation, one character is told that they cannot join a group by another character. In addition, in order for the exclusion to be considered bullying, each scenario explicitly stated that the excluder has been repeatedly excluding the other student over an

extended period of time (Espelage & Swearer, 2003; Graham & Juvonen, 2002; Olweus, 1994b).

Six assessments followed each scenario. First, to evaluate social reasoning *Judgments*, participants were asked to rate how good or bad it was for the bully to exclude, using an eight-point scale ranging from (1) "very, very good" to (8) "very, very bad". Second, to assess social reasoning *Justifications*, participants were asked why they thought the bully's action was good/bad. Participants were instructed to select and prioritize up to three reasons from a provided list of eight possible reasons. The reasons presented varied by type of social reasoning and were drawn from the social cognitive domain theory and bullying literatures (Astor, 1994; Killen et al., 2002; Rigby & Slee, 1993; Tisak, 1995; Turiel, 1983). Participants were also given the option to write in their own reason. Answers were coded as moral (i.e., "Because [the bully] is being mean"), social conventional ("Because [the victim] can't play as well as [the bully] and the rest of the group"), or stereotype ("Because [the victim] wouldn't get along with the group because he's not like them"; see Table 1 for more details and examples).

Third, children's interpretations of the bully's goals were assessed by asking participants to select one of eight possible answers in response to the question "Why do you think [bully] is doing this?" (*Social Goals of Bully*). The list of goals was compiled using goals indicated by children in previous studies on social information processing and bullying (Erdley & Asher, 1996; Rigby & Slee, 1993). Participants were also given the option to write in their own answer. Goals were coded using one of four categories: (1) Aggression (i.e., "Because she is trying to hurt Jenny's

feelings."); (2) Relational (i.e., "Because she is trying to show the other kids in the class how tough she is."); (3) Protective (i.e., "Because she is trying to protect herself."); or (4) Other (see Table 2 for more details and examples).

Fourth, *Response Generation* was assessed. Participants were asked to write in up to three things the victim could do next. Responses were coded as (1) Verbal Aggression (i.e., trying to get back at or get something from victim using words); (2) Assertive (i.e., trying to deal with confrontation by self in positive manner); (3) Physical Aggression (i.e., trying to get back at or get something from victim using physical violence); (4) Adult Assistance (i.e., asking a parent or teacher for help); (5) Avoidance (i.e., trying to keep away from confrontation); (6) Relational Aggression (i.e., trying to get back at or get something from victim using relationships with other people); or (7) Other. These codes were chosen based on previous research which found that they represent the most common types of responses to these kinds of situations (Camodeca et al., 2003). *Response Generation* was included in the survey because it created a natural flow for the questions. However, since *Response Generation* is not considered one of the aspects of SIP most likely to interact with social reasoning (see Appendix A) and no hypotheses included *Response Generation*, these assessments were not included in analyses.

Fifth, participants were asked to indicate what they would do if they were the victim by choosing one answer from a list of five possible responses. They were also given the option to write in their own response. Answers were coded using the same coding system that was used for the *Response Generation* question: (1) Verbal Aggression; (2) Assertive; (3) Physical Aggression; (4) Adult Assistance; (5)

Avoidance; (6) Relational Aggression; or (7) Other (see Table 3 for more details and examples).

The sixth and final assessment examined participants' interpretations of victims' goals (*Social Goals of Victim*). Specifically, participants were asked to select one of eight possible goals (including write in their own) in response to the question "Why would you do this [referring to their answer to *Response Selection*]?". The list of possible goals was based on previous research that identified the most common types of goals in these kinds of situations (Erdley & Asher, 1996). As with *Social Goals of Bully*, answers were coded as: (1) Aggression (i.e., "Because I would be trying to get back at her."); (2) Relational (i.e., "Because I would be trying to work out the problem peacefully."); (3) Protective (i.e., "Because I would be trying to protect myself."); or (4) Other (see Table 4 for more details and examples).

Bully/Victim Experiences

The last section of the survey contains 21 questions that assess children's and adolescents' personal experiences with peers. Eleven of these questions ask participants about their personal experiences with bullying and victimization. All of the questions about bullying and victimization experience were adapted from two measures, the Olweus Bully-Victim Questionnaire (Bentley & Li, 1995; Olweus, 1993, 1994b) and the Peer Relations Questionnaire (Rigby & Slee, 1993; Rigby & Slee, 1995b). Both of these measures have been used extensively by researchers in multiple countries with high reliability to assess bullying/victimization experience (Olweus, 1994a, 1994b; Rigby & Slee, 1993; Rigby & Slee, 1995a). Three different types of bullying/victimization are represented: physical, verbal, and exclusion. An

example of this kind of question is “Since the beginning of the school year, how often have stronger or more popular kids said mean things to you, teased you, or called you names (NOT in a joking way)?”. In response, participants indicated the frequency with which they experienced this treatment on a 7-point scale ranging from “It hasn’t happened this year” to “Several times a day”. To minimize the possibility that the bully/victim questions could make participants feel unhappy, 10 positive and filler questions, such as “Since the beginning of this school year, how often have you participated in school-related after-school activities?”, were interspersed among the bully/victim questions.

A factor analysis, using Principal Axis Factoring with Varimax rotation, was run on all 21 questions, to confirm that the bullying questions and the victimization questions hung together and created separate factors. Using a cut-off value of .30, results showed that the questions clustered into 5 factors, which could be summarized as (1) Bullying; (2) Victimization; (3) Enjoy School; (4) Sociability; and (5) Friends (for factor loading values, see Table 7). Because no hypotheses examined the last three factors, these items were not examined further.

The Bullying factor included the following questions: (1) “Since the beginning of the school year, how often have you said mean things, teased, or called a weaker or less popular student names (NOT in a joking way)?”; (2) “Do you think you could join in picking on a student whom you don't like?”; (3) “Do you think it's fun to make trouble for other students?”; (4) “Since the beginning of the school year, how often have you hit, kicked, or pushed another student (NOT in a joking way) who was weaker or less popular than you?”; (5) “Since the beginning of the school

year, how often have you seen someone else getting picked on?". The Victimization factor included the following 4 questions: (1) "Since the beginning of the school year, how often have stronger or more popular kids said mean things to you, teased you, or called you names (NOT in a joking way)?"; (2) "Since the beginning of this school year, how often have stronger or more popular kids not let you sit with them at lunch or hang out with them at recess/free periods?"; (3) "Since the beginning of the school year, how often have stronger or more popular kids hit, kicked, or pushed you (NOT in a joking way)?"; (4) "Since the beginning of the school year, how often have you seen someone else getting picked on?".

Starting with these groups of questions, two scales were created. First, to create the Bullying Experience Scale, a Scale Reliability analysis was done on the 5 questions listed above in the Bullying factor. Results indicated that the alpha for the scale would be higher if the last question (how often have you seen someone getting picked on?) was deleted. Based on this information, and because the question loaded on both the Bullying and Victimization factors, it was dropped from the scale. Reliability analysis was conducted again to confirm the reliability of the scale without this question (Alpha = .73). Interestingly, the question that assessed exclusion bullying did not load on the Bullying factor. Because of the conceptual importance of this question to this particular study, though, a scale reliability analysis with the 4 remaining bullying items and the exclusion bullying question ("Since the beginning of the school year, how often have you not let a weaker or less popular student sit with you at lunch or hang out with you at recess/free periods?") was conducted. A scale including this question was still reliable (Alpha = .70), therefore these five items

were used to create the Bullying Experience Scale (see Table 8). All questions were coded with higher numbers indicating more prosocial behavior. Therefore, higher scores on the Bullying Experience Scale indicate less experience bullying, while lower scores indicate more experience bullying.

Next, a Scale Reliability analysis was run on the 4 items in the Victimization factor. Results indicated that the scale was not reliable, but would be without the question that had also loaded on the Bullying factor ("Since the beginning of the school year, how often have you seen someone else getting picked on?"). A new Scale Reliability analysis found that a scale using the remaining 3 questions was reliable (Alpha = .63). Therefore, these questions were used to create the Victim Experience Scale (see Table 9). Similar to the Bullying Experience Scale, higher scores indicate less experience as a victim, while lower scores indicate more experience as a victim.

Procedure

Pilot testing was conducted to assess the appropriateness of the scenarios and questions and length of time needed to complete the survey by both 6th graders and 9th graders. Questions were added, deleted, and re-worded based on feedback received during the pilot testing phase.

After the survey was finalized and approved by the University of Maryland's Institutional Review Board (IRB), approval was obtained from school districts (for public schools) and principals (for all schools) to administer the survey to students. Presentations were made to students in their classrooms explaining what the project entailed. Parental consent forms were collected when required by a particular school,

and in those schools, only the students returning signed parental consent forms completed the survey. In addition, all participants signed an assent form immediately prior to completing the survey. (See Appendices C and D for the Parental Consent and student Assent Forms.)

Students were told that the purpose of the project was to better understand how 6th and 9th graders think about how students get along in schools. In addition, participants were told that the survey would ask them to read a few sentences describing something that happened between two kids their age, and that they would be asked what they thought happened and how they would act in the same situation. They were also told that the survey asked questions about school and after-school activities, and about how students treat each other at school. Students were assured that the survey was confidential and anonymous, and that we would not share their answers with their parents, teachers, principal, or other students. Before taking the survey, participants were reminded that the survey was not a test and that there were no right or wrong answers.

Girls received the female version of the survey, and boys received the male version. Versions were identical except that characters in the girl version had long hair and female names, while characters in the boy version had short hair and male names. The survey took both 6th and 9th graders on average 25 minutes to complete.

Reliability Coding

All surveys were coded by either the author or one of two trained undergraduate research assistants. Reliability was conducted between each pair of coders. Reliability of coding for *Justifications* was calculated on 20% of the surveys,

with Cohen's kappas ranging from .80 (88% agreement) to 1.00 (100% agreement); for *Social Goals of Bully* on 23% of the surveys, with Cohen's kappas ranging from .80 (89% agreement) to 1.00 (100% agreement); for *Response Generation* on 15% of the surveys, with Cohen's kappas ranging from .89 (92% agreement) to .93 (95% agreement); for *Response Selection* on 26% of the surveys, with Cohen's kappas ranging from .73 (84% agreement) to .78 (87% agreement); and for *Social Goals of Victim* on 15% of the surveys, with Cohen's kappas ranging from .81 (91% agreement) to 1.00 (100% agreement).

Chapter 4: Results

Hypotheses were tested using Linear Regressions, Logistic Regressions, and ANOVAs. Due to the repeated measures design, ANOVA models, as opposed to log-linear analysis, are appropriate for analyzing this type of data (see Wainryb, Shaw, Laupa, & Smith, 2001, footnote 4). Independent and paired samples t-tests were used to examine interaction effects found with ANOVAs.

Bully/Victim Experience predicts Social Reasoning and SIP

Overall Differences in Experience by Grade and Gender

It was hypothesized that boys would be more likely than girls to exhibit bullying behavior. A univariate ANOVA of Gender and Bullying Experience Scale was significant, F (1, 259) = 12.81, $p < .001$, $\eta_p^2 = .05$. Lower scores on the Bullying Experience Scale indicated less prosocial behavior and more experience bullying, while higher scores indicated more prosocial behavior and less experience bullying. As with previous research, the current study found that, indeed, boys (M = 5.29) were more likely than girls (M = 5.61) to report having bullied other students.

To determine if there were Grade differences in bullying experience, a univariate ANOVA analysis of Grade and Bullying Experience Scale was significant, F (1, 259) = 10.56, $p = .001$, $\eta_p^2 = .04$. Previous research has found that bullying tends to peak in 6th grade. However, in the current study, 9th graders (M = 5.28) were more likely than 6th graders (M = 5.57) to report having bullied other students this school year.

Victimization experience did not differ by grade or gender. All other grade and gender differences are reported below. Because of the overall gender and grade

differences found in bullying experience, all regressions examining the relation between bullying experience and aspects of social cognition controlled for Grade and Gender differences by entering them on the first step and then entering Bullying Experience on the second step. Regressions examining the relation between victimization experience and social cognitive factors did not include gender and grade as predictors.

Judgments

First, it was hypothesized that, overall, children would consider bullying with exclusion a "bad" thing to do (Astor, 1994; Killen et al., 2002; Turiel, 2006). Judgments were rated from 1 ("very, very good") to 8 ("very, very bad"). Overall mean ratings for each scenario ranged from 6.07 (SD = 1.30) to 6.61 (SD = .99), indicating that, as predicted, overall, participants considered the bully's exclusion of the victim to be a "somewhat bad" to "very bad" thing to do.

It was also hypothesized that participants with less experience bullying would rate exclusion bullying as more wrong. A linear regression used Grade and Gender (Step 1) and Bullying Experience (Step 2) to predict Judgments for each scenario. For all scenarios, the model was significant, with $p < .001$ for each, and r^2 ranging from .08 (African-American bully and African-American victim) to .17 (European-American bully and European-American victim). Bullying Experience was the only significant and a positive predictor of judgment ratings in all scenarios (European-American bully and African-American Victim: B = .408; African-American bully and African-American victim: B = .337; European-American bully and European-American victim: B = .539; African-American bully and European-American victim:

B = .544). Therefore, as predicted, participants who reported bullying more often also rated the hypothetical bullies' actions as less wrong, regardless of bully/victim race/ethnicity combination.

Justifications

To test differences in use of social reasoning categories, Justification Domain Category variables were re-coded into separate variables for each type of domain for each scenario. Use of the domain was coded as 1, non-use was coded 0. Next, the mean for each domain across the three variables per scenario was computed into a new variable. This resulted in 4 variables per domain (i.e., the mean of Moral justifications for Scenario 1, the mean of Moral justifications for Scenario 2, the mean of Moral justifications for Scenario 3, and the mean of Moral justifications for Scenario 4). These variables were used in all Justification analyses.

Concerning Justifications, it was predicted that would not be differences based on amount of bullying experience in use of moral justifications overall. Linear regression was used to test this hypothesis, with Moral Justifications for each scenario regressed on Grade, Gender, and Bullying Experience. As expected, Bullying Experience was not a significant predictor of use of Moral Justifications for any scenario.

It was hypothesized, however, that bullying experience would be differentially related to different kinds of moral justifications (Astor, 1994). Specifically, it was expected that children with more experience bullying others would be more likely to use moral justifications that blamed the victim, while children with less bullying experience would be more likely to consider the victim's feelings. To test these

hypotheses, first, a logistic regression using Grade, Gender, and Bullying Experience to predict the use of Blaming Victim Justification ("Because the victim probably did something to deserve it") was run. Results showed that in all situations except when both the bully and victim were European-American, children with more experience bullying others were also more likely to use the justification that blamed the victim (European-American bully, African-American victim: B = -.702, Wald = 11.158, p = .001; African-American bully, African-American victim: B = -.615, Wald = 8.633, p = .003; African-American bully and European-American victim: B = -.445, Wald = 4.692, p = .03.) Next, Victim's Feelings Justification ("Because it might hurt the victim's feelings") was regressed on Grade, Gender, and Bullying Experience. As predicted, children with less experience bullying others were more likely, in all situations, to use the justification that took the victim's feelings into account (European-American bully, African-American victim: B = .530, Wald = 7.391, p = .007; African-American bully, African-American victim: B = .403, Wald = 4.204, p = .04; European-American bully, European-American victim: B = .529, Wald = 7.142, p = .008; African-American bully and European-American victim: B = .472, Wald = 4.869, p = .027).

It was also expected that participants who reported bullying others more often would be more likely to use stereotype reasoning. The linear regression with Stereotype Justifications for each scenario regressed on Grade, Gender, and Bullying Experience, however, found that Bullying Experience was not predictive of use of Stereotype justifications.

In sum, while there were no differences in use of Moral Justifications overall by Bullying Experience, Bullying Experience did predict what kind of moral reasoning participants used. Specifically, more bullying experience was related to an increased use of justifications that blamed the victim, whereas less bullying experience was related to an increased use of justifications that sympathized with the victim.

Intent Attributions

First, scores were summed across the scenarios involving a European-American potential perpetrator creating a European-American Intent Attribution score and across the scenarios involving an African-American potential perpetrator creating an African-American Intent Attribution score. Higher scores indicated more hostile intent towards the potential perpetrator.

It was hypothesized that participants with more experience bullying others would also be more likely to attribute hostile intent to potential perpetrators in ambiguous situations. This hypothesis was tested separately for Intent Attribution towards European-American Potential Perpetrators and Intent Attribution towards African-American Potential Perpetrators, since previous analyses (reported below) had found a difference in Intent Attribution based on the race/ethnicity of the potential perpetrator.

The model in which Intent Attribution towards European-American Potential Perpetrators was regressed on Gender, Grade, and Bullying Experience was significant ($p < .001$; $r^2 = .08$). Gender, Grade, and Bullying Experience were all significant predictors of intent attribution. Specifically, boys evidenced more hostile

intent than girls towards European-American potential perpetrators (B = .119; p = .006). Sixth graders evidenced more hostile intent than 9th graders towards European-American potential perpetrators (B = -.126; p = .004). And, participants with more bullying experience were also more likely than participants with less bullying experience to evidence hostile intent towards European-American potential perpetrators (B = -.082; p = .006).

A linear regression using Grade, Gender, and Bullying Experience to predict Intent Attribution towards African-American Potential Perpetrators was also significant ($p < .001$; $r^2 = .10$). Only Grade and Bullying Experience were significant predictors this time, however. As with Intent Attribution towards European-American Potential Perpetrators, 6th graders evidenced more hostile intent than 9th graders towards African-American potential perpetrators (B = -.179; $p < .001$). In addition, participants who bullied more often were again more likely than participants with less bullying experience to evidence hostile intent, this time towards African-American potential perpetrators (B = -.098; p = .001).

Overall, the hypothesis that more bullying experience would predict more hostile intent attribution towards potential perpetrators was supported, and regardless of the potential perpetrator's race/ethnicity.

In addition, it was hypothesized that participants who had more experience as a victim would also be more likely to attribute hostile intent to potential perpetrators. A linear regression using Victim Experience to predict Intent Attribution towards European-American Potential Perpetrators was significant (p = .01; $r^2 = .03$). As predicted, participants with more experience as victims were more likely to attribute

hostile intent towards European-American potential perpetrators (B = -.064; p = .01). In addition, regressing Intent Attribution towards African-American Potential Perpetrators on Victim Experience (p = .002; r^2 = .04) showed that participants with more victim experience were more likely to attribute hostile intent to African-American potential perpetrators (B = -.077; p = .002). Therefore, there was support for both hypotheses. Specifically, participants who had either more experience bullying others or more experience being bullied by others were also more likely to attribute hostile intent to potential perpetrators, regardless of the race/ethnicity of the potential perpetrator.

Social Goals of Bully

New dichotomous variables (1 = yes, 0 = no) were created to indicate whether the participant chose an Aggressive, a Protective, or a Relational goal for the bully in each scenario. The following analyses were conducted using the dichotomous variables.

It was expected that participants with less experience bullying others would be more likely to consider bullies' goals as aggressive. However, when Grade, Gender, and Bullying Experience were regressed on Aggressive Goals of Bully for each scenario, bullying experience was not a significant predictor.

It was also hypothesized that participants with more experience bullying would be more likely to choose relational goals for bullies. This hypothesis was not supported. A logistic regression with Gender, Grade, and Bullying Experience predicting Relational Goals for Bullies found that bullying experience was not a significant predictor of selection of relational goals for bullies.

More experience bullying others was also expected to positively predict selection of protective goals. This hypothesis could not be tested in relation to selection of protective goals for bullies, because the frequency of protective goals for bullies was too low to analyze. Therefore, overall, bullying experience was not predictive of bullies' goals.

Social Goals of Victim

As with Social Goals of Bully variables, new dichotomous variables (1 = yes, 0 = no) were created to indicate whether the participant chose an Aggressive, a Protective, or a Relational goal for the victim in each scenario. The following analyses were conducted using the dichotomous variables.

To determine if participants who bullied others more often were also more likely to select aggressive goals for victims, logistic regressions were run with Grade, Gender, and Bullying Experience predicting Aggressive Goals of Victims for each scenario. Models for all scenarios were significant, and Bullying Experience was a significant predictor for all of the scenarios: European-American bully, African-American victim: B = -.798, Wald = 9.216, $p = .002$; African-American bully, African-American victim: B = -.699, Wald = 10.745, $p = .001$; European-American bully, European-American victim: B = -.753, Wald = 12.090, $p = .001$; African-American bully and European-American victim: B = -1.492, Wald = 25.774, $p < .001$. Overall, participants with more bullying experience were more likely than participants with less bullying experience to choose aggressive goals for victims in all situations, regardless of race/ethnicity of bully and victim.

It was hypothesized that less experience bullying others would positively predict selection of relational goals. Grade, Gender, and Bullying Experience were regressed on Relational Goals for Victims. Bullying Experience significantly predicted participants' choice of relational goals for victims, but only when the victims were European-American (European-American bully, European-American victim: B = .382, Wald = 3.885, p = .049; African-American bully, European-American victim: B = .537, Wald = 7.787, p = .005). Therefore, participants with more bullying experience were less likely to choose relational goals for European-American victims. Bullying experience was not a significant predictor of choice of relational goals for victims in scenarios where the victims were African-American.

In addition, less experience being bullied was predicted to be positively related to the selection of relational goals. However, a logistic regression with Victim Experience predicting Relational Goals for Victims was not significant.

Finally, participants with more experience being bullied were expected to be more likely to select protective goals. Victim Experience was regressed on Protective Goals of Victim for each scenario, but was only a significant predictor when both the bully and the victim were African-American (B = .369, Wald = 5.373, p = .02). Contrary to the hypothesis, participants with more experience as victims were less likely to choose protective goals for victims, but only when both bully and victim were African-American.

In sum, more bullying experience was related to an increased likelihood of selecting aggressive goals for victims, regardless of race/ethnicity of bully and victim, and a decreased likelihood of selecting relational goals for European-American

victims. Victim experience was not predictive of selection of relational goals, but was related to a decreased likelihood of selecting protective goals for victims when both the bully and the victim were African-American.

Response Selection

New dichotomous variables (1 = yes, 0 = no) were created to indicate whether the participant chose a Verbally Aggressive, Physically Aggressive, Relationally Aggressive, Assertive, Adult Assistance, or Avoidance response for the victim in each scenario. Because of the low frequency of occurrence for Verbally Aggressive, Physically Aggressive, and Relationally Aggressive (each less than 10%), the three were combined to create one Aggressive response variable per scenario. The following analyses were conducted using the dichotomous variables.

It was hypothesized that participants who bullied others more often would also be more likely to choose aggressive responses. Logistic regressions were run with Grade, Gender, and Bullying Experience predicting Aggressive Responses for each scenario. Bullying Experience was a significant predictor in all four situations: European-American bully, African-American victim: B = -1.365, Wald = 21.825, $p < .001$; African-American bully, African-American victim: B = -.968, Wald = 15.742, $p < .001$; European-American bully, European-American victim: B = -1.179, Wald = 20.506, $p < .001$; African-American bully and European-American victim: B = -1.150, Wald = 17.633, $p < .001$. The hypothesis was supported, with participants with more bullying experience more likely than participants with less bullying experience to use aggressive responses in all situations, regardless of race/ethnicity of bully and victim.

It was also expected that bullying less often would predict selection of assertive responses. Logistic regressions with Grade, Gender, and Bullying Experience predicting Assertive Responses were run for each scenario. Analyses showed that in three of the four situations, as predicted, participants with less experience bullying were more likely respond in assertive ways. Specifically, Bullying Experience was a significant predictor of Assertive Responses in both cross-race situations (European-American bully, African-American victim: B = .618, Wald = 8.948, p = .003; African-American bully, European-American victim: B = .531, Wald = 6.875, p = .009) and when both the bully and victim were European-American (B = .619, Wald = 9.501, p = .002).

Less experience being bullied was also hypothesized to predict selection of assertive responses. When Assertive Responses was regressed on Victim Experience, the relation was not significant.

Finally, it was predicted that participants who were bullied more often would also be more likely to select avoidance responses. Logistic regressions found that Victim Experience predicted Avoidance Responses only when the bully was African-American and the victim was European-American (B = .486, Wald = 7.587, p = .006). The relation was in the opposite direction than was predicted, however, with participants with more experience as victims less likely to choose avoidance responses.

In sum, the analyses indicated that more bullying experience was related to an increased likelihood of choosing aggressive responses, regardless of the race/ethnicity of the bully and victim, while less bullying experience was related to an increased

likelihood of choosing assertive responses in the cross-race situations and when both the bully and victim were European-American. On the other hand, victim experience was not predictive of use of assertive responses, and was unexpectedly predictive of being less likely to choose avoidance responses. (For a summary of all key findings for this section, please see Table 17).

Social Reasoning and SIP: Grade, Gender, and Race/Ethnicity

Next, hypotheses concerning differences by grade, gender, and the racial/ethnic combination of characters in scenarios were tested. Four-way, Split Plot ANOVAs (Repeated Measures) were used. Interactions involving Grade or Gender were examined using Independent t-tests. Interactions involving race/ethnicity of the bully and the race/ethnicity of the victim were examined using Paired Samples t-tests.

Judgments

It was hypothesized that participants' judgments would evidence an ingroup positive bias/outgroup negative bias, with participants rating ingroup characters more favorably than outgroup characters. Because judgments were set up so that higher ratings indicated greater disapproval of the bully's actions, rating characters more favorably would be indicated by lower rating scores. A 2 (Grade: 6^{th}, 9^{th}) X 2 (Gender: girls, boys) X (2 (Race/Ethnicity of Bully: European-American, African-American) X 2 (Race/Ethnicity of Victim: European-American, African-American)) ANOVA with Repeated Measures on the last two factors was conducted. Main effects for Race/Ethnicity of Bully and Race/Ethnicity of Victim were qualified by a Race/Ethnicity of Bully X Race/Ethnicity of Victim interaction, F (1, 258) = 21.85, $p < .001$, $\eta_p^2 = .08$. Follow-up tests found that participants rated the bully's actions as

less bad when the bully was African-American and the victim was European-American (M = 6.07) than for all other combinations of bullies and victims (African-American bully and African-American victim: M = 6.56; European-American bully and European-American victim: M = 6.57; European-American bully and African-American victim: M = 6.61).

Age-related Expectations for Justifications

It was expected that 9th graders would be more likely than 6th graders to use social conventional reasoning (Horn, 2003). A 2 (Grade) X 2 (Gender) X (2 (Race of Bully) X 2 (Race of Victim)) ANOVA with Repeated Measures on the last two factors was conducted on Social Conventional justifications. No differences by grade (or gender or race/ethnicity) were found for Social Conventional reasoning.

Second, 9th graders were expected to be more likely than 6th graders to use stereotype reasoning. A 2 (Grade) X 2 (Gender) X (2 (Race/Ethnicity of Bully) X 2 (Race/Ethnicity of Victim)) ANOVA with Repeated Measures on the last two factors was conducted on Stereotype justification variables. Results revealed a Race/Ethnicity of Bully X Grade interaction, F (1, 261) = 8.44, p = .004, η_p^2 = .03. Follow-up tests found a small but statistically significant difference between 9th graders' use of stereotype reasoning depending on the race/ethnicity of the bully. Specifically, when the victim was European-American, 9th graders were more likely to use stereotype reasoning when the bully was African-American (M = .18) than when the bully was European-American (M = .13). There were no significant differences for 6th graders' use of stereotype reasoning.

Intent Attributions

Comparisons were done to determine if participants were more likely to attribute hostile intent to European-American or African-American potential perpetrators. Specifically, it was hypothesized that participants' intent attributions would evidence an ingroup positive bias/outgroup negative bias, with participants rating ingroup characters more favorably than outgroup characters. In other words, participants (who were all European-American) would attribute less hostile intent towards European-American potential perpetrators than towards African-American potential perpetrators. To test this hypothesis, a 2 (Grade) X 2 (Gender) X 2 (Race of Potential Perpetrator) ANOVA with Repeated Measures on the last factor was conducted. A main effect for Race/Ethnicity of Potential Perpetrator was revealed, $F(1, 261) = 13.83$, $p < .001$, $\eta_p^2 = .05$. A follow-up paired samples t-test found a small but statistically significant difference in participants' intent attribution depending on the race/ethnicity of the potential perpetrators. Contrary to expectations, participants were more likely to attribute hostile intent to European-American potential perpetrators (M = .39) than to African-American potential perpetrators (M = .30).

It was also predicted that 9th graders would be more likely than 6th graders to evidence a negative outgroup bias in their intent attributions. However, the Race/Ethnicity of Potential Perpetrator X Grade interaction was not significant.

Social Goals of Bully

First, it was expected that participants would be more likely to attribute aggressive goals to outgroup (African-American) characters than to ingroup (European-American) characters. A 2 (Grade) X 2 (Gender) X (2 (Race/Ethnicity of

Bully) X 2 (Race/Ethnicity of Victim)) ANOVA with Repeated Measures on the last two factors was conducted on Aggressive Goals of Bully. A Race/Ethnicity of Bully X Race/Ethnicity of Victim interaction was found, F (1, 257) = 6.92, p = .009, η_p^2 = .03. Follow-up tests indicated that a bully's goals were more likely to be considered aggressive when both the bully and victim are African-American (M = .69) than when the bully was European-American and the victim is African-American (M = .62). In addition, a bully's goals more likely to be considered aggressive when both the bully and victim were European-American (M = .75) than when the bully was European-American and the victim was African-American (M = .62) or than when the bully was African-American and the victim was European-American (M = .67). Overall, this indicates that participants were more likely to attribute aggressive goals to a bully in a same-race situation than in a cross-race situation.

Second, 9th graders were expected to be more likely than 6th graders to choose aggressive goals for an African-American bully than for a European-American bully. A Race/Ethnicity of Victim X Grade interaction (F (1, 257) = 7.37, p = .007, η_p^2 = .03) and a follow-up Independent Samples t-test showed that, contrary to expectations, 9th graders (M = .68) were more likely than 6th graders (M = .57) to consider the bully's goals aggressive when the bully was European-American and the victim was African-American (t = -1.995, df = 261.90, p = .05).

Social Goals of Victim

It was hypothesized that participants would be more likely to attribute aggressive goals to African-American victims than to European-American victims. A 2 (Grade) X 2 (Gender) X (2 (Race/Ethnicity of Bully) X 2 (Race/Ethnicity of

Victim)) ANOVA with Repeated Measures on the last two factors was conducted on Aggressive Goals of Victim. A Race/Ethnicity of Bully X Race/Ethnicity of Victim interaction was found, F (1, 251) = 16.60, $p < .001$, $\eta_p^2 = .06$. Follow-up tests indicated that participants were more likely to select aggressive goals for victims in situations where the bully and victim were same race/ethnicity (European-American bully and European-American victim: M = .17; African-American bully and African-American victim: M = .17) than in situations where bullies and victims were of different races (European-American bully and African-American victim: M = .09; African-American bully and European-American victim: M = .10). Therefore, selection of aggressive goals for the victim did not depend solely on the race/ethnicity of the victim, but instead on the racial/ethnic combination of the characters involved.

In addition, 9th graders were expected to be more likely than 6th graders to select aggressive goals for African-American victims than for European-American victims. However, no significant differences by Grade were found.

Response Selection

It was expected that participants would be more likely to attribute aggressive responses to African-American characters than to European-American characters. To test this hypothesis, a 2 (Grade) X 2 (Gender) X (2 (Race/Ethnicity of Bully) X 2 (Race/Ethnicity of Victim)) ANOVA with Repeated Measures on the last two factors was conducted on Aggressive Responses. The main effect of Race/Ethnicity of Victim was not significant. However, there was a significant Race/Ethnicity of Victim X Gender interaction, F (1, 253) = 8.01, $p = .005$, $\eta_p^2 = .03$. Follow-up tests found that, in partial support of the hypothesis, when the victim was African-

American, boys (European-American bully: M = .22; African-American bully: M = .18) were more likely than girls (European-American bully: M = .03; African-American bully: M = .04) to choose aggressive responses. However, follow-up tests also found that when the victim was European-American and the bully was European-American, boys (M = .16) were more likely than girls (M = .06) to choose aggressive responses. There were no differences between boys and girls when the bully was African-American and the victim was European-American.

9^{th} graders were hypothesized to be more likely than 6^{th} graders to evidence a negative outgroup bias in their selection of aggressive responses, by being more likely to attribute aggressive responses to African-American victims than to European-American victims. There was a Race/Ethnicity of Victim X Grade interaction, but this was further qualified by a Race/Ethnicity of Bully X Race/Ethnicity of Victim X Grade interaction, F (1, 253) = 3.93, p = .049, η_p^2 = .02. Independent samples t-tests indicated that 9^{th} graders (European-American bully and African-American victim: M = .24; African-American bully and European-American victim: M = .14) were more likely than 6^{th} graders (European-American bully and African-American victim: M = .04; African-American bully and European-American victim: M = .04) to choose aggressive responses in cross-race interactions, and when both the bully and victim were African-American (9^{th} graders: M = .18; 6^{th} graders: M = .06). However, there were no grade differences for the ingroup, same-race situation, where both the bully and victim were European-American. (For a summary of all key findings for this section, please see Table 18).

Mediation: Social Reasoning, SIP, and Bullying Experience

Finally, multiple regression analysis was used to test the mediation effect of SIP variables on the relation between social reasoning and bullying experience (Baron & Kenny, 1986; see Figure 1). The social reasoning variables examined were Judgments, Blaming Victim Justification, and Victim's Feelings Justification, since these social reasoning variables were found earlier to be significantly related to Bullying Experience in a majority of the scenarios. The social information processing variables included were Intent Attributions, Aggressive Goals of Victim, and Aggressive Responses, since these were the aspects of social information processing that earlier were found to be significantly related to Bullying Experience in all four scenarios.

To examine basic relations between social reasoning, social information processing, and bullying experience, new composite variables were created. These new variables were the mean of the variable across all four scenarios for each of the social reasoning variables and each of the social information processing variables.

First, correlations between all variables to be included in mediation analyses were computed, in order to make sure that they were significantly intercorrelated as required for mediation (Baron & Kenny, 1986; see Table 10). As can be seen in Table 10, Bullying Experience was significantly correlated with all three social reasoning variables and all three social information processing variables. However, Judgments, Blaming Victim Justification, and Victim's Feelings Justification were not significantly correlated with Intent Attribution. Therefore, mediational analyses were not conducted using Intent Attribution as a possible mediator.

Mediation was tested by following the four steps outlined by Baron and Kenny (1986). Separate analyses were conducted for each combination of social reasoning and social information processing variables. First, the dependent variable (Bullying Experience) was regressed on the independent variable (Judgments, Blaming Victim Justification, or Victim's Feelings Justification) to determine the value and significance of the total effect. Second, the mediator (Aggressive Goals of Victim or Aggressive Responses) was regressed on the independent variable. Third, the mediator was used to predict the dependent variable, while controlling for the independent variable. These two steps determine the value of the indirect effect. Fourth, complete or partial mediation was determined by calculating the effect of the independent variable on the dependent variable while controlling for the mediator, to determine the value of the direct effect. Complete mediation is when the direct effect is equal to the total effect. Partial mediation is when the indirect effect is not equal to the total effect, but is smaller and of the same sign. Lastly, follow-up Sobel tests were conducted to determine the significance of the indirect effects (Preacher & Leonardelli, 2003).

Judgments and Bullying Experience

Aggressive Goals of Victim. All three regressions corresponding to the first three steps outlined above were significant (see Table 11). The indirect effect (.045) did not equal the total effect (.350), but was smaller and of the same sign, indicating partial mediation. A follow-up Sobel test determined that the indirect effect differed significantly from zero (Sobel test statistic = 2.46, p = .014), confirming that

mediation had occurred. Therefore, Aggressive Goals of Victim partially mediated the relation between Judgments and Bullying Experience.

Aggressive Responses. Regressions run to examine the relations between Judgments, Aggressive Responses, and Bullying Experience, were significant (see Table 12). The indirect effect (.076) did not equal the total effect (.350), but was smaller and of the same sign, indicating partial mediation. A follow-up Sobel test determined that the indirect effect differed significantly from zero (Sobel test statistic = 3.14, p = .002), confirming that mediation had occurred. Therefore, Aggressive Responses partially mediated the relation between Judgments and Bullying Experience.

Blaming Victim Justification and Bullying Experience

Aggressive Goals of Victim. Regressions run to examine the mediational effect of Aggressive Goals of Victim on the relation between Blaming Victim Justification and Bullying Experience were significant (see Table 13). The indirect effect (-.152) did not equal the total effect (-0.587), but was smaller and of the same sign, indicating partial mediation. A follow-up Sobel test determined that the indirect effect differed significantly from zero (Sobel test statistic = -2.59, p = .01), confirming that mediation had occurred. Therefore, the relation between Blaming Victim Justification and Bullying Experience was partially mediated by Aggressive Goals of Victim.

Aggressive Responses. All three regressions corresponding to the first three steps outlined above were significant (see Table 14). The indirect effect (-.244) did not equal the total effect (-0.587), but was smaller and of the same sign, indicating

partial mediation. A follow-up Sobel test determined that the indirect effect differed significantly from zero (Sobel test statistic = -3.12, p = .002), confirming that mediation had occurred. Therefore, Aggressive Responses partially mediated the relation between Blaming Victim Justification and Bullying Experience.

Victim's Feeling Justification and Bullying Experience

Aggressive Goals of Victim. Regressions run to examine the relations between Victim's Feeling Justification, Aggressive Goals of Victim, and Bullying Experience, were significant (see Table 15). The indirect effect (.100) did not equal the total effect (.457), but was smaller and of the same sign, indicating partial mediation. A follow-up Sobel test determined that the indirect effect differed significantly from zero (Sobel test statistic = 2.27, p = .023), confirming that mediation had occurred. Therefore, Aggressive Goals of Victim partially mediated the relation between Victim's Feeling Justification and Bullying Experience.

Aggressive Responses. Regressions run to examine the mediational effect of Aggressive Responses on the relation between Victim Feeling's Justification and Bullying Experience were significant (see Table 16). The indirect effect (.167) did not equal the total effect (.457), but was smaller and of the same sign, indicating partial mediation. A follow-up Sobel test determined that the indirect effect differed significantly from zero (Sobel test statistic = 2.79, p = .005), confirming that mediation had occurred. Therefore, the relation between Victim Feeling's Justification and Bullying Experience was partially mediated by Aggressive Responses.

In sum, both social information processing variables examined (Aggressive Goals of Victim and Aggressive Responses) were partial mediators of the relations between each social reasoning variable (Judgments, Blaming Victim Justification, and Victim Feeling's Justification) and Bullying Experience. (For a summary of key findings for this section, please see Tables 19, 20, and 21).

Chapter 5: Discussion

The relations between moral reasoning, social information processing, and bullying behavior had not previously been examined empirically, despite the call from Arsenio and Lemerise (2004) that such an endeavor would be fruitful. In addition, while research has found that race/ethnicity affects social reasoning and decision-making (Dovidio & Gaertner, 1998; Lawrence, 1991; Margie et al., 2005), the impact of race/ethnicity on reasoning about bullying, and specifically exclusion as a form of bullying, had not been studied. The novel contributions of this project to the literature on bullying center on the findings regarding how children's moral reasoning is related to bullying experience, how children take into account the contextual factor of race/ethnicity when evaluating bullying situations, and the mediational role of aggressive goals and responses between moral justifications and bullying experience. These findings will be discussed in detail below.

Bully/Victim Experience predicts Social Reasoning and SIP

Social Reasoning: Judgments and Justifications

Bullying experience and social reasoning were related generally as expected. First, while participants overall considered bullying with exclusion a "bad" thing to do (Astor, 1994; Killen & Nucci, 1995; Tisak, 1995; Turiel, 1983), there were differences in how wrong bullying was rated based on the participant's experience as a bully. Specifically, children who reported bullying more often also rated the hypothetical bullies' actions as less wrong, regardless of bully/victim race/ethnicity combination. This is similar to the findings of Zelli and colleagues (1999) and Bellmore and colleagues (2005) who both found that children's normative beliefs

about retaliatory aggression were related to their aggressive behavior. The current study extends this research, though, by showing a link between behavior and judgments concerning proactive aggression as opposed to retaliatory aggression.

As with Astor's (1994) study of physically aggressive and non-aggressive children, there were no overall differences in use of moral justifications by amount of bullying experience. Children's preferences for different kind of moral justifications, however, did differ by amount of bullying experience. Specifically, results showed that in all situations except when both the bully and victim were European-American, children with more experience bullying others were also more likely to use the justification that blamed the victim. Bullying less often was associated with a greater likelihood of using the justification that took the victim's feelings into account, regardless of the race/ethnicity combination of the characters. In other words, as might be expected, children who bully more were less likely to sympathize with the victim (i.e., less prosocial) and more likely to blame the victim (i.e., attributing bullying to factors external to the bully; Slee, 1993). These findings extend previous research by showing that differences in use of moral justifications do not only apply to the extreme groups of physically violent versus non-aggressive children, but also to those who report bullying using non-physical means and with less frequency.

In addition, the race/ethnicity of those involved in a conflict interacted with the moral reasoning children used when evaluating the situation. Results showed that children who bullied others more often were also more likely to blame the victim, but only in the situations where the victims were African-American and where the bully was African-American and the victim was European-American. If this had only

occurred for the situations involving African-American victims, it would suggest an outgroup negative bias on the part of children who bullied more often. However, the explanation cannot be this straightforward, since it was also found that those with more bullying experience were more likely to place blame on a European-American victim when the bully was African-American. An alternative explanation is that when interpreting a situation involving bullying, children with more experience bullying default to the answer that blames the victim. In other words, their first thought is to perceive the situation from the bully's point-of-view and place blame on the victim. This may be indicative of their relative inability to take the perspective of others and sympathize. However, when they are presented with a situation in which they can more easily take the perspective of both sides of the situation (i.e., when both bully and victim are the same race as themselves), they are less likely to use their default answer and blame the victim.

Social Information Processing: Intent Attributions, Victim Goals, Responses

Findings from the current study support previous research that examined the relation between intent attributions, social goals of victims, and response selection and bullying and victimization experience. First, children with more experience bullying others or being bullied were also more likely to attribute hostile intent to potential perpetrators. These results mirror other studies of bullying and hostile intent (Camodeca & Goossens, 2005; Camodeca et al., 2003; Slee, 1993) as well as research on aggression and hostile intent (Arsenio & Lemerise, 2004; Crick & Dodge, 1994; Dodge & Schwartz, 1997). In addition, no differences were found by race/ethnicity of the potential perpetrator, indicating that participants with more experience as

bullies or with more experience as victims did not evidence any racial/ethnic bias in their attributions of intent. They perceived the intent of potential perpetrators as hostile regardless of whether the potential perpetrator was European-American or African-American.

As with previous research, participants with more bullying experience were more likely to choose aggressive goals for victims (Camodeca & Goossens, 2005). In the current study, this was found for all situations, regardless of the race/ethnicity of the bully and the victim. In other words, their tendency to choose aggressive goals for victims is applied to all, regardless of race/ethnicity, and therefore appears to supersede any racial/ethnic bias they might hold. When it came to more prosocial goals, however, race/ethnicity played a role in how choices were made. As expected, participants with more bullying experience were less likely to choose relational goals, but only for European-American victims. In other words, children who bullied less were more likely to attribute relational goals to European-American victims. Bullying less and choosing relational goals are prosocial actions, so it is understandable that they would be related. However, this prosocial inclination did not extend to African-American victims, which could be a sign of negative racial/ethnic bias. Alternatively, it could indicate a lack of experience with African-Americans and a failure to understanding that African-American victims might also have relational goals.

Finally, concerning response selection, previous studies found that bullies are more likely than non-bullies to choose aggressive solutions (Camodeca & Goossens, 2005; Camodeca et al., 2003; Slee, 1993). Findings from the current study supported

this as well. Specifically, participants with more bullying experience were more likely to use aggressive responses. As with intent attributions and aggressive social goals of victims, this relation did not differ by the race/ethnicity of the bully and the victim. Other kinds of responses, though, did differ by the racial/ethnic combination of the characters. For instance, as predicted, participants with less experience bullying were more likely respond in assertive ways in both cross-race situations and when both the bully and victim were European-American, but not when the bully and victim were both African-American. Perhaps participants with a more prosocial bent felt more comfortable indicating that victims could respond in assertive ways when the situation involved an ingroup character.

It is interesting to note that the relations between bullying experience and social information processing were similar to those found in previous studies even though extreme groups were not used in this study. Previous research has generally examined children classified on the extreme end of bullying (approximately 7-15% of the school population; Pellegrini, 1998), and found that they are more likely to attribute hostile intent, choose aggressive goals in retaliation, and select aggressive responses (Camodeca & Goossens, 2005; Camodeca et al., 2003; Slee, 1993). Since bullying is considered to fall along a continuum (Espelage & Swearer, 2003; Olweus, 1994b), the current study took a less extreme approach towards assessing bullying experience and used a continuous measure. While scores on the Bullying Experience Scale ranged from 2.20 to 6.20 (2 = bullying behavior happens almost every day; 6 = bullying behavior happened once or twice this school year), the majority of scores were in the more prosocial range, from 5.40 to 6.20 (5 = bullying behavior happens

about once a month; 6 = bullying behavior happened once or twice this school year). Even still, children who exhibited more bullying behavior also demonstrated the differences in social information processing found in studies of more extreme groups of bullies. This indicates that a focus only on those children who fit a more extreme classification of "bully" is likely missing others who exhibit this behavior less often but have the same social information processing deficits. This has implications for interventions, which generally target the more extreme groups. In addition, it indicates that school-wide programs, or at least programs that cast a broader net, might benefit those children who bully to a lesser extent.

In sum, bullying experience was a significant predictor of wrongfulness judgments, different kinds of moral justifications, hostile intent attributions, aggressive goals of victims, and aggressive responses, and in general these relations did not differ by the race/ethnicity of the characters involved in the interactions. Children with more bullying experience were less likely to rate a bully's actions as wrong and to use moral justifications that considered the victim's feelings, while they were more likely to use moral justifications that blamed the victim, perceive hostile intent in ambiguous situations, attribute aggressive goals to victims, and select aggressive responses. This may indicate that their aggressive tendencies supersede any racial/ethnic bias they may hold. In terms of intergroup bias, this is a positive finding. Specifically, it indicates that racial/ethnic bias does not affect bullies' actions towards others, therefore removing the possibility that the negative effects of racial/ethnic prejudice and discrimination compound the already negative consequences of bullying. It also indicates that interventions designed to change

intent attributions, aggressive goals, and aggressive responses do not necessarily need to take the intergroup context into account.

Social Reasoning and SIP: Grade, Gender, and Race/Ethnicity

Next, social reasoning and social information processing variables were examined for differences by racial/ethnic combination of characters in a situation, grade, and gender. For judgments, it was expected that participants would rate ingroup bullies' actions more favorably than outgroup bullies' actions, as has been found in previous research (Lawrence, 1991; McGlothlin & Killen, 2006; Sagar & Schofield, 1980). However, results showed that the relation was not that simple. Specifically, participants rated the bully's actions as less bad when the bully was African-American and the victim was European-American than for all other combinations of bullies and victims. Therefore, the racial/ethnic combination of characters was more important than just the race/ethnicity of the bully alone. These results may indicate use of a stereotype and sensitivity to intergroup bias. Regarding the stereotype, children may be thinking that it is okay for an African-American to exclude a European-American because they won't have much in common, and that it is worse for European-Americans or African-Americans to exclude each other since they will have things in common. Concerning sensitivity to intergroup bias, they gave a worse rating to the situation in which a European-American excludes an African-American, perhaps because that could be considered racist.

Justification use was not expected to differ by race/ethnicity of characters. However, previous studies have found that older children tend to use more multifaceted reasoning when considering situations involving exclusion by

race/ethnicity (Killen et al., 2002). Therefore, it was hypothesized that use of types of social reasoning would differ by grade. Contrary to expectations, 9th graders were not more likely than 6th graders to use social conventional reasoning. However, in partial support of the prediction that there would be grade differences in the use of stereotype reasoning, results showed that 9th graders were more likely to use stereotype reasoning to justify the bully's actions when the bully was African-American and the victim was European-American, than when the bully was European-American and the victim was European-American. There were no significant differences for 6th graders' use of stereotype reasoning. Because this type of reasoning was used in reference to the outgroup bully, it could indicate that, either because of societal stereotypes or because of experience, 9th graders think it is normal for African-Americans to exclude European-Americans. Alternatively, 9th graders could be drawing on the stereotype that African-Americans are aggressive, and therefore, are more likely than European-Americans to bully.

An ingroup positive bias/outgroup negative bias was also expected with intent attributions. In other words, participants (who were all European-American) would attribute less hostile intent towards European-American potential perpetrators than towards African-American potential perpetrators. Contrary to the hypothesis, however, children in this study were more likely to attribute hostile intent to European-American potential perpetrators than to African-American potential perpetrators. One explanation is that participants were trying not to appear to be prejudiced by attributing hostile intent to African-Americans. Alternatively, it could reflect their personal experiences. All participants attended schools that were

primarily European-American, and therefore were more likely to encounter European-American perpetrators. Research indicates that bullying is more likely between children of the same race/ethnicity than children of different races/ethnicities (Boulton, 1995). Finally, this finding could also represent a developmental change in attributions of intent. Previous research that found that European-American children in racially/ethnically homogeneous schools interpreted African-American potential perpetrators as committing a transgression more often than European-American potential perpetrators was conducted with younger children (1st and 4th graders; McGlothlin & Killen, 2006). Other research has found that cross-race friendships and peer interactions tend to decline with age (Rubin et al., 2006). It could be that older children (6th and 9th graders) are drawing more on their personal experiences with those of the same race/ethnicity in order to make their intent attributions, whereas younger children are drawing on outgroup negative/ingroup positive bias based on their inexperience with those of other races/ethnicities.

Concerning social goals of victims, no previous research was found that examined selection of goals based on the racial/ethnic composition of peer interactions. However, it was hypothesized that participants would draw on outgroup negative/ingroup positive bias when choosing goals for victims. Therefore, it was expected that children would be more likely to attribute aggressive goals to African-American victims than to European-American victims. As with judgments, though, results showed that the relation between variables was more complex than originally expected. Specifically, participants were more likely to select aggressive goals for victims in situations where the bully and victim were same race/ethnicity than in

situations where bullies and victims were of different races. Therefore, selection of aggressive goals for the victim did not depend solely on the race/ethnicity of the victim, as hypothesized, but instead on the racial/ethnic combination of the characters involved. As with intent attributions, it could be that participants were less likely to attribute aggressive goals to victims in cross-race situations for the fear of appearing to be prejudiced. However, it is also possible that, again, participants were drawing on their personal experiences. Since same-race interactions increase with age, by 6th and 9th grade most peer interactions are same-race. Therefore, participants have witnessed more bullying situations involving aggression between members of the same race/ethnicity, whether European-American or African-American. In addition, because of the explicit sensitivity, in schools especially, towards appearing prejudiced or racist, perhaps when cross-race interactions occur, students are less likely to exhibit aggression for fear of appearing racist.

As with social goals of victims, previous research had not examined differences in response selection by race/ethnicity of those involved in peer interactions. Again, the simple hypothesis that response selection would differ depending on the race/ethnicity of the victims was not supported. Differences by race/ethnicity of characters varied by gender and grade of participant. Specifically, boys were more likely than girls to choose aggressive responses when the victim was African-American and when both the victim and bully were European-American. This finding may be evidence of boys' negative outgroup bias, since they were more likely to attribute aggressive responses to African-American victims. And the

selection of aggressive responses in the situation where both bully and victim were European-American may be based on personal experience.

Grade differences were also found. Ninth graders were hypothesized to be more likely than 6th graders to evidence a negative outgroup bias in their selection of aggressive responses. Findings revealed that 9th graders were more likely than 6th graders to choose aggressive responses, but only in cross-race interactions and when both the bully and victim were African-American. Curiously, these results diverge from the findings concerning intent attributions and aggressive goals of victim, where participants were less likely to attribute hostile intent or aggressive goals in cross-race situations. However, they correspond to the interpretation concerning use of stereotype reasoning. Specifically, if 9th graders are drawing on the stereotype that African-Americans are more aggressive than European-Americans in selecting justifications for bullies' actions, perhaps this same stereotype also influences their choice of aggressive responses.

Finally, a novel aspect of this study was its inclusion of an assessment of the social goals of the bully in addition to social goals of the victim. Previous studies have examined only children's evaluations of the social goals of victims, asking bullies and aggressive children why they would respond a particular way if they were the victim in a situation (Camodeca & Goossens, 2005; Erdley & Asher, 1996). Since bullying can involve proactive aggression, as opposed to the reactive nature of a victim's response, it seemed important to get information from children on what they thought the bullies' goals were. It was expected that children with less experience bullying others would be more likely to consider bullies' goals as

aggressive, while children with more experience bullying would be more likely to choose relational or protective goals for bullies. However, bullying experience was not a significant predictor of aggressive, relational, or protective goals for bullies.

Differences, though, were found in participants' assessments of bullies' goals based on the race/ethnicity of the characters involved in the situation. Specifically, participants overall were more likely to attribute aggressive goals to a bully in a same-race situation than in a cross-race situation. These findings mirror the results found with intent attributions and social goals of victims. As discussed above, participants could be hesitant to attribute aggression or hostility in cross-race situations for fear of appearing racially/ethnically biased. Because the racial/ethnic factor is more explicit in a cross-race situation than in a same-race situation, it is possible that children are motivated to reduce or hide their prejudice. However, it is also possible, as discussed above, that participants were drawing on their personal experience when making these attributions and evaluations.

In sum, different aspects of social reasoning and social information processing appear to represent different aspects of racial/ethnic bias. First, participants' judgments, use of stereotype justifications, and selection of aggressive responses seem to be influenced by stereotypes that same-race children will have more in common than cross-race children, or that African-Americans are aggressive. The result is negative outgroup bias. Additionally, this bias was only found in 9th graders concerning justifications and responses, indicating an increase in bias with age in relation to justifications and aggressive responses. Second, when evaluating intent attributions, goals of victims, and goals of bullies, children were more likely to

perceive hostility and aggression in same-race situations than in cross-race situations. Whether this was due to fear of appearing biased or to actual personal experience, these findings indicate a sensitivity to issues of racial/ethnic bias as opposed to a negative outgroup bias.

SIP: Mediator of Social Reasoning and Bullying Experience

As predicted, social information processing influenced the relation between bullying experience and social reasoning. Specifically, aggressive goals of victims and aggressive responses partially mediated the relation between social reasoning (judgments, justifications that blamed the victim, justifications that sympathized with the victim) and bullying experience. These findings are an important first step towards testing the theory that social reasoning's effect on behavior works via social information processing (Arsenio & Lemerise, 2004). While previous research found that the relation between normative beliefs about aggression, which are similar to judgments, and aggressive behavior was mediated by intent attribution, aggressive response access, and aggressive response evaluation (Bellmore et al., 2005; Zelli et al., 1999), the current study is the first empirical examination of the effect of social information processing on the relation between justifications and bullying. In addition to finding that bullying experience was significantly predicted by justifications on their own, results showing that this relation was affected by social information processing provides additional information about how reasoning and bullying interact. This indicates that, in addition to the individual contribution of aspects of social reasoning and social information processing, the influence on

behavior of social reasoning and social information processing together needs to be taken into account in order to explain and ultimately affect behavior.

Limitations and Directions for Future Research

There were several limitations to this study. First, while its focus only on exclusion made it possible to examine both cross-race and same-race interactions, future studies need to examine and compare social reasoning and social information processing concerning multiple forms of bullying (i.e., physical, exclusion, verbal) in one study in order to obtain a more complete picture of bullying.

Second, in order to employ a range of measures, it was necessary to use only one ethnic group in this study. While most studies of racial/ethnic bias have used European-American samples, recent developmental research focusing on minority children's perspectives (i.e., Margie et al., 2005) has found interesting differences by race/ethnicity. Future studies can be conducted which expand the group of participants in terms of racial/ethnic background while focusing in more precisely on only one or two aspects of social reasoning and social information processing.

In addition, future research should examine how the relations between social reasoning, social information processing, and bully/victim experience may differ based on the level of intergroup contact and age. Differences in intent attribution and judgments of younger European-American children have been found depending on the racial/ethnic homogeneity/heterogeneity of school environments (McGlothlin & Killen, 2006; McGlothlin et al., 2005). These findings were not replicated here. It is unclear whether this was due to an age-related shift in attributing intent and making judgments, or as a function of intergroup contact.

On a similar note, another interesting and important avenue for future research is the examination of different racial/ethnic combinations of characters. The European-American/African-American comparison is an important one, but United States society is increasingly multi-ethnic and, therefore, research needs to take the multiple races/ethnicities that interact in society into account.

A third limitation of this study was the reliance on self-report measures, particularly for the assessment of bullying and victim experience. While self-report measures of bullying and victimization have shown adequate psychometric properties (Bendixen & Olweus, 1999; Olweus, 1994a), future studies could benefit from incorporating peer-report measures of bullying and victimization experience as well.

While the current study did not find that children's choice of bullies' social goals was related to bullying experience, results showed that children were more likely to attribute aggressive goals to bullies in same-race situations than in cross-race situations. The mixed findings based on this assessment indicate that it was a useful assessment. However, since it was the first time a measure like this was used to determine bullies' goals, it would likely benefit from further refinement and testing. The purpose for including this kind of question is still an important one when examining bullying. Previous studies of bullying and social information processing assessed only how children evaluate reactions to bullying. As with the current study, previous research found that bullies' differed in their evaluations of retaliation. This could indicate that evaluations concerning how bullies would react as a victim are the key indicators of differences in bullies' social information processing. However, it still leaves open the question of what distinguishes bullies' social information

processing from victims' social information processing in relation to the proactive aggression often exhibited by bullies. Future studies need to take into account how bullies process information from the bully's perspective in order to understand why they are thinking the way they are. Having a better understanding of bullies' thought processes from the bully's perspective will provide clues as to why they bully and ultimately how to change the behavior.

A surprising finding in the current study was that 9th graders were more likely than 6th graders to have bullied this school year. While previous research found that bullying tends to peak in 6th grade, studies also show that this increase is most prevalent when 6th grade entails a transition to middle school (Espelage & Swearer, 2003; Pellegrini, 2002). Most 9th graders included in this study had transitioned to their school at the beginning of the year, while the 6th grade sample was more mixed. Therefore, it is possible that, while 6th grade is an important developmental point in the bullying trajectory, transition times are also critical moments to examine. Instead of comparing students in specific grade levels, future work should compare students who are transitioning into a new situation (beginning of middle school and/or high school) with students who have already transitioned (i.e., 6th and 8th graders at the same middle school, 9th graders and 11th graders at the same high school).

It is also interesting to note that the expected relation between social reasoning, intent attributions, and bullying experience was not found in this study. A robust finding of research using the Crick and Dodge (1994) model of social information processing is that aggressive and non-aggressive children differ in their attributions of intent in ambiguous situations. Similarly, the present study found that

children with more bullying experience, like more aggressive children, were more likely to attribute hostile intent than were children with less bullying experience, like non-aggressive children. In addition, as mentioned earlier, previous mediational studies found that intent attributions mediated the relation between normative beliefs and aggressive behavior. It is possible that a similar relation was not found here because this is a study of bullying as opposed to aggression. Because bullying tends to involve proactive aggression, perhaps viewing others' intent as hostile is not an important predictor of bullying nor a critical component in the relation between social reasoning and bullying specifically. In other words, perhaps bullies do not need to perceive hostile intent in order to act in harmful ways. Future studies need to examine these findings in more depth. In addition, these findings indicate that future research needs to deliberately distinguish between bullying and aggression in order to fully explain bullying as a phenomenon distinct from aggression.

A final limitation of this research was its cross-sectional design. Despite this limitation, the current study and previous research (Bellmore et al., 2005) found relations between social reasoning, social information processing, and bullying experience similar to those found by research using longitudinal data (Zelli et al., 1999). However, because the data were cross-sectional, the mediation results are not evidence of causation. To fully understand the causal relations between social reasoning, social information processing, and bullying/victimization, future studies need to collect longitudinal data, to see if social reasoning and social information processing at previous points in time predict to bullying behavior at points later in time.

Lastly, future research needs to examine two findings in more depth. First, the mixed findings concerning indications of racial/ethnic bias in social reasoning and social information processing need to be explored. If children really are applying stereotypes and negative bias during some aspects of social information processing but not during others, better understanding these differences will shed light on how decisions are made in situations involving people of other races/ethnicities. Second, the mediational analyses in this study represent a first step in elucidating the mechanisms involved in the relation between moral reasoning and bullying. Much more work needs to be done to determine exactly how these mechanisms work.

Conclusions

In sum, the present study provides new information concerning the relations between social reasoning and bullying experience, and the effects of race/ethnicity on children's evaluations of bullying situations. Moral justifications are directly related to bullying experience, and this relation is partially mediated by children's evaluations of aggressive goals of victims and aggressive responses. This knowledge represent an important advance towards the application of moral reasoning literature in the explanation of the thought processes of children who bully, and towards a more complete understanding of the mechanisms involved.

Concerning race/ethnicity, this study shows that the relation between race/ethnicity and children's social reasoning and social information processing is complex. It is not just a matter of exhibiting ingroup positive bias and/or outgroup negative bias. Rather, bias is much more contextual, depending on the racial/ethnic composition of the people involved in a situation, and depending on the aspect of

social reasoning or social information processing being examined. It is a positive sign that children are not always evidencing racial/ethnic bias in their evaluations of bullying, but instead are ignoring race/ethnicity when making certain decisions concerning bullying situations. Sometimes race/ethnicity is not as relevant as other factors, and understanding when this is the case is the first step towards understanding why, and possibly how to reduce bias in other aspects of decision-making as well.

Tables

Table 1

Justification Coding

Category	Description
Moral	Fairness; justice; rights; empathy; feelings • Because [victim] probably did something to deserve it. • Because it might make other kids not want to hang out with [victim]. • Because [bully] might feel badly about it later. • Because it might hurt [victim]'s feelings. • Because [bully] doesn't like [victim]. • [Bully's] being mean. • [Bully] is excluding. • [Bully] is a bitch.
Social Conventional	Group functioning; social order; rules; customs • Because [victim] can't play as well as [bully] and the rest of the group. • [Victim] wouldn't fit in with the other kids. • Because the game is full. • Because [bully] won't get in trouble for doing it. • Because [bully] might get in trouble for doing it.
Stereotype	• [Bully] wouldn't be friends with [victim] because s/he's Black. • [Victim] wouldn't get along with the group because s/he's not like them. • Because that's just the way some kids act.

Table 2

Goals of Bully Coding

Category	Description
Aggression	Antisocial; intentionally harmful; trying to get back at or get something from victim. • Because she is trying to get [victim] to give her something. • Because she thinks it's fun. • Because she is trying to hurt [victim]'s feelings. • Because [victim] might have annoyed her.
Protective	Defensive; protecting oneself. • Because she is trying to protect herself.
Relational	To improve relationships with others. (If the answer given is about harming someone using relationships, then it is coded as Aggression.) • Because other kids were doing it. • Because she is trying to make [victim] like her. • Because she is trying to show the other kids in the class how tough she is.
Other	Anything that does not fit into one of the above categories.

Table 3

Response Selection Coding

Category	Description
Aggressive – Verbal	Antisocial; intentionally harmful; trying to get back at or get something from victim using words. • I would call [bully] a name.
Assertive	Taking charge; trying to deal with confrontation by self in positive manner; not giving in to exclusion. • I would tell [bully] it's not her decision and ask the other players. • He could ask the other kids in the club if he could join. • She could ask the other kids sitting at the table if she could sit down. • Join the game.
Aggressive – Physical	Antisocial; intentionally harmful; trying to get back at or get something from victim using physical violence. • I would hit [bully].
Adult Assistance	Asking an adult (parent, teacher, etc.) for help. • I would tell a teacher. • Tell a parent.

Response Selection Coding

Category	Description
Avoidance	Trying to keep away from confrontation; not engaging the bully or bystanders of the exclusion; not doing something to address the incident/issue. • I wouldn't ask to play anymore. • She could find other people to play with. • He could just sit at another table. • Get over it. • Mope about.
Aggressive – Relational	Antisocial; intentionally harmful; trying to get back at or get something from victim using relationships with other people. • Start another club that keeps [bully] out. • Invite [bully's] friends to the mall but not [bully].
Other	Any answers that do not fit the above categories.

Table 4

Goals of Victim Coding

Category	Description
Aggression	Antisocial; intentionally harmful; trying to get back at or get something from victim. • Because I would be trying to get back at her. • Because I would be trying to hurt her feelings.
Protective	Defensive; protecting oneself. • Because I would be trying to avoid her. • Because I would be trying to protect myself.
Relational	To improve relationships with others. (If the answer given is about harming someone using relationships, then it is coded as Aggression.) • Because I would be trying to work out the problem peacefully. • Because I would be trying to make her like me. • Because I would be trying to make sure that other kids didn't think I was a push-over.
Other	Anything that does not fit into one of the above categories.

Table 5

Race/ethnicity of potential perpetrators and victims in Intent Attribution scenarios

Scenario Description	Race/ethnicity of Perpetrator	Race/ethnicity of Victim
Spilled milk on participant	African-American	European-American
Participant's new cell phone broken	African-American	European-American
Participant's new shoes muddied	European-American	European-American
Spilled paint on participant's art project	European-American	European-American

Table 6

Race/ethnicity of bullies and victims in Exclusion Bullying scenarios

Scenario Description	Race/ethnicity of Bully	Race/ethnicity of Victim
Not allowed to join basketball game	European-American	African-American
Not allowed to sit at lunch table	African-American	African-American
Not allowed to join music club	European-American	European-American
Not invited to mall	African-American	European-American

Table 7

Factor Loadings for Bully/Victim Experience measure

	1	2	3	4	5
Verbally bullied this year?	.848	.202	.051	.027	-.027
Could you join in picking on a student you don't like?	.639	-.025	-.047	.099	-.143
Fun to make trouble for other students?	.560	.122	.050	-.138	.198
Physically bullied this year?	.512	.089	.052	.031	.036
Seen someone else getting picked on this year?	.428	.307	.006	-.101	-.001
Experienced verbal bullying this year?	.197	.754	.010	.171	.047
Experienced physical bullying this year?	.050	.669	-.101	.085	.069
Comforted another student who was picked on this year?	-.061	-.552	.055	.200	-.066
Experienced exclusion bullying this year?	.115	.518	.119	-.111	.069
Bullied with exclusion this year?	.270	.271	.134	-.204	-.012
Enjoy going to school?	.036	.042	.816	.109	.010
Enjoy classes?	.106	.141	.650	-.036	-.026
Participated in school after-school activities this year?	-.184	-.066	.260	.224	.063
Could you defend a student who is being picked on?	.025	-.075	.136	.009	.051
Hung out with kids from school on weekends this year?	.066	.037	-.011	.557	.243

Factor Loadings for Bully/Victim Experience measure

	1	2	3	4	5
Participated in non-school after-school activities this year?	-.068	.046	.052	.478	.074
Invited someone to join group for lunch this year?	-.078	-.170	.171	.446	-.075
Feel you are better liked than other students?	-.313	.096	-.037	.329	.162
Like working on group projects?	.168	-.121	-.018	.301	.067
How many good friends outside of class?	.050	.090	-.026	.159	.620
How many good friends in your class?	-.123	.130	.315	.222	.568

1 = Bullying; 2 = Victimization; 3 = Enjoy School; 4 = Sociability; 5 = Friends

Table 8

Bullying Experience Scale items

1. Since the beginning of the school year, how often have you said mean things, teased, or called a weaker or less popular student names (NOT in a joking way)?
2. Do you think you could join in picking on a student whom you don't like?
3. Do you think it's fun to make trouble for other students?
4. Since the beginning of the school year, how often have you hit, kicked, or pushed another student (NOT in a joking way) who was weaker or less popular than you?
5. Since the beginning of the school year, how often have you <u>not</u> let a weaker or less popular student sit with you at lunch or hang out with you at recess/free periods?

Table 9

Victim Experience Scale items

1. Since the beginning of the school year, how often have stronger or more popular kids said mean things to you, teased you, or called you names (NOT in a joking way)?
2. Since the beginning of this school year, how often have stronger or more popular kids <u>not</u> let you sit with them at lunch or hang out with them at recess/free periods?
3. Since the beginning of the school year, how often have stronger or more popular kids hit, kicked, or pushed you (NOT in a joking way)?

Table 10

Correlations between social reasoning, social information processing, and bullying experience variables

	1	2	3	4	5	6	7
1.Bullying Experience		.42**	-.24**	.24**	-.21**	-.38**	-.50**
Social Reasoning:							
2.Judgments	.42**		-.26**	.30**	.01	-.17**	-.21**
3.Blaming Victim Justification	-.26**	-.26**		-.27**	.09	.17**	.20**
4.Victim's Feelings Justification	.24**	.30**	-.27**		-.03	-.15*	-.18**
SIP:							
5.Intent Attribution	-.21**	.01	.09	-.03		.19**	.11
6.Aggressive Victim Goals	-.38**	-.17**	.17**	-.15*	.19**		.66**
7.Aggressive Responses	-.50**	-.21**	.20**	-.18**	.11	.66**	

** Correlation is significant at the 0.01 level 2-tailed.
* Correlation is significant at the 0.05 level 2-tailed.

Table 11

Results of Regressions testing Aggressive Goals of Victim as a Mediator of Judgments and Bullying Experience

	B	SE	P	R^2	Adj. R^2
Judgments predicting Bullying Experience	.350	.047	.000	.177	.174
Judgments predicting Aggressive Goals of Victim	-.046	.017	.007	.027	.024
Aggressive Goals of Victim predicting Bullying Experience, controlling for Judgments	-.981	.166	.000	.275	.270

Table 12

Results of Regressions testing Aggressive Responses as a Mediator of Judgments and Bullying Experience

	B	SE	P	R^2	Adj. R^2
Judgments predicting Bullying Experience	.350	.047	.000	.177	.174
Judgments predicting Aggressive Responses	-.061	.018	.001	.042	.039
Aggressive Responses predicting Bullying Experience, controlling for Judgments	-1.250	.151	.000	.350	.345

Table 13

Results of Regressions testing Aggressive Goals of Victim as a Mediator of Blaming Victim Justification and Bullying Experience

	B	SE	P	R^2	Adj. R^2
Blaming Victim Justification predicting Bullying Experience	-.587	.151	.000	.055	.051
Blaming Victim Justification predicting Aggressive Goals of Victim	.140	.049	.005	.030	.026
Aggressive Goals of Victim predicting Bullying Experience, controlling for Blaming Victim Justification	-1.084	.177	.000	.176	.169

Table 14

Results of Regressions testing Aggressive Responses as a Mediator of Blaming Victim Justification and Bullying Experience

	B	SE	P	R^2	Adj. R^2
Blaming Victim Justification predicting Bullying Experience	-.587	.151	.000	.055	.051
Blaming Victim Justification predicting Aggressive Responses	.177	.053	.001	.041	.037
Aggressive Responses predicting Bullying Experience, controlling for Blaming Victim Justification	-1.378	.159	.000	.268	.262

Table 15

Results of Regressions testing Aggressive Goals of Victim as a Mediator of Victim's Feelings Justification and Bullying Experience

	B	SE	P	R^2	Adj. R^2
Victim's Feelings Justification predicting Bullying Experience	.457	.117	.000	.056	.053
Victim's Feelings Justification predicting Aggressive Goals of Victim	-.093	.038	.017	.022	.018
Aggressive Goals of Victim predicting Bullying Experience, controlling for Victim's Feelings Justification	-1.077	.177	.000	.175	.169

Table 16

Results of Regressions testing Aggressive Responses as a Mediator of Victim's Feelings Justification and Bullying Experience

	B	SE	P	R^2	Adj. R^2
Victim's Feelings Justification predicting Bullying Experience	.457	.117	.000	.056	.053
Victim's Feelings Justification predicting Aggressive Responses	-.121	.041	.003	.032	.028
Aggressive Responses predicting Bullying Experience, controlling for Victim's Feelings Justification	-1.378	.159	.000	.270	.264

Table 17

Results Summary: Bullying Experience as Predictor

Judgments	
	More bullying → Lower ratings of wrongfulness of bullying, for all racial/ethnic combinations
Justifications	
	More bullying → More likely to blame victim, for all situations except when both bully and victim are European-American
	More bullying → Less likely to take victim's feelings into account, for all racial/ethnic combinations
	Bullying not related to use of stereotype reasoning
Intent Attribution	
	More bullying → More hostile intent, regardless of race/ethnicity of potential perpetrator
Goals of Bully	
	Bullying and goals not related
Response Selection	
	More bullying → More aggressive responses, for all situations
	More bullying → Less assertive responses, except when both the bully and victim were African-American
Goals of Victim	
	More bullying → More aggressive goals for all victims
	More bullying → Less relational goals for European-American victims

Table 18

Results Summary: Race/Ethnicity Differences

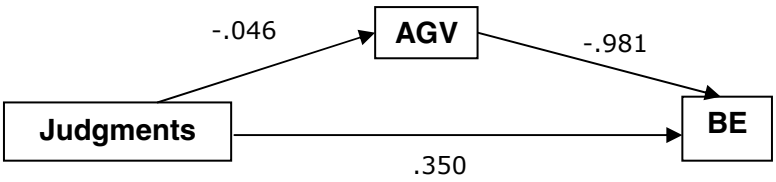
Social Reasoning	
Judgments	Bully's actions rated less bad when the bully was African-American and the victim was European-American than for all other combinations of bullies and victims.
Justifications	When the victim was European-American, 9th graders were more likely to use stereotype reasoning when the bully was African-American than European-American.
Social Information Processing	
Goals of Bully	More likely to attribute aggressive goals to a bully in a same-race situation than in a cross-race situation.
Response Selection	9th graders were more likely than 6th graders to choose aggressive responses in cross-race situations, and when both the bully and victim were African-American.
Goals of Victim	More likely to selection aggressive goals for victims in a same-race situation than in a cross-race situation.

Table 19

Results Summary: Judgments and Bullying Mediation

Aggressive Goals of Victim (AGV) partially mediated the relation between Judgments and Bullying Experience (BE).

- Indirect effect = .045; total effect = .350



Aggressive Responses (AR) partially mediated the relation between Judgments and Bullying Experience (BE).

- Indirect effect = .076; total effect = .350

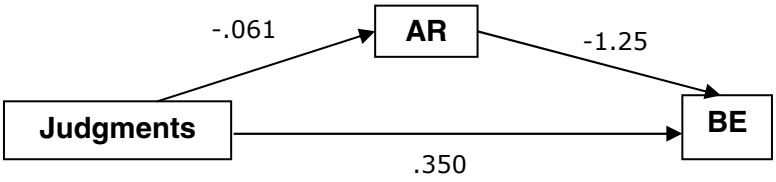
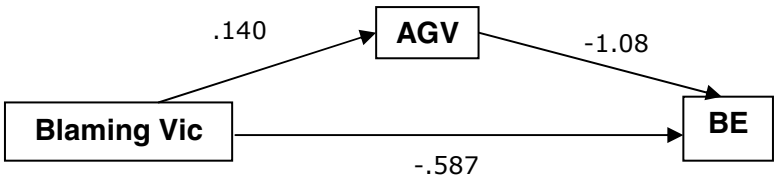


Table 20

Results Summary: Blaming Victim Justification and Bullying Mediation

Aggressive Goals of Victim partially mediated the relation between Blaming Victim Justification and Bullying Experience.

- Indirect effect = -.152; total effect = -.587



Aggressive Responses partially mediated the relation between Blaming Victim Justification and Bullying Experience.

- Indirect effect = -.244; total effect = -.587

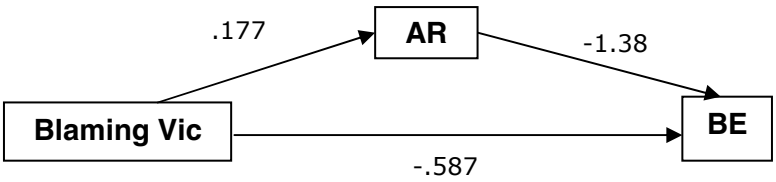
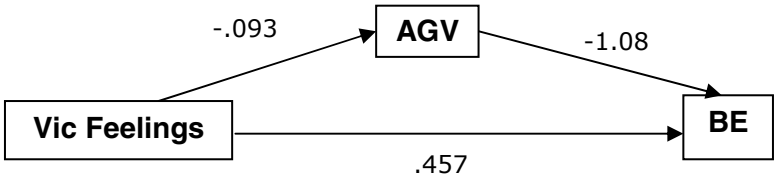


Table 21

Results Summary: Victim's Feelings Justification and Bullying Mediation

Aggressive Goals of Victim partially mediated the relation between Victim's Feelings Justification & Bullying Experience.

- Indirect effect = .100; total effect = .457



Aggressive Responses partially mediated the relation between Victim's Feelings Justification & Bullying Experience.

- Indirect effect = .167; total effect = .457

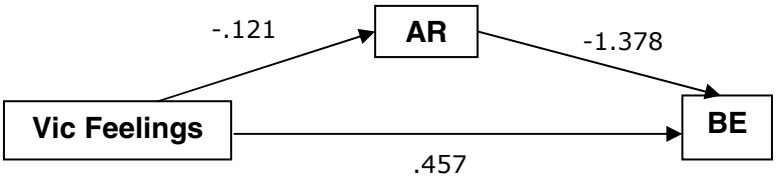
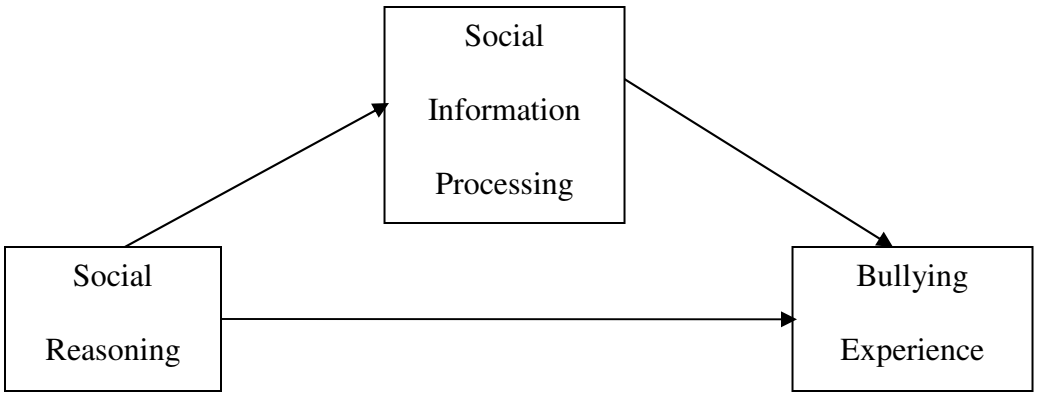


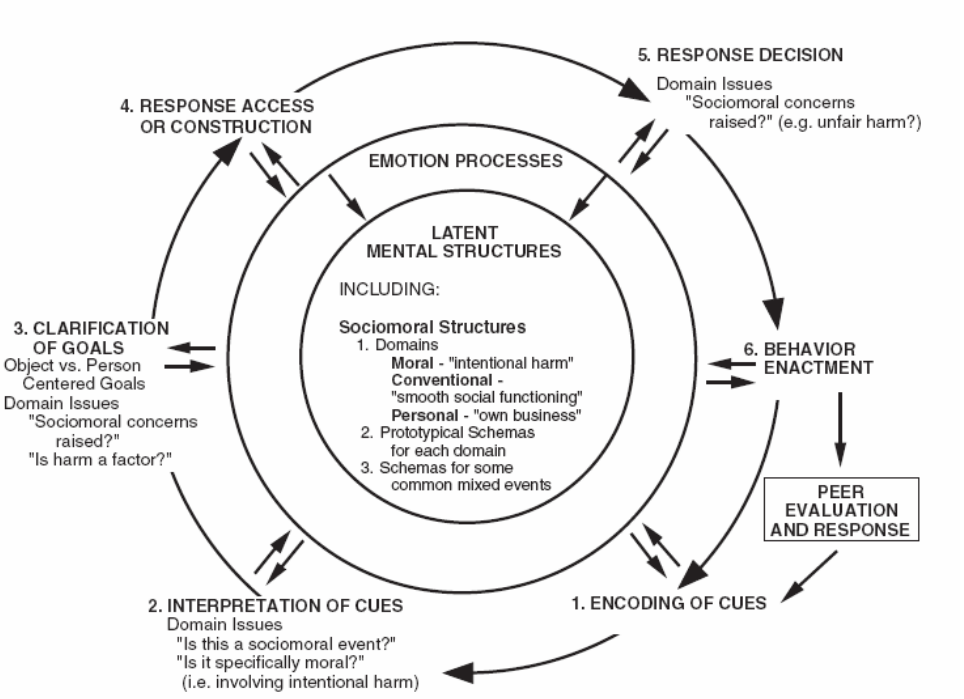
Figure 1

Proposed mediational relation between social reasoning, social information processing, and bullying experience.



Appendix A

Arsenio and Lemerise's (2004) revision of Crick and Dodge's (1994) Social Information Processing Model integrating Social Cognitive Domain Theory



Appendix B

University of Maryland
Peer Relationship Survey

Dr. Melanie Killen and Nancy Geyelin Margie

Instructions:
We are interested in how kids and teens think about the stories described in this survey. All of the characters in the stories are students about your age.

This is not a test. There are no right or wrong answers. Please respond to these questions as honestly as you can. If there is not a "perfect" answer, please choose the **best one** of the available choices. Please complete the entire form.

All of your answers will be confidential; only members of the University of Maryland research team will see the completed surveys, and we will not reveal your answers to anyone. In addition, because we are not using your name on the form, no one will know which answers are yours.

Please feel free to ask any questions, either now or later. Thank you very much!

Initials: _____ **School**: _____
Date of Birth: _____ **Grade**: _____

Race/Ethnicity (circle all that apply):
European-American/White African-American/Black Hispanic/Latino Asian-American
Other: _____

For more information, please contact:
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University of Maryland
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3304 Benjamin Building
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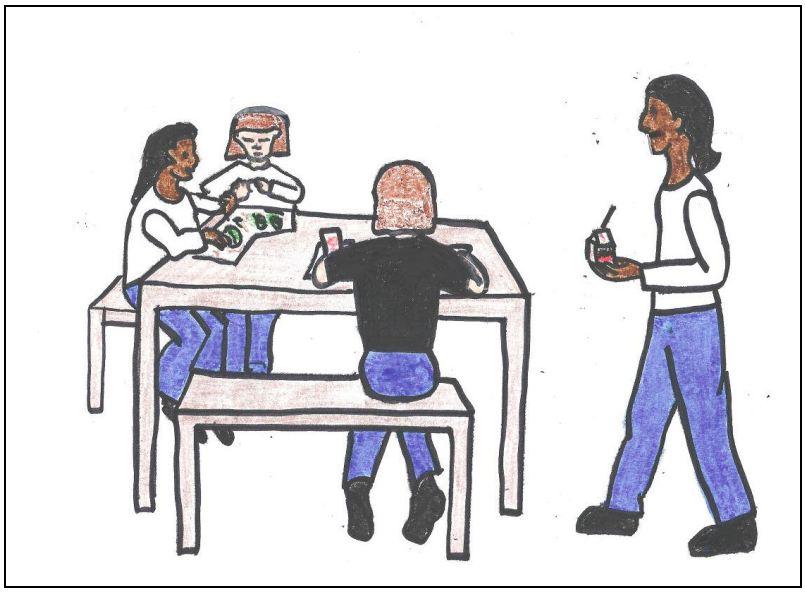
SECTION 1

Please read the following stories and look at the pictures. Imagine that you are the character in the **black shirt** in each picture. Please fill in the circle next to ONE answer to each question.

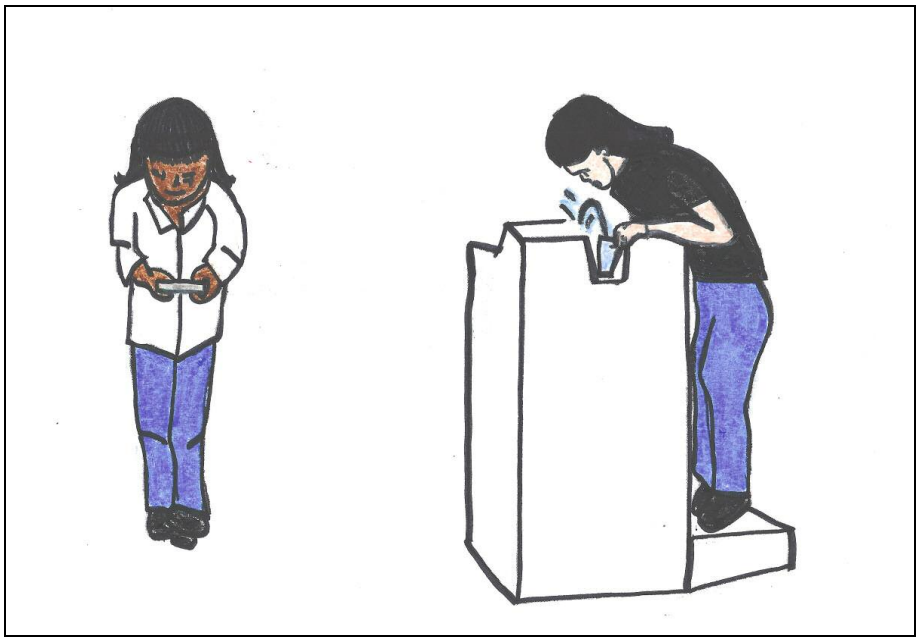
1. Imagine that you are sitting at the lunch table at school, eating lunch. You look up and see another student coming over to your table with a carton of milk. You turn around to eat your lunch, and the next thing that happens is that the student spills milk all over your back. The milk gets your shirt all wet.



A. Why did the student get milk all over your back?
   - ○ The student slipped on something.
   - ○ The student just does stupid things like that to you.
   - ○ The student wanted to make fun of you.
   - ○ The student wasn't looking and didn't see you.

B. Do you think the student:
   - ○ Tried to pour milk on you?
   - ○ Poured milk on you by accident?

2. Imagine that you brought your new cell phone to school today. You saved up your money to buy the cell phone and you want to show it to the other kids at school. You let another kid play with it for a few minutes while you go get a drink of water. When you get back you see that the kid has broken your brand new cell phone.



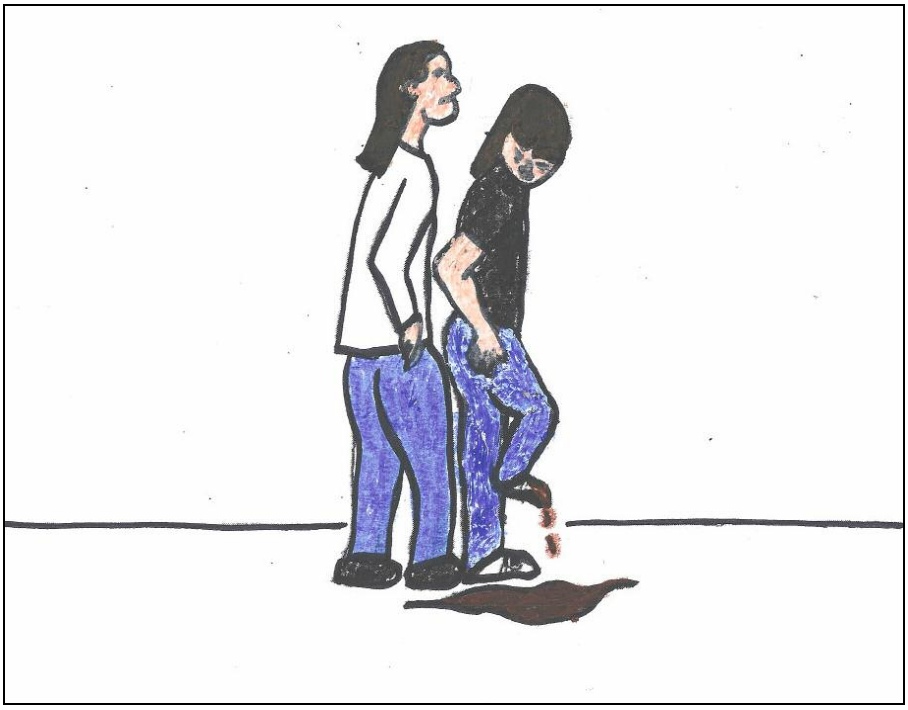
A. Why did the kid break your cell phone?

- ○ The cell phone wasn't made well.
- ○ The cell phone slipped out of the kid's hands.
- ○ The kid was mad at you.
- ○ The kid was jealous of you.

B. Do you think the kid broke it:

- ○ On purpose?
- ○ By accident?

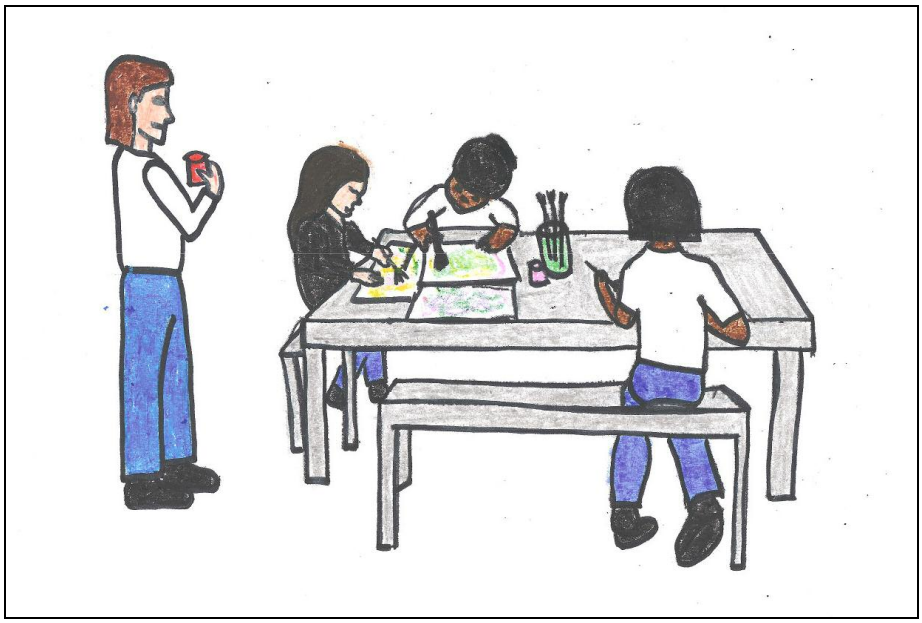
3. Imagine that you are walking to school and you're wearing your brand new sneakers. You really like your new sneakers and this is the first day you have worn them. All of a sudden, you are bumped from behind by another student. You stumble and fall into a mud puddle and your new sneakers get muddy.



A. Why did the student bump you from behind?
   - ○ The student was being mean.
   - ○ The student was fooling around and pushed too hard by accident.
   - ○ The student was running down the street and didn't see you.
   - ○ The student was trying to push you down.

B. Do you think the student:
   - ○ Bumped you on purpose?
   - ○ Bumped you by accident?

4. Imagine that you have finished an art project for school. You've worked on it for a long time and you're really proud of it. Another kid comes over to look at your project. The kid is holding a jar of paint. You turn away for a minute and when you look back the kid has spilled paint all over your art project. You worked on the project for a long time and now it's messed up.



A. Why did the kid spill paint on your project?

- ○ The kid is mean.
- ○ The kid dropped the paint by accident.
- ○ The kid is kind of clumsy.
- ○ The kid wanted to mess up your project.

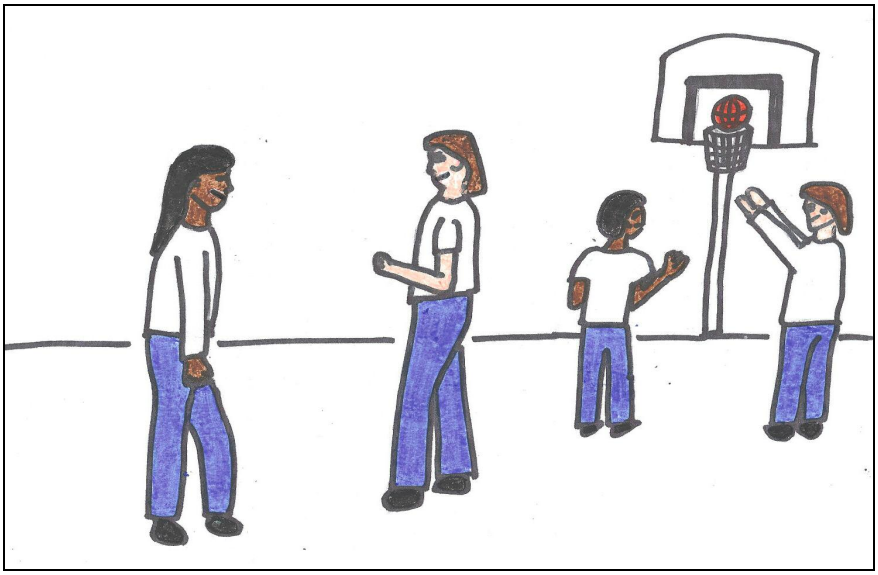
B. Do you think the kid spilled the paint:

- ○ On purpose?
- ○ By accident?

SECTION 2

Please read the following stories, look at the pictures, and answer the following questions.

1. At recess, Jenny sees a group of kids playing basketball. Jenny walks up to and asks if she can play too. Samantha, one of the players, says "no way". Samantha has been doing this to Jenny for the past few weeks.



Jenny **Samantha**

A. How good or bad is it for Samantha to do this?

○	○	○	○	○	○	○	○
Very, Very Good	Very Good	Somewhat Good	A Little Good	A Little Bad	Somewhat Bad	Very Bad	Very, Very Bad

B. Why is it good or bad for Samantha to do this? (Choose UP TO 3 answers. If you choose more than one answer, number your answers in order of importance.)

____ Because Jenny probably did something to deserve it.

____ Because Samantha won't get in trouble for doing it.

____ Because that's just the way some kids act.

____ Because it might make other kids not want to hang out with Jenny.

____ Because Samantha might get in trouble for doing it.

____ Because Samantha might feel badly about it later.

____ Because Jenny can't play as well as Samantha and the rest of the group.

____ Because it might hurt Jenny's feelings.

____ Other: _____

C. Why do you think Samantha is doing this? (Choose ONE answer.)

- ○ Because she is trying to get Jenny to give her something.
- ○ Because she thinks it's fun.
- ○ Because she is trying to hurt Jenny's feelings.
- ○ Because Jenny might have annoyed her.
- ○ Because other kids were doing it.
- ○ Because she is trying to protect herself.
- ○ Because she is trying to make Jenny like her.
- ○ Because she is trying to show the other kids in the class how tough she is.
- ○ Other: _____

D. What could Jenny do next?

1. _____
2. _____
3. _____

E. What would you do if you were Jenny? (Choose ONE answer.)

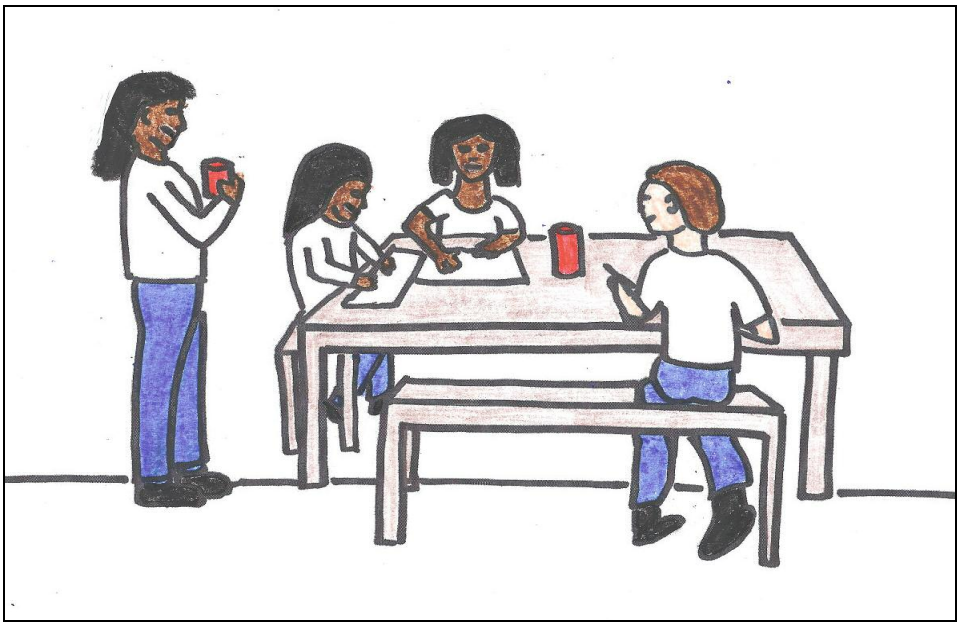
- ○ I would call Samantha a name.
- ○ I would tell Samantha it's not her decision and ask the other players.
- ○ I would hit Samantha.
- ○ I would tell a teacher.
- ○ I wouldn't ask to play anymore.
- ○ Other: _____

F. Why would you do this? (Choose ONE answer.)

- ○ Because I would be trying to get back at her.
- ○ Because I would be trying to hurt her feelings.
- ○ Because I would be trying to avoid her.
- ○ Because I would be trying to protect myself.
- ○ Because I would be trying to work out the problem peacefully.
- ○ Because I would be trying to make her like me.
- ○ Because I would be trying to make sure that other kids didn't think I was a push-over.
- ○ Other: _____

2. At lunch, Megan goes to sit down at a lunch table with a group of kids. Brittany, one of the kids sitting at the table, tells Megan she can't sit there even though there are empty seats. Brittany has been doing this to Megan for the past few weeks.

Megan Brittany



A. How good or bad is it for Brittany to do this?

○	○	○	○	○	○	○	○
Very, Very Good	Very Good	Somewhat Good	A Little Good	A Little Bad	Somewhat Bad	Very Bad	Very, Very Bad

B. Why is it good or bad for Brittany to do this? (Choose UP TO 3 answers. If you choose more than one answer, number your answers in order of importance.)

____ Because Megan probably did something to deserve it.

____ Because Brittany won't get in trouble for doing it.

____ Because that's just the way some kids act.

____ Because it might make other kids not want to hang out with Megan.

____ Because Brittany might get in trouble for doing it.

____ Because Brittany might feel badly about it later.

____ Because Megan wouldn't fit in with Brittany and the rest of the group.

____ Because it might hurt Megan's feelings.

____ Other: _____

C. Why do you think Brittany is doing this? (Choose ONE answer.)

- ○ Because she is trying to get Megan to give her something.
- ○ Because she thinks it's fun.
- ○ Because she is trying to hurt Megan's feelings.
- ○ Because Megan might have annoyed her.
- ○ Because other kids were doing it.
- ○ Because she is trying to protect herself.
- ○ Because she is trying to make Megan like her.
- ○ Because she is trying to show the other kids in the class how tough she is.
- ○ Other: _____

D. What could Megan do next?

1. _____
2. _____
3. _____

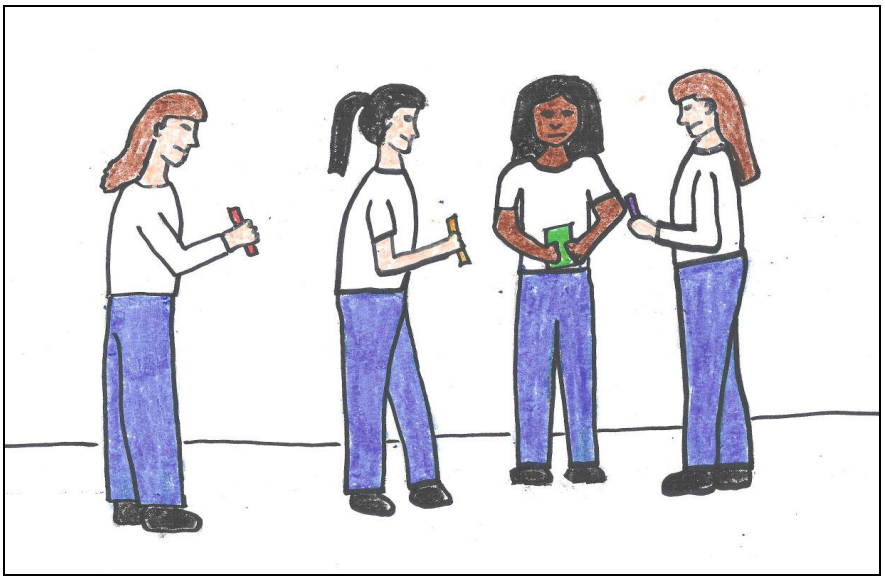
E. What would you do if you were Megan? (Choose ONE answer.)

- ○ I would call Brittany a name.
- ○ I would tell Brittany to stop telling me where to sit.
- ○ I would hit Brittany.
- ○ I would tell a teacher.
- ○ I would stop trying to sit at Brittany's table.
- ○ Other: _____

F. Why would you do this? (Choose ONE answer.)

- ○ Because I would be trying to get back at her.
- ○ Because I would be trying to hurt her feelings.
- ○ Because I would be trying to avoid her.
- ○ Because I would be trying to protect myself.
- ○ Because I would be trying to work out the problem peacefully.
- ○ Because I would be trying to make her like me.
- ○ Because I would be trying to make sure that other kids didn't think I was a push-over.
- ○ Other: _____

3. A group of kids at school have started a music club that gets together every week to trade CDs and talk about music. Kayla really likes music and wants to join the club, which is like one she was part of last year. But this year, every time she has asked if she can join the club, Nicole, one of the members, tells her to go away.



Kayla **Nicole**

A. How good or bad is it for Nicole to do this?

○	○	○	○	○	○	○	○
Very, Very Good	Very Good	Somewhat Good	A Little Good	A Little Bad	Somewhat Bad	Very Bad	Very, Very Bad

B. Why is it good or bad for Nicole to do this? (Choose UP TO 3 answers. If you choose more than one answer, number your answers in order of importance.)

____ Because Kayla probably did something to deserve it.

____ Because Nicole won't get in trouble for doing it.

____ Because that's just the way some kids act.

____ Because it might make other kids not want to hang out with Kayla.

____ Because Nicole might get in trouble for doing it.

____ Because Nicole might feel badly about it later.

____ Because Kayla doesn't like the same music as the other kids in the club.

____ Because it might hurt Kayla's feelings.

____ Other: _____

C. Why do you think Nicole is doing this? (Choose ONE answer.)

- ○ Because she is trying to get Kayla to give her something.
- ○ Because she thinks it's fun.
- ○ Because she is trying to hurt Kayla's feelings.
- ○ Because Kayla might have annoyed her.
- ○ Because other kids were doing it.
- ○ Because she is trying to protect herself.
- ○ Because she is trying to make Kayla like her.
- ○ Because she is trying to show the other kids in the class how tough she is.
- ○ Other: _____

D. What could Kayla do next?

1. _____
2. _____
3. _____

E. What would you do if you were Kayla? (Choose ONE answer.)

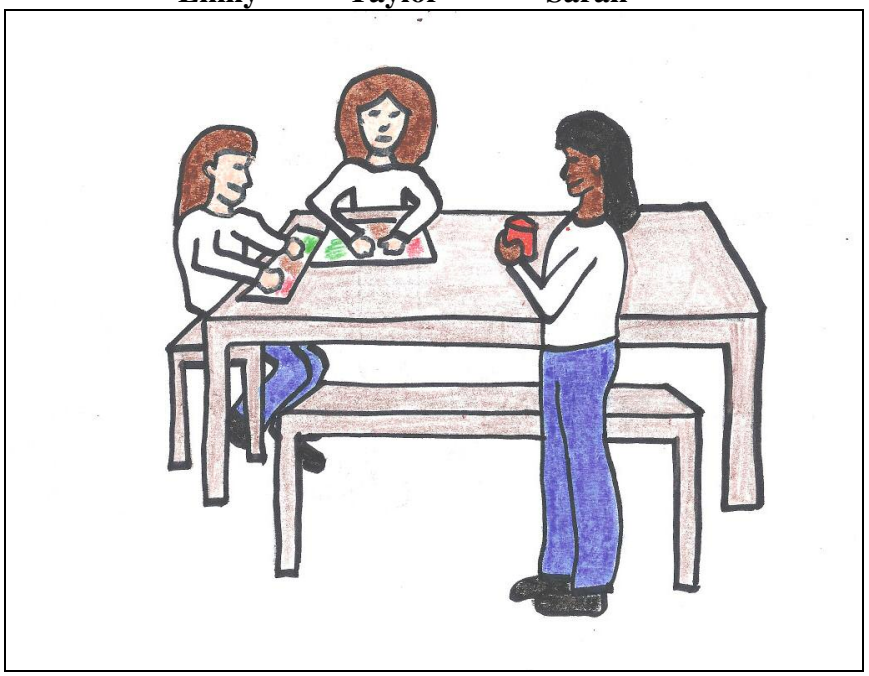
- ○ I would call Nicole a name.
- ○ I would tell Nicole it's not her decision and ask someone else in the club.
- ○ I would hit Nicole.
- ○ I would tell a teacher.
- ○ I would stop asking to join.
- ○ Other: _____

F. Why would you do this? (Choose ONE answer.)

- ○ Because I would be trying to get back at her.
- ○ Because I would be trying to hurt her feelings.
- ○ Because I would be trying to avoid her.
- ○ Because I would be trying to protect myself.
- ○ Because I would be trying to work out the problem peacefully.
- ○ Because I would be trying to make her like me.
- ○ Because I would be trying to make sure that other kids didn't think I was a push-over.
- ○ Other: _____

4. Taylor and Emily are sitting together at lunch. Sarah comes up to their table, tells them that she and a bunch of other kids are going to the mall after school, and asks Emily if she wants to come. She does not invite Taylor. Sarah has been doing this for a few weeks.

Emily Taylor Sarah



A. How good or bad is it for Sarah to do this?

○	○	○	○	○	○	○	○
Very, Very Good	Very Good	Somewhat Good	A Little Good	A Little Bad	Somewhat Bad	Very Bad	Very, Very Bad

B. Why is it good or bad for Sarah to do this? (Choose UP TO 3 answers. If you choose more than one answer, number your answers in order of importance.)

____ Because Taylor probably did something to deserve it.

____ Because Sarah won't get in trouble for doing it.

____ Because that's just the way some kids act.

____ Because it might make other kids not want to hang out with Taylor.

____ Because Sarah might get in trouble for doing it.

____ Because Sarah might feel badly about it later.

____ Because Taylor wouldn't fit in with the other kids going to the mall.

____ Because it might hurt Taylor's feelings.

____ Other: _____

C. Why do you think Sarah is doing this? (Choose ONE answer.)

- ○ Because she is trying to get Taylor to give her something.
- ○ Because she thinks it's fun.
- ○ Because she is trying to hurt Taylor's feelings.
- ○ Because Taylor might have annoyed her.
- ○ Because other kids were doing it.
- ○ Because she is trying to protect herself.
- ○ Because she is trying to make Taylor like her.
- ○ Because she is trying to show the other kids in the class how tough she is.
- ○ Other: _____

D. What could Taylor do next?

1. _____
2. _____
3. _____

E. What would you do if you were Taylor? (Choose ONE answer.)

- ○ I would call Sarah a name.
- ○ I would ask Sarah if I could go too.
- ○ I would hit Sarah.
- ○ I would tell a teacher.
- ○ I would just ignore Sarah and go home after school.
- ○ Other: _____

F. Why would you do this? (Choose ONE answer.)

- ○ Because I would be trying to get back at her.
- ○ Because I would be trying to hurt her feelings.
- ○ Because I would be trying to avoid her.
- ○ Because I would be trying to protect myself.
- ○ Because I would be trying to work out the problem peacefully.
- ○ Because I would be trying to make her like me.
- ○ Because I would be trying to make sure that other kids didn't think I was a push-over.
- ○ Other: _____

Section 3

Please fill in the circle next to ONE answer for each question.

1. Do you enjoy going to school?
   - ○ I always do.
   - ○ I usually do.
   - ○ About half the time.
   - ○ I usually don't.
   - ○ I never do.
2. Do you enjoy your classes?
   - ○ Yes, all of them.
   - ○ Almost all of them.
   - ○ One or two.
   - ○ No, none of them.
3. Do you feel that you are better liked than other students in your class?
   - ○ No, never.
   - ○ Yes, once in a while.
   - ○ Yes, fairly often.
   - ○ Yes, often.
   - ○ Yes, very often.
4. Since the beginning of the school year, how often have stronger or more popular kids said mean things to you, teased you, or called you names (NOT in a joking way)?
   - ○ It hasn't happened this school year.
   - ○ Once or twice this school year.
   - ○ About once a month.
   - ○ About once a week.
   - ○ About 2 or 3 times a week.
   - ○ Almost every day.
   - ○ Several times a day.
5. Do you like working on group projects at school?
   - ○ No, never.
   - ○ Yes, once in a while.
   - ○ Yes, fairly often.
   - ○ Yes, often.
   - ○ Yes, very often.

6. Since the beginning of this school year, how often have stronger or more popular kids not let you sit with them at lunch or hang out with them at recess/free periods?
   - ○ It hasn't happened this school year.
   - ○ Once or twice this school year.
   - ○ About once a month.
   - ○ About once a week.
   - ○ About 2 or 3 times a week.
   - ○ Almost every day.
   - ○ Several times a day.

7. Do you think it's fun to make trouble for other students?
   - ○ No, never.
   - ○ Yes, once in a while.
   - ○ Yes, fairly often.
   - ○ Yes, often.
   - ○ Yes, very often.

8. Since the beginning of the school year, how often have stronger or more popular kids hit, kicked, or pushed you (NOT in a joking way)?
   - ○ It hasn't happened this school year.
   - ○ Once or twice this school year.
   - ○ About once a month.
   - ○ About once a week.
   - ○ About 2 or 3 times a week.
   - ○ Almost every day.
   - ○ Several times a day.

9. Since the beginning of the school year, how often have you invited someone to join you or your group of friends at lunch or at recess/free periods?
   - ○ It hasn't happened this school year.
   - ○ Once or twice this school year.
   - ○ About once a month.
   - ○ About once a week.
   - ○ About 2 or 3 times a week.
   - ○ Almost every day.
   - ○ Several times a day.

10. Since the beginning of the school year, how often have you not let a weaker or less popular student sit with you at lunch or hang out with you at recess/free periods?
    - ○ It hasn't happened this school year.
    - ○ Once or twice this school year.
    - ○ About once a month.
    - ○ About once a week.
    - ○ About 2 or 3 times a week.
    - ○ Almost every day.
    - ○ Several times a day.

11. Since the beginning of the school year, how often have you hung out with kids from school on the weekends?
    - ○ It hasn't happened this school year.
    - ○ Once or twice this school year.
    - ○ About once a month.
    - ○ About once a week.
    - ○ Almost every Saturday and Sunday.

12. Since the beginning of the school year, how often have you said mean things, teased, or called a weaker or less popular student names (NOT in a joking way)?
    - ○ It hasn't happened this school year.
    - ○ Once or twice this school year.
    - ○ About once a month.
    - ○ About once a week.
    - ○ About 2 or 3 times a week.
    - ○ Almost every day.
    - ○ Several times a day.

13. Do you think you could defend a student who is being picked on?
    - ○ Yes.
    - ○ Yes, maybe.
    - ○ I don't know.
    - ○ No, I don't think so.
    - ○ No.

14. Since the beginning of this school year, how often have you participated in school-related after-school activities?
    - ○ It hasn't happened this school year.
    - ○ Once or twice this school year.
    - ○ About once a month.
    - ○ About once a week.
    - ○ About 2 or 3 times a week.
    - ○ Every day.

15. Since the beginning of the school year, how often have you participated in non-school-related after-school activities?
    - ○ It hasn't happened this school year.
    - ○ Once or twice this school year.
    - ○ About once a month.
    - ○ About once a week.
    - ○ About 2 or 3 times a week.
    - ○ Every day.

16. Since the beginning of the school year, how often have you hit, kicked, or pushed another student (NOT in a joking way) who was weaker or less popular than you?
    - ○ It hasn't happened this school year.
    - ○ Once or twice this school year.
    - ○ About once a month.
    - ○ About once a week.
    - ○ About 2 or 3 times a week.
    - ○ Almost every day.
    - ○ Several times a day.

17. Since the beginning of the school year, how often have you seen someone else getting picked on?
    - ○ It hasn't happened this school year.
    - ○ Once or twice this school year.
    - ○ About once a month.
    - ○ About once a week.
    - ○ About 2 or 3 times a week.
    - ○ Almost every day.
    - ○ Several times a day.

18. Do you think you could join in picking on a student whom you don't like?
    - ○ Yes.
    - ○ Yes, maybe.
    - ○ I don't know.
    - ○ No, I don't think so.
    - ○ No.

19. Since the beginning of the school year, how often have you comforted another student who had been picked on?
    - ○ It hasn't happened this school year.
    - ○ Once or twice this school year.
    - ○ About once a month.
    - ○ About once a week.
    - ○ About 2 or 3 times a week.
    - ○ Almost every day.
    - ○ Several times a day.

20. How many good friends do you have in your class?
    - ○ None.
    - ○ I have 1 good friend in my class.
    - ○ I have 2 or 3 good friends in my class.
    - ○ I have 4 or 5 good friends in my class.
    - ○ I have many good friends in my class.

21. How many good friends do you have outside of your class?
    - ○ None.
    - ○ I have 1 good friend outside of class.
    - ○ I have 2 or 3 good friends outside of class.
    - ○ I have 4 or 5 good friends outside of class.
    - ○ I have many good friends outside of class.

Appendix C

PARENTAL CONSENT FORM

Project Title	"Children's evaluations of peer social interactions"
Why is this research being done?	This is a research project being conducted by Dr. Melanie Killen at the University of Maryland, College Park. We are inviting your child to participate in this research project because your child is in 6th or 9th grade. The purpose of this research project is to better understand how 6th and 9th graders think about situations involving potential peer conflicts and exclusion, and how their experiences with peers might be related to how they think about these kinds of situations.
What will my child be asked to do?	Your child will be asked to complete a survey. The survey will be given to him/her in his/her classroom or in another area designated by the school. Trained research assistants from the University of Maryland, College Park, will administer the survey and will be available to answer any questions. Your child will be asked to read a few sentences describing peer social interactions, some of which involve exclusion, and answer questions about what they think happened in the stories and how they would respond in a similar situation. The survey will also ask your child about his/her experiences with bullying and other peer social situations. The survey will take approximately 30 minutes.
What about confidentiality?	All information collected for the study is confidential. Your child's name will not be on the survey. Instead, non-identifiable ID numbers will be assigned to all participants. All completed surveys will be stored in a locked cabinet in the researcher's locked office and will only be accessible to the researcher and trained research assistants. If we write a report or article about this research project, neither your child's identity nor any personally identifiable information will be disclosed. Your child's information may be shared with representatives of the University of Maryland, College Park or governmental authorities if your child or someone else is in danger or if we are required to do so by law.
What are the risks of this research?	There are no known risks associated with participating in this research project. The survey questions have been widely used in published research, with no negative results for participants in those studies. In addition, in past studies, children have enjoyed the opportunity to express their opinions about hypothetical stories to adults.
What are the benefits of this research?	This research is not designed to help you or your child personally, but the results may help the investigators learn more about how children evaluate peer social interactions and exclusion. We hope that, in the future, other people might benefit from this study through improved understanding of how children evaluate peer social interactions and exclusion situations, which can be used to create more appropriate methods of preventing potentially harmful behavior.
Does my child have to be in this research? May my child stop participating at any time?	Your child's participation in this research is completely voluntary. Your child may choose not to take part at all. If your child decides to participate, s/he may stop participating at any time. If your child decides not to participate or if your child stops participating at any time, your child will not be penalized or lose any benefits to which your child otherwise qualifies. Participation is not a school or class requirement. Participation will not affect your child's grades or performance evaluation.
What if my child or I have questions?	This research is being conducted by Dr. Melanie Killen, a professor in the Department of Human Development at the University of Maryland, College Park. If you have any questions about the research study itself,

	please contact Dr. Killen at: Dept. of Human Development, 3304 Benjamin Building, College Park, MD 20742-1131; (telephone) 301-405-3176. If you have questions about your rights as a research subject or wish to report a research-related injury, please contact: Institutional Review Board (IRB) Office, University of Maryland, College Park, MD 20742; (e-mail) irb@deans.umd.edu; (telephone) 301-405-0678. This research has been reviewed according to the University of Maryland, College Park IRB procedures for research involving human subjects.	
Statement of Age of Subject and Consent	Your signature indicates that: (1) you are at least 18 years of age; (2) the research has been explained to you; (3) your questions have been fully answered; and (4) you freely and voluntarily allow your child to participate in this research project.	
Signature and Date	**NAME OF CHILD**	
	NAME OF PARENT/GUARDIAN	
	SIGNATURE OF PARENT/GUARDIAN	
	DATE	

Appendix D

ASSENT FORM

Project Title	"Children's evaluations of peer social interactions"
Why is this research being done?	This is a research project being conducted by Dr. Melanie Killen at the University of Maryland, College Park. We are inviting you to participate in this research project because you are in 6th or 9th grade. The purpose of this research project is to better understand how 6th and 9th graders think about how students get along in schools.
What will I be asked to do?	You will be asked to complete a survey. It will be given to you in your classroom or in another area designated by the school. Trained research assistants from the University of Maryland, College Park, will give out the survey and will be available to answer any questions you have before, during, and after you fill it out. You will be asked to read a few sentences describing something that happened between two kids your age, and you will be asked what you think happened and how you would act in the same situation. You will also be asked questions about school and after-school activities, and about how you have been treated by other students and how you have treated other students. The survey will take about 30 minutes.
What about confidentiality?	All information collected for the study is confidential and anonymous. Your name will not be on the survey. Instead, you will be given an ID number. We will not share your answers with anyone, including your classmates, teachers, principal, or parents.
What are the risks of this research?	There are no known risks associated with participating in this research project.
What are the benefits of this research?	This research is not designed to help you personally, but the results may help us learn more about what kids think about how kids treat each other. We hope that, in the future, other people might benefit from this information, by better understanding kids' experiences with other students in school.
Do I have to be in this research? May I stop participating at any time?	Participation is strictly voluntary. You can ask any questions at any time, or stop participating at any time. If you decide not to participate or you stop participating at any time, you will not be penalized or lose any benefits. Participation is not a school or class requirement. Participation will not affect your grades or performance evaluation.
What if I have questions?	This research is being conducted by **Dr. Melanie Killen**, a professor in the Department of Human Development at the University of Maryland, College Park. If you have any questions about the research study itself, please contact Dr. Killen at: **Department of Human Development, 3304 Benjamin Building, College Park, MD 20742-1131; (telephone) 301-405-3176.** If you have questions about your rights as a research subject or wish to report a research-related injury, please contact: **Institutional Review Board (IRB) Office, University of Maryland, College Park, Maryland, 20742; (e-mail) irb@deans.umd.edu; (telephone) 301-405-0678.** This research has been reviewed according to the University of

	Maryland, College Park IRB procedures for research involving human subjects.	
Assent	Your signature indicates that: the research has been explained to you; your questions have been fully answered; and you freely and voluntarily agree to participate in this research project.	
Signature and Date	**NAME OF PARTICIPANT**	
	SIGNATURE OF PARTICIPANT	
	DATE	

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