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The Role of Empathy, Anger Management and Normative Belief about Aggression in Bullying Among Urban, African American Middle School Children

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The Role of Empathy, Anger Management and
Normative Beliefs about Aggression in Bullying
among Urban, African-American Middle School Children

A Dissertation submitted in partial fulfillment of the requirements for the degree of
Doctor of Philosophy at Virginia Commonwealth University

by

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ABSTRACT

THE ROLE OF EMPATHY, ANGER MANAGEMENT AND NORMATIVE BELIEF ABOUT AGGRESSION IN BULLYING AMONG URBAN, AFRICAN AMERICAN MIDDLE SCHOOL CHILDREN

By Layla Elise Esposito, Ph. D.

A Dissertation submitted in partial fulfillment of the requirements for the degree of
Doctor of Philosophy at Virginia Commonwealth University.

Virginia Commonwealth University, May 2007

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This study used binary logistic regression analysis to examine the role of empathy, anger management, and normative beliefs about aggression on overt bullying, relational bullying, and prosocial behavior in urban African-American middle school children. Participants included 177 African-American sixth, seventh, and eighth grade students from two public, urban middle schools in a large city in the Southeast United States.

The results of this study indicated that binary logistic regression models including empathy, anger management, and normative beliefs about aggression predicted prosocial behavior, and marginally predicted relational bullying. Normative beliefs about aggression had a significant moderating effect, such that for participants who endorsed higher normative beliefs about aggression, low levels of empathy significantly increased the

likelihood of being classified as a relational bully. Participants in this study reported highly aggressive behavior, with 24% of the sample being identified as overt bullies. Significant gender differences were also identified in this study. Boys reported more relational aggression than girls, and girls reported higher levels of empathy, and prosocial behavior. Implications for future research and intervention programs for bullying among middle school children are discussed.

Chapter 1

Introduction

Bullying or peer victimization among school-aged children is a problem that has become a serious concern given the deleterious consequences not only for the victims, but also for those children labeled as bullies. For example, bullies, victims, and bully/victims (those who are both bullies and victims) report various psychosocial adjustment difficulties including internalizing and externalizing symptoms, as well as problems in school (Nansel et al., 2001). Moreover, bullying behaviors have been studied in several countries, indicating involvement in bullying poses as a risk factor to healthy development universally (Haynie et al., 2001; Olweus, 1997; Roland, 2000).

As violence in schools is gaining attention in the media, so is the interest in understanding the nature and correlates of bullying in order to develop successful prevention and intervention strategies. Research has identified several correlates of bullying behaviors, including low levels of empathy, and anger (Olweus, 1993; Shields & Cicchetti, 2001). However, the majority of the social-psychological literature examining bullying in American children has relied on predominately Caucasian, middle-class samples. In school systems that serve urban, African-American communities, ecological factors such as exposure to violence may impact bullying among students. More specifically, minority children living in low-resource, urban neighborhoods may develop normative beliefs about aggression from their unique experiences. Thus, findings from literature examining correlates of bullying and intervention strategies may be less generalizable to this population.

This study addresses the influence of empathy and anger management on overt bullying, relational bullying, and prosocial behavior among African-American children attending urban middle-schools. In addition, this study will examine if normative beliefs about aggression moderate the impact of empathy and anger management on these variables.

In the following literature review, research relating to bullying and its correlates will be discussed. Along with the variables of interest in this study, this review will also cover a comprehensive conceptualization of bullying. This paper will first present general background information regarding bullying including prevalence, types of bullying behaviors, consequences of victimization and bullying, and gender and ethnic differences in bullying. The next sections will review literature on the personal and external factors that contribute toward bullying. Lastly, factors relating to and benefits of prosocial behavior will be discussed.

Chapter 2

Review of the Literature

Prevalence of Bullying

Bullying among youth in schools has gained public attention over the past several years, partially due to increased media coverage of specific and extreme incidents. For example, of the seven school shootings that were publicized between 1997-1999 (e.g., Littleton, Colorado, Jonesboro, Arkansas) three of the shooters were frequently bullied by their peers (Holmes, 2000). However, the prevalence of bullying and peer victimization in schools still remains unclear, as there is a significant range of variability in this behavior (e.g., Farrington, 1993; Schwartz et al., 2001).

There are numerous methodological reasons for why a prevalence estimate of bullying is difficult to determine. First, researchers rely on a variety of reporters for data, including self-report, teacher report, peer nominations or any combinations of these sources. The reliability of these sources is questionable. Bullies may be reluctant to admit to their aggressive behaviors, victims may be embarrassed or too intimidated to report their personal experiences, and peers and teachers may be unaware of the bullies' actions. A second reason prevalence data is difficult to attain is because bullying can be defined in several different ways, or left undefined. A third reason is because the time period in which peer victimization is examined varies across studies. Prevalence may refer to one specific point in time, the past month, semester, or even year. Similarly, survey questions regarding prevalence may either use dichotomous "yes/no" responses or a Likert scale.

Responses may be based on estimates from a single item, or several items. Additionally, the categorization of bully, victim, and bully-victim, varies greatly from study to study (Solberg & Olweus, 2003). Thus, estimating an accurate prevalence of bullying is difficult.

Stolberg and Olweus (2003) addressed the problem of prevalence estimation of bullying, and surveyed a sample of 5,171 Norwegian school children, in grades five through nine, using the Olweus Bully/Victim Questionnaire (Olweus, 1996). Students were classified as bullies if they reported bullying peers twice a month or more. In this sample, 6.5% of the students reported bullying their peers twice a month or more. Ten percent of the sample reported being victimized, and 1.6% reported both bullying and being victimized (“bully-victims”). Boys were significantly more likely to report bullying (9.7%) than were girls (3.2%) (Stolberg & Olweus, 2003).

In a United States sample of 15,686 students in grades five through ten, 9% reported bullying other students weekly, 11% reported bullying “sometimes,” and 24% reported bullying other students at least once in the past year (Nansel et al., 2001). Other studies of American children suggest higher levels of bullying. For example, Duncan (1999) found that 28% of middle school students reported bullying other students, while Espelage, Bosworth and Simon (2000) found that 80% of their sample reported some bullying behavior over the past month. A study of 6,758 youth in the United Kingdom found that 12% of the primary school students and 6% of secondary school students engaged in bullying other students (Whitney & Smith, 1993). Current prevalence estimates of bullying emphasize the extent of the problem among youth. Defining

distinguishable types of bullying also contributes to our understanding of this phenomenon.

Types of Bullying

Olweus (1993), one of the leading researchers in peer victimization, defined bullying as ... “when (a student) is exposed, repeatedly and over time, to negative actions on the part of one or more other students” (p. 9). There is an inherent “imbalance in strength” between the bullying and victim, and the victim is usually unsuccessful at defending him/herself against the attack. Bullying may be the act of one individual, or a group of peers (Olweus, 1993). Aggression, on the other hand, is typically defined as the intention to cause harm to others (Archer, 2001). Although not all aggressive children are bullies, all bullies are aggressive. Thus, aggression is a key variable included in the bullying literature and will also be discussed in this review. There are three main types of bullying behavior, including direct bullying, indirect bullying and relational bullying.

Direct bullying is when one student directly and overtly victimizes another student. This can include physical attacks (e.g., pushing, shoving, hitting, kicking), or verbal attacks (yelling, name-calling, intimidating, threatening). Indirect bullying is an anonymous and non-confrontational attack on another student, possibly to avoid retaliation. The bully may spread rumors about the victim, leave threatening messages, or destroy property of the victim. Similar to indirect bullying is relational bullying. Relational bullying is the repeated use of relational aggression, defined as “behaviors that harm others through damage (or the threat of damage) to relationships or feelings of acceptance, friendship, or group inclusion” (Crick et al., 1999, p. 77). Relational bullying

might include spreading rumors, gossip, backstabbing, ignoring, criticizing to others, social exclusion, public embarrassment, or breaking confidences. Indirect bullying differs from relational bullying in the nature of the acts. Indirect bullying includes acts that are not aimed at breaking social bonds (i.e., fire setting, stealing, property destruction). Girls are more likely than boys to engage in relational bullying because relational and social bonds are social goals that are particularly salient and meaningful to females (Block, 1983). Both of these types of bullying behaviors contribute to negative psychosocial consequences for the victims, and the bullies.

Psychosocial consequences of victimization

There are a number of psychosocial correlates of peer victimization (being bullied), including anxiety, depression, and low self-worth (Bond et al., 2001; Crick & Bigbee, 1998; Prinstein, Boergers, & Vernberg, 2001). The following section will briefly review the literature relating to the negative psychological correlates and consequences of being victimized by bullying.

It is widely acknowledged that anxiety is correlated with victimization (Grills & Ollendick, 2002; Hodge & Perry, 1999; Olweus, 1993a; Sharp, 1995, e.g.) and most of the studies of victimization and anxiety have examined children's experience of generalized anxiety. It is not difficult to understand how chronic harassment can cause a child to become fearful and anxious. It has even been suggested that some victimized children become hypervigilant to their environment and others' opinions of them (Roth, Coles & Heimberg, 2002). It has been found that, in general, children experience acute anxiety immediately after being bullied at school (Faust & Forehand, 1994). Rigby (1998)

examined the psychological and physical consequences of peer victimization among 819 adolescent, Australian students using the General Health Questionnaire (GHQ), which has an anxiety subscale. Victims reported significantly more anxiety than non-victims, regardless of gender. Another study that looked at 173 children in grades three through seven found that anxiety was related to victimization as both an antecedent and a consequence. The results demonstrated that internalizing symptoms, including manifest anxiety, were significantly related to victimization. Moreover, internalizing symptoms independently predicted increases in victimization at a second assessment, one year later (Hodges & Perry, 1999).

One large cohort study followed 2,680 Australian middle school children over a two-year period. The goals of the study were to assess anxiety and depression in children reporting chronic victimization at three time points. One third of the sample reported recurrent victimization, one third reported occasional victimization, and the other third denied any victimization. History of victimization at the first assessment was significantly related to self-report of anxiety and depression symptoms during later assessments. Seven percent of the sample reported anxious or depressed symptoms during the second year. History of victimization was more predictive of onset of anxiety and depression symptoms for females than for males (Bond et al., 2001). Therefore, there is evidence to suggest that being subjected to bullying can cause anxiety in children.

There are several current studies that suggest that victimization is not only related to generalized anxiety, but social anxiety as well. Social anxiety is defined by a persistent fear of certain social situations that may cause embarrassment or humiliation (American

Psychiatric Association, 2000). These social situations, if not avoided, produce a variety of anxiety symptoms in the individual. Because victimization occurs in a social context and can create feelings of distress, it is likely that children may attempt to avoid situations when victimization is possible. The escape or avoidance of peer related social activities may then generalize to the avoidance of all social activities. One of the first studies to examine the relationship between victimization and social anxiety was done by Slee (1994). The results of this investigation indicated that victimized Australian middle school boys and girls were more likely to be fearful of negative evaluations by peers, and victimized girls exhibited greater social avoidance. In a sample of 272 sixth grade students, Grills and Ollendick (2001) also found that both boys and girls who were victimized experienced significantly higher levels of social anxiety than those not victimized. Eighty-three percent of the sample were Caucasian, 6% were African-American, and 3% were Asian-American.

Several studies have shown that peer victimization can also lead to depression. Crick and Grotpeter (1996) examined victimization and depression in 474 children in grades three through six. In this cross sectional study, depression was measured by the Children's Depression Inventory (CDI) and victimization was measured by the Social Experience Questionnaire (SEQ). This study found that both overt and relational victimization were significantly and uniquely related to depression. Prinstein, Boergers, and Vernberg (2001) looked at the relationship between victimization and depression in an older sample. Five hundred and sixty-six adolescents in grades nine through twelve completed measures to determine their status as a victim of overt aggression, relational

aggression, or a victim of both types of aggression. In this sample, overt victimization was more frequently experienced by boys, whereas the frequency of relational victimization was comparable for boys and girls. The findings indicated that overt and relational victimization were significantly correlated with the current feelings of depression in boys and girls. Moreover, adolescents who were victimized by both forms of aggression had significantly higher depression scores than adolescents victimized by only one form.

A study by Paul and Cillessen (2003) looked at peer victimization in 600 children over four years (between fourth and seventh grade). The purpose of the study was to examine predictors, correlates and short-term consequences of victimization. The results of this study indicated that victimization was stable over the four years. In addition, concurrent correlates of victimization included higher levels of withdrawal, disruptive behavior, and aggression. Victims had lower scores on measures of school competence, academic self-efficacy and peer sociability than non-victims. The most important finding, however, was related to gender differences in psychosocial adjustment in response to victimization. After controlling for initial levels of the outcome measures, the authors found that the effects of persistent victimization were present for girls but not for boys. Victimized girls exhibited greater levels of depression, anxiety, negative self-perception and disruptive behavior. Moreover, the development of psychosocial maladjustment was evident even after the first year of the study. These preliminary studies suggest that victimization in childhood may have long-term implications.

Another psychosocial consequence of being bullied is low self-esteem or self-worth. Several correlational studies have indicated that victims report lower global self-

worth than non-victims. In an ethnically diverse sample of sixth and seventh grade children, Graham and Juvonen (1998) found that victims were significantly more likely to have lower self-worth than non-victims. Similarly, a study of 120 middle school children in Ireland found that children who scored high on peer victimization measures had significantly lower scores on global self-worth scales, as well as lower scores in domains such as scholastic competence, social acceptance, physical appearance and behavioral conduct on Harter's Self-Perception Profile for Children (1985) (Callaghan & Joseph, 1995). Grills and Ollendick (2002) examined peer victimization, global self-worth and anxiety in middle school children. Their findings suggested that victimization negatively affected global self-worth, and that global self-worth was a mediator and a moderator of victimization and anxiety. For girls, global self-worth acted as a mediator, in that victimization led to lower self-worth which in turn affected the report of anxiety symptoms. For boys, on the other hand, global self-worth acted as a moderator. Boys with higher levels of global self-worth reported fewer symptoms than those with lower levels of global self-worth. In sum, peer victimization is related to several negative psychosocial correlates, including anxiety, depression, and low self-worth.

Psychosocial consequences of bullying

Although the majority of the psychological literature focuses on the psychosocial consequences of being bullied, bullying others has also been correlated with several psychosocial adjustment problems. For example, Haynie et al. (2001) examined behavior problems and psychosocial variables in 4,263 middle school children involved in bullying and victimization. Bullies and bully/victims scored significantly higher than victims and

controls on several variables, including problem behaviors, behavioral misconduct, deviant peer influences, and acceptance of deviance. Bullies scored significantly higher than students uninvolved in peer victimization on a scale of depression, but lower than victims and bully/victims. In addition, bullies and bully/victims scored significantly lower than victims and controls in the areas of self-control, social competence, school adjustment and school bonding. On all variables, bully/victims scores revealed more significant psychosocial problems than bullies (Haynie et al., 2001).

Nansel and colleagues (2001) also found students classified as bullies or bully/victims have various adjustment difficulties. The sample included 15,686 students in grades six through ten, attending both public and private schools in the U.S. Results indicated that, compared to victims, bullies and bully/victims scored higher on measures of alcohol use, smoking, and fighting, and lower on academic achievement. Lower ratings of perceived school climate was only related to bullying, while loneliness and poor peer relationships were significantly related to bully/victims and victims, but not bullies (Nansel et al., 2001).

Other studies had found similar conclusions (e.g., Olweus, 1993). Whitney and Smith (1993) found that bullies are more likely to have criminal records and participate in serious and recidivist crime. Kumpulainen et al. (1998) found that in comparing bullies, victims, bully/victims and controls in elementary schools, male bully/victims were most likely to be referred for psychiatric consultation (22%). Female bully/victims were next most likely to be referred (12%) followed by male bullies (10%). Thus, the research indicates that children involved in peer victimization at all levels (bullies, victims, and

bully/victims) are subject to negative psychosocial consequences, including internalizing problems, externalizing problems, and school/academic problems. Just as Kumpulainen and colleagues (1998) found gender differences in psychiatric referrals for bullies, there are also gender differences in bullying behaviors.

Gender Differences

There are gender differences in the use of overt bullying behaviors versus relational bullying behaviors. (Bjorkqvist, Lagerspetz & Kaukiainen, 1992; Boulton & Underwood, 1992; Crick & Grotpeter, 1995; Olweus, 1993; Paquette & Underwood, 1999). Crick and Grotpeter (1995) found that 16% of boys in their middle school sample were overly aggressive towards peers while only 0.4% of girls engaged in overt aggression. Conversely, 17% of girls used relational aggression compared to only 2% of boys. Boys were more likely to use a combination of both methods (9%) than were girls (4%). Bjorkqvist, Lagerspetz and Kaukiainen (1992) found similar results in a sample of eight year-olds and a sample of fifteen year-olds. In both the younger and older cohorts, females were significantly more likely to use indirect (relational) aggression and boys were significantly more likely to use direct aggression.

As mentioned, the typical means of aggression for boys is overt and the most common means of aggression for girls is relational. This gender difference may exist because boys and girls place emphasis on different social goals. Aggressors seek to damage the goals that are most valuable to the victim. Social relationships and intimate bonds with others appear to be more important to girls than to boys. Therefore, relational aggression would be more hurtful or damaging to girls than it would to boys. Similarly,

boys value strength and physical dominance, which is more aptly attacked through acts of overt aggression. Another reason why girls may be more likely than boys to use indirect or relational aggression is that compared to boys, they have more advanced verbal and cognitive skills (Bjorkqvist et al., 1992; Owens, 1996).

However, some research suggests that gender differences in types of aggression are not as straightforward. For example, several studies have found that boys are more likely than girls to use a combination of both direct and indirect aggression (Henington, Hughes, Cavell, & Thompson, 1998; Salmivalli & Kaukiainen, 2004; Tomada & Schneider, 1997). Additionally, verbal aggression increases with age for boys as well as girls (Österman et al., 1998). Finally, there are moderate to strong correlations among different types of aggression, including verbal, direct, indirect and relational (Crick, 1996; Crick & Grotpeter, 1995; Tomada & Schneider, 1997). Thus, it appears that children develop aggressive patterns that are likely to include more than one type of aggression. The following section discusses the role of ethnicity and race in bullying.

Ethnic/Racial Differences

Few studies have addressed race or ethnicity as a variable related to bullying. In the large U.S. study conducted by Nansel and colleagues (2001), there were no significant differences in bullying between Caucasian and African-American students. Hispanic students reported marginally higher bullying behaviors than both Caucasian and African-American students. On the other hand, in a study of students from an ethnically diverse, urban middle school, Graham and Juvonen (2002) found that African-American students were significantly more likely to be nominated by their peers and teachers as

aggressive than Hispanic or Caucasian students. Thus, there does not seem to be any consensus of the relation between race or ethnicity and bullying

The paucity of information on bullying and victimization among African-American children makes it difficult to draw conclusions about the contribution of ethnicity to bullying and peer victimization. Yet, a promising area of research recently examined is the ethnic context of the school. Instead of ethnicity being examined as a risk factor for bullying and victimization, a few studies have looked at the interaction between ethnicity and the ethnic make-up of the school or classroom (ethnic context) and bullying. Findings have shown that children who are in the ethnic majority of their school or class are more likely to be aggressive and less likely to be victimized than children in the ethnic minority (Bellmore, Witkow, Graham, & Juvonen, 2004; Graham & Juvonen, 2002; Verkuyten & Thijs, 2002). Two of these studies are briefly described below.

Graham and Juvonen (2002) investigated ethnicity, peer harassment (harassment includes lesser acts of bullying and victimization), and psychosocial adjustment in 418 sixth and seventh grade students. The sample included 29% Latino, 29% African-American, 11% White, 11% Persian/Middle Eastern, 9% Asian, and 11% "other" students. The breakdown of victimization by ethnicity was as follows: 6% of African-American students, 7% of Latino students, 22% of White students, 31% of Persian students, 14% of Asian students and 18% of others. Therefore, the two numerical majority groups (African-American and Latino) reported the least amount of peer harassment, and moreover, the highest levels of social adjustment. This is consistent with the idea that the numerical majority holds the power in the school, and an imbalance of power is a factor in

victimization (Olweus, 1978). Peer nominations were also used in this study to categorized aggressors or victims of harassment by ethnicity. African-American students received the highest percentage of nomination for being aggressors (62%) but the lowest percentage of nominations for being victims (38%). Of the nominations for Latino students, 54% were for aggressors, and 46% for victims. The numerical minority students, White and Persian children, received the greatest number of nominations for victimization (78% and 86% respectively) but the lowest number of nominations for aggressors (20% and 12% respectively). Therefore, numerical ethnic majority or minority status seems to play a role in predicting who will be more susceptible to becoming a bully or a victim.

Types of Victims of Bullying

There are two main categories of victims: passive victims and provocative victims. The majority of victims fall into the first category. Passive victims are generally shy, anxious, reserved, and project an image of insecurity. This lack of self-esteem and assertiveness signals to others that they will be easy targets for harassment. In other words, it is obvious to the bully that a passive victim will not be able to successfully defend him/herself. This perception is reinforced when the victimized child responds with submissive behaviors, such as crying or isolation (Olweus, 1993).

Provocative victims (sometimes called bully-victims) are labeled so because their irritating behavior often provokes negative acts from peers. Provocative victims tend to be hyperactive, impulsive and have problems concentrating (Olweus, 1993). Like bullies, provocative victims are overly aggressive, dominant, and often exhibit antisocial behaviors. Also like bullies, male provocative victims outnumber female provocative

victims three to one (Olweus, 2001). Provocative victims are significantly less prevalent than passive ones. It has been estimated that 4 to 8% of children can be classified as provocative victims (Schwartz, Proctor & Chien, 2001). Often students and teachers are unsympathetic to the victimization that provocative victims receive because they view it as somewhat deserved (Olweus, 2001). It has been suggested that these children are emotionally dysregulated and “ineffectual aggressors.” Provocative victims are unable to use goal-oriented aggressive behaviors successfully, as do non-victimized aggressors (Perry, Perry & Kennedy, 1992). Victimization and bullying also differs across developmental stages. The following section addresses the importance of studying bullying during the middle school years.

The Significance of Middle School and Early Adolescence

While bullying often begins in early childhood, it peaks in early adolescence and then decreases in middle to late adolescence (Hoover, Oliver, & Hazler, 1992; Nansel et al., 2001; Pelligrini & Bartini, 2001). There are developmental changes that make middle school and early adolescence a particularly vulnerable time for this type of harassment (Nansel et al., 2001; Paul & Cillessen, 2003). One such change from childhood to early adolescence is an increase in importance of the peer group and in time spent with those peers (Sebold, 1992). Adolescents rely on their peers for social support, feelings of acceptance, and social status or popularity (Dornbusch, 1989). Moreover, social support and popularity are protective factors for peer victimization (Coleman & Byrd, 2003). Therefore, victimization, which can be seen as a rejection by peers, may be particularly salient to children of this age. Gains in cognitive and social development during early

adolescence are reflected in the increased reliance on verbal and relational forms of bullying (Bjorkqvist, Osterman, & Kaukiainen, 1992).

Middle school is also an important social context in which to study peer victimization because of the transition made from elementary school. Students coming into sixth grade are now at the bottom of the social hierarchy, and are thereby, more vulnerable to being bullied. Also, during this transition, bullying may be used as an attempt to fit into the new culture. Pellegrini, Bartini, and Brooks (1999) found that bullying increased group popularity in a sample of 138 students in their first year of middle school. Another study found that 13% of sixth grade boys were rated as both aggressive yet popular by teachers, and as “cool” by peers (Rodkin, Farmer, Pearl, & Van Acker, 2000). In sum, bullying during middle school can sometimes be seen as the child’s attempt to establish dominance and social status as they encounter a new peer group (Pellegrini, 2001; Pellegrini & Bartini, 2001).

Theoretical Conceptualization

Theory guiding the study of children’s social behavior has been driven by social-cognitive models (Dodge & Crick, 1990). Social information-processing models have yielded a vast amount of research focused on social behavior and subsequent social adjustment (e.g., Dodge & Crick, 1990; Huesmann, 1988; Slaby & Guerra, 1988). Crick and Dodge (1994) reformulated the information processing theory (Miller, Galanter, & Pribram, 1960; Newell & Simon, 1972) to explain social behavior in children (i.e., aggression) as a result of a complex series of cognitive processing steps. The theory suggests that social competence and adaptive social interactions can be understood as

successful cognitive processing of social cues (Dodge & Crick, 1990). Social information-processing theories of aggression in children have been applied to peer victimization (Camodeca & Goossens, 2005; Camodeca, Goossens, Schuengel, & Terwogt, 2003; Crick, Grotpeter, & Bigbee, 2002).

The revised social information-processing model (Crick & Dodge, 1994) explains aggressive behavior (such as bullying) through six sequential and cyclical cognitive steps: encoding of social cues, interpretation, goal formulation, response access, response decision, and lastly, behavioral enactment. Deficits at any of these steps can lead to maladaptive behavior. In the first two steps, it is hypothesized that children attend to select social cues (internal and external), encode the cues and interpret them. Encoding of social cues is influenced by previously acquired schemata and heuristics, which may be unique for aggressive children. Inaccurate detection, encoding or interpretation of a peer's behavior or intent may increase the likelihood of an inappropriate reaction, such as aggression (Crick & Dodge, 1994). On the other hand, skilled cognitive processing at these stages leads to better accuracy in the interpretation of another's behavior; this has been referred to as "cue detection" (Dodge, Murphy, & Buchsbaum, 1984) or "social cue reading" (Lipton, McDonel, & McFall, 1986).

In step three of this model, children select goals or a desired outcome for the current situation. Social goals can be either internal and emotional or external and instrumental. For example, an internal social goal could be feeling accepted or avoiding embarrassment, while an external goal might be trying to be first in line. Research has indicated that compared to non-aggressive children, the social goals of aggressive children

goals are more inappropriate, less prosocial and more likely to harm social ties and relationships (e.g., Crick & Dodge, 1989; Slaby & Guerra, 1988).

The next two steps of the revised social information-processing model are response access and response decision. Response access refers to the behavioral options children consider for the given situation. These options can be retrieved from memory or constructed spontaneously in novel situations. Studies have found that aggressive children generate fewer responses than non-aggressive children (Dodge et al., 1986; Slaby & Guerra, 1988), and often access responses that are more aggressive and less prosocial than their peers (Dodge et al., 1986; Pettit, Dodge & Brown, 1988). The fourth step, response decision, depends upon the evaluation of the cognitively generated responses, expectations of the outcome and self-efficacy for the response (Crick & Dodge, 1994). The findings of several studies have indicated that aggressive children are more likely to evaluate aggressive responses more positively, and adaptive (or prosocial) responses more negatively than peers (Deluty, 1983; Quiggle, Garber, Panak, & Dodge, 1992). Moreover, some studies suggest that children who use aggressive strategies often anticipate favorable outcomes from their actions (Deluty, 1983; Dodge et al., 1986).

The sixth and final step in the model is behavioral enactment of the selected response. Deficits in cognitive processing of social experiences at any or all of the previous stages can lead to aggressive behavior. In addition, Crick and Dodge (1994) propose that this social information-processing model is cyclical, and uses feedback loops, with ongoing information being processed in different stages. In other words, it is suggested that this processing is nonlinear. Although much of the research supporting this

model focuses on general childhood aggression (e.g., Crick & Dodge, 1996; Crick & Werner, 1998), bullies are considered highly aggressive children and their behavior can be conceptualized using this theory.

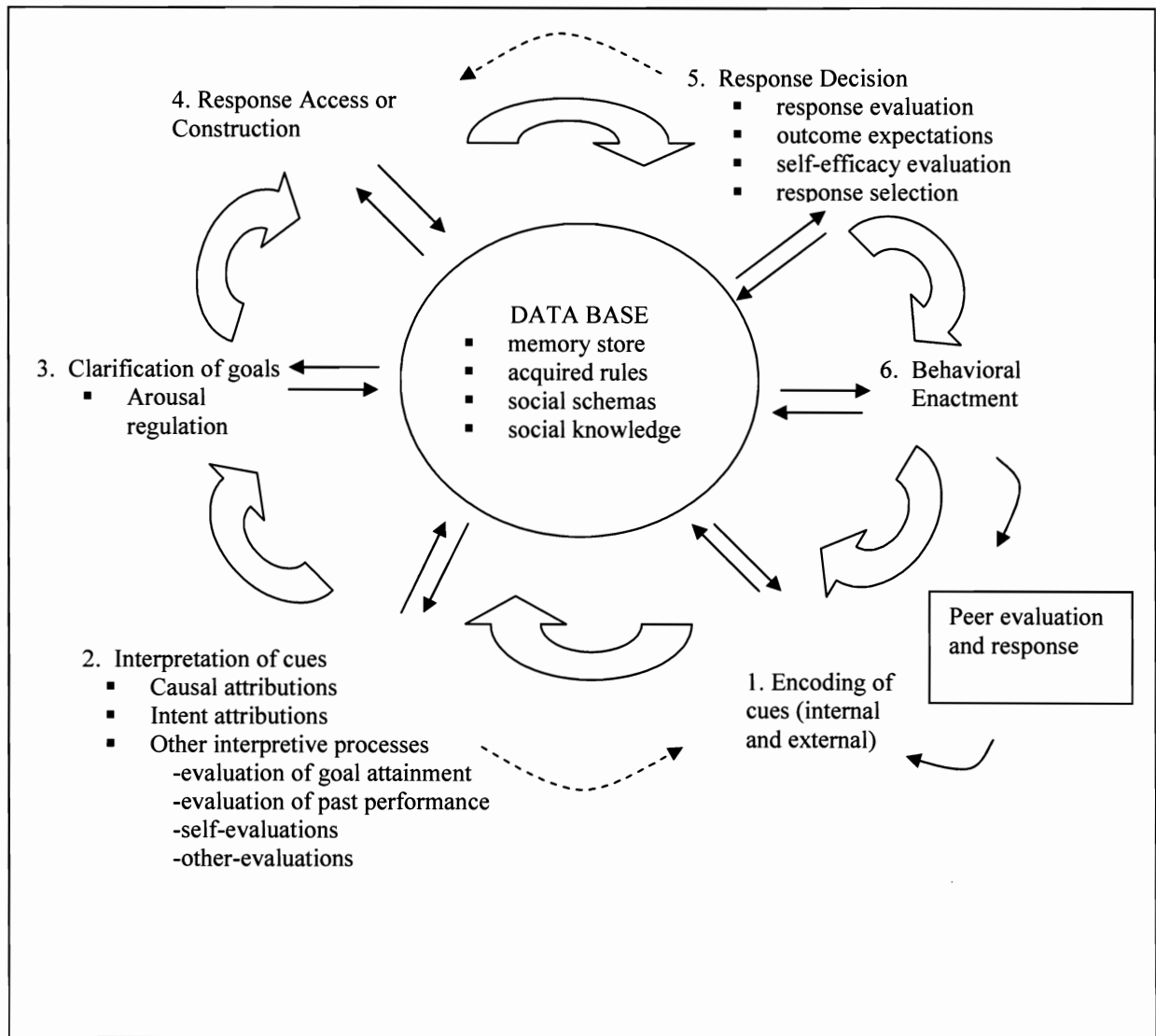


Figure 1

Reformulated social information-processing model of children's social adjustment.
Adapted from Crick and Dodge (1994).

The social information-processing theory contributes to our understanding of why certain children act aggressively and bully others. Additionally, studies have identified both internal and external factors that contribute toward bullying. Although not all of these factors are addressed in the present study, many key factors will be reviewed in the following sections.

Personal Factors Contributing to Bullying

Aggression. There are several characteristics that define children identified as bullies. The most obvious of these characteristics is aggression toward peers. Olweus (1993) found that male bullies victimize or harass more than 80% of the boys classified as victims, and more than 60% of the girls classified as victims. Most bullies initiate aggressive attacks themselves, but a small subset of bullies, often referred to as “passive bullies,” only join in after another bully has initiated the attack. In addition to aggression towards peers, bullies are frequently aggressive toward adults, including parents and teachers (Olweus, 1993).

Size. Bullies are generally characterized by physical strength, and are larger in stature and older than the victims they pick on. Physical strength, among boys, is strongly correlated with popularity, while physical weakness is correlated with unpopularity (Olweus, 1993). Studies have found that bullies tend to be of average to slightly below average in popularity (e.g., Adler, Kless, & Adler, 1992; Pulkkinen & Tremblay, 1992). Physical strength is also a protective factor against being bullied, since the individual would likely be able to defend himself against the attack.

Empathy. Another personal characteristic of bullies is lack of empathy and is a variable that will be investigated in this study. Feshbach (1997) defined empathy as “an emotional response that emanates from the emotional state of another individual, and although empathy is defined as a shared emotional response, it is contingent on cognitive as well as emotional factors” (Feshbach, 1997, p. 35). Empirical studies have indicated that empathy in children increases with age from toddlerhood until adolescence (e.g., Eisenberg & Fabes, 1998; Robinson, Zahn-Waxler, & Emde, 2001; Zahn-Waxler et al., 2001). For example, children’s expression of empathy (facial, vocal, postural, and gestural) increased between 14 and 36 months of age in responding to fake injuries of their mother or the experimenter (Robinson et al., 2001). Similarly, another study found that toddlers between 16 and 22 months increased empathetic responding and prosocial behavior toward their distressed mother (van der Mark, Ijzendoorn, & Bakermans-Kranenburg, 2002). Continued increases in empathetic responding during childhood is likely due to cognitive advances in children’s ability to understand other’s emotions, thoughts, and perspective (Eisenberg, Murphy, & Shepard, 1997; Strayer & Roberts, 1989).

The empirical evidence on gender differences in empathy or empathetic responding is mixed and therefore, inconclusive. In a meta-analysis of children’s empathy and sympathy conducted by Eisenberg and Fabes (1998), effect sizes across studies were extremely inconsistent. In addition, some studies revealed no gender difference in empathy between boys and girls, while others indicated support for large differences (with girls scoring higher than boys). One hypothesis for the discrepancy is due to variance in

methodology. Self-report measures often yield the greatest gender differences, while differences from more covert indices (i.e., facial expressions) tend to be less pronounced (Eisenberg & Fabes, 1998). “Taken together, data published in recent years suggests that the public perception of gender differences in empathy and sympathy is possibly exaggerated... It is possible that part of the gender differences in measures of empathy and sympathy is due to children’s desire to adhere to gender-stereotypic conceptions” (Eisenberg, Spinrad, & Sadovsky, 2006, p. 532).

Recent studies suggest that empathy in children is related to prosocial behavior when measured by facial expression, physiological response, or experimental manipulation (versus self-report of young children) (Eisenberg & Fabes, 1998; Eisenberg & Miller, 1987). For example, observed markers of empathy in children was related to prosocial responding in several studies (Denham, Mitchell-Copeland, Strandberg, Auerbach & Blair, 1997; Trommsdorff & Friedlmeier, 1999). Other studies have found that children’s self-report of empathy is related to adults’ ratings of their prosocial behavior (Eisenberg et al., 1999; Krevans & Gibbs, 1996).

Zahn-Waxler, Cole, Welsh and Fox (1995) examined physiological markers of empathy and prosocial behavior in preschool children with varying levels of externalizing behavior problems. Children were categorized as low-, moderate- or high-risk for developing disruptive behavior problems based upon their current level of behavior problems. Physiological arousal was measured by heart rate and skin conductance. Children were exposed to hypothetical or real distress in adults and measures of empathetic

concern, arousal, prosocial behavior, avoidance and discrete emotions (joy, sadness, and anger) were taken.

Results indicated that empathetic concern was significantly correlated with arousal and prosocial behavior, and negatively correlated with avoidance. Empathetic concern and prosocial behavior did not vary among children at different levels of risk for behavior problems. However, compared to children rated as low-risk, children rated as moderate- and high-risk displayed more negative and less positive engagement with the distressed target. Higher heart rate and heart rate deceleration (magnitude of change) significantly predicted empathetic concern and prosocial behavior while lower heart rate was correlated with aggression and avoidant behavior (Zahn-Waxler, Cole, Welsh, & Fox, 1995). Thus, research suggests that a relation between empathy and prosocial behavior exists, but few studies have examined links between empathy and bullying.

There is a paucity of literature addressing the relation between empathy and bullying. One study by Endresen and Olweus (2001) surveyed 2,286 Norwegian adolescents between 13 and 16 years of age, in grades six through nine. Students were administered the Empathetic Responsiveness Questionnaire (Olweus & Endresen) and subscales from the Olweus Bully/Victim Questionnaire (Olweus, 1989, 1996). Overall, girls reported more empathetic responsiveness than boys. In this sample, correlations between bullying and empathetic response were low for both boys ($r_s = -.02$ to $-.19$) and girls ($r_s = -.06$ to $-.17$). When positive attitudes toward bullying were controlled for in regression analyses, empathy was not found to account for a significant amount of variance in bullying others. Hence, the “effects” of empathy were mediated by a negative attitude

toward bullying (Endresen & Olweus, 2001). These results emphasize the importance of considering children's attitudes and view of aggression or bullying in this type of research.

A second study on the relation between empathy and bullying examined 268 sixth, seventh, and eighth grade American students (Espelage, Mebane, & Adams, 2004).

Ninety-one percent of this sample reported their ethnicity to be Caucasian, 4% African-American, 3% Native American, 1% Hispanic, and <1% Asian-American. This study is important because empathy was not only studied in relation to bullying, but also to relational aggression and fighting, in both girls and boys. Empathy was measured by four different scales, including a scale for consideration of others, empathetic concern, engagement in caring acts and perspective-taking.

Several important results emerged from this study. For boys, all measures of empathy were significantly and negatively related to bullying, but not fighting. Scores on empathic concern and consideration of others were negatively correlated with relational aggression. For girls, all measures of empathy were significantly negatively correlated with relational aggression. Negative correlations were also found between consideration for others and perspective-taking and both bullying and fighting. Additionally, a positive attitude toward bullying mediated the association between bullying and perspective-taking for girls and boys. The authors interpret this finding by suggesting that "...with the exception of empathetic concern for females, the direct effect of empathy on bullying is better understood in a model that considers how students view bullying (p. 52)."

Gender differences in this study are important to recognize, especially in relation to relational aggression. Although boys and girls reported similar levels of relational

aggression, high levels of empathy were related to less relational aggression for girls only (Espelage, Mebane, & Adams, 2004). Given that empathy and relational aggression (relational bullying) have only begun to be studied, future research in this area will help illuminate this potentially complex relationship. These results also suggest that programs aimed at reducing relational aggression among girls should consider including empathy training as a principal component. A second key component that should be considered for bullying prevention programs is anger management.

Anger and anger management

Anger is another important personal factor linked to bullying behavior in children and adolescence and investigated in this study (Bosworth, Espelage, & Simon, 1999; Camodeca & Goossens, 2004; Camodeca, Goossens, Schuengel, & Terwogt, 2003; Olweus, 1993; Thomas & Smith, 2004). Anger has most often been studied as an antecedent to aggressive behavior in general (e.g., Dodge, 1991; Dodge, Coie, Pettit, & Price, 1990). Dodge (1991) used anger to distinguish two subtypes of aggression: proactive and reactive aggression. Proactive aggression describes aggressive behavior used to achieve a personal or instrumental goal, and is not usually motivated by an emotional response such as anger. Reactive aggression, on the other hand, is aggression in reaction to an event which likely elicited angry, hostile or retaliatory feelings (Dodge, 1991). Although several recent studies have addressed the role of anger in bullying, there is still a need for a better understanding of the relation between these variables.

Bosworth, Espelage, and Simon (1999) conducted one of the first studies to examine anger and bullying in a sample of 558 middle school students. The majority of

the sample reported being Caucasian (84%), 9% reported being African-American, 4% reported being biracial, and the remaining 3% were of “other” ethnic/racial backgrounds. Self-report data was collected on several variables including anger, anger management skills, bullying behaviors, and beliefs supportive of violence. Results of multiple regression analyses indicated that anger accounted for a significant portion of the variance in bullying. Students who reported frequent feelings of anger were more likely to report bullying peers compared to students with less frequent experiences of anger. Beliefs supporting violence were also significantly related to bullying. Students who reported anger management skills and self-efficacy for nonviolent strategies were significantly less likely to be involved in bullying. Thus, the experience of anger and the ability to manage anger in a socially adaptive way are significantly related to bullying (Bosworth, Espelage, & Simon, 1999).

The influence of anger on aggression and bullying (e.g., Camodeca & Goosen, 2005; Camodeca, Goosen, Schuengel, & Terwogt, 2003) has been considered within the framework of the revised social information-processing theory (SIP), proposed by Crick and Dodge (1994). As previously mentioned, SIP examines children’s social behavior through six stages of cognitive processing: encoding, interpretation, goal clarification, response access, response decision and finally behavioral response. Errors or deficits in cognitive processing at any stage can result in maladaptive behavior, including aggression (Crick & Dodge, 1996). Differences have been found between aggressive and non-aggressive children in these cognitive steps. Aggressive children encode fewer benign social cues, exhibit a hostile attribution bias toward ambiguous cues, select goals which are

damaging to the relationship, create fewer prosocial responses to situations, evaluate aggression positively, and have self-efficacy for aggressive behavior (Crick & Dodge, 1990; Quiggle et al., 1992).

Furthermore, emotion (i.e. anger) can influence all of the steps in SIP (Lemerise & Arsenio, 2000). Anger can affect the detection, encoding and interpretation of social cues. Goal selection can be influenced by anger or empathy with the other individual. Additionally, anger can influence the type of behavioral responses considered, enacted, and evaluated. Conversely, anger management skills may contribute to more adaptive social information-processing by reducing the influence of the negative emotion (Crick & Dodge, 1999; Lemerise & Arsenio, 2000). The following study addresses anger, social cognition and aggression in bullies.

Camodeca and Goossens (2005) examined 242 fifth and sixth grade students. Measures were given to assess bullying, aggression (proactive and reactive), social information-processing and emotions (angry and sad). Results from this study indicated that compared to non-bullies, bullies scored higher on measures of both proactive and reactive aggression. Bullies (and victims) had higher scores on anger, retaliation, and hostile interpretation compared to children uninvolved in bullying problems. Thus, in this study, students classified as bullies (and victims) demonstrated deficits in social information-processing, and expressed a greater tendency toward anger. These findings are supported by an earlier study which found that bullies were also less able to use assertive strategies when confronted with provocation (Camodeca, Goossens, Schuengel, & Terwogt, 2003).

In sum, the current literature examining anger and anger management in bullying suggests a relation exists such that bullies report higher levels of anger than those not involved in bullying, which likely influences the processing of social information. Deficits in information processing may lead a child to interpret interpersonal situations as more hostile and subsequently engage in more aggressive behavior. Understanding the influence of emotion and social information-processing in bullies is key to developing interventions for peer victimization. In addition, many anti-bullying programs include anger-management components (e.g., Frey, Hirschstein, & Guzzo, 2000; Olweus, 1993), making it essential to determine if anger-management is a successful strategy in various populations. Given the paucity of literature in this area, future research is certainly needed.

Self-Esteem. One common misconception about bullies is that their aggressive behaviors toward others reflect low self-esteem or insecurity. However, there is little evidence to support this claim. On the contrary, studies have found that bullies do not demonstrate significantly higher levels of anxiety, stress hormones (Olweus, 1981, 1984), or lower levels of self-esteem than non-bullies and victims (Olweus, 1991; Pulkkinen & Tremblay, 1992). For example, Salmon, James, and Smith (1998) examined anxiety and self-esteem in 904 adolescents involved in peer victimization (bullies and victims). Bullies scored significantly lower in anxiety than victims and controls, and showed no significant difference in self-esteem. Thus, low self-esteem, insecurity, and anxiety do not appear to be significant characteristics of the majority of youth identified as bullies, and thus will not be examined in this study.

External Factors Contributing toward Bullying

Parental Influences/Family Characteristics

Although the scope of this study does not examine parental influences or family characteristics, understanding these influences is important for an accurate conceptualization of bullying. Olweus (1993) describes three key factors related to parental influences on their children's bullying behavior. It is important to note, however, that his research primarily focuses on boys. The first of these factors is the attitude of the primary care giver, usually the mother, toward the child during the formative years. "A negative basic attitude, characterized by lack of warmth and involvement, clearly increases the risk that they boy will later become aggressive and hostile toward others" (p. 39). The second factor Olweus describes is how permissive the primary caregiver is when the child is aggressive. He suggests that a child's aggression increases when aggressive behavior towards siblings, peers, or adults is tolerated or accepted. Thus, limit setting and non-physical discipline for aggression are important parenting strategies (Olweus, 1993).

The third factor that can contribute toward bullying, according to Olweus (1993), is the parents' use of "power-assertive" parenting strategies, such as physical punishment, or "violent emotional outbursts." This is based upon the idea that a child will learn from how s/he is treated, and is supported by Bandura's social learning theory (1973, 1986) which explains how aggressive behavior is learned from aggressive adult role models. Olweus also contends that one personal factor contributes toward bullying behavior, namely the temperament of the child. Children with an "active and hot headed" temperament are more likely to develop aggression than children with an "ordinary and more quiet" temperament.

In summary, Olweus (1993) concludes that "...Love and involvement from the person(s) who rears the child, well-defined limits on which behaviors are permitted and which are not, and use of non-physical methods of child-rearing create harmonious and independent children"(p. 40).

Warmth versus negativity. Parental warmth has been shown to be modestly correlated with externalizing problems in childhood. In one study of five- and six-year old children, maternal warmth was negatively related to externalizing behavior problems, including aggression (Bates & Bayles, 1988). In another example, Booth and colleagues (1994) determined that maternal warmth toward children at age four was negatively correlated with conduct problems at age eight. Conversely, maternal negativity was positively correlated with conduct and behavior problem (Booth, Rose-Krasnor, McKinnon & Rubin, 1994). Putallaz (1987) also found that parents who are warm, engaged, and responsive are more likely to raise children who demonstrate social competence.

Involvement. Flouri and Buchanan (2003) investigated the role of mother and father involvement in bullying behavior in adolescents. Data collected from 1,147 British adolescents (57% girls) revealed that both low father and mother involvement contributed significantly toward bullying behavior in adolescence. Moreover, father involvement was found to be more protective against their children's participation in bullying when mother involvement was low.

Parenting Practices and Discipline. The use of harsh physical discipline, coercion, and punishment, are predictors of future aggressive behavior (e.g., Eron, Huesman, & Zell, 1991; Eron, Walder, & Lefkowitz, 1971; Farrington & Hawkins, 1991) and bullying (e.g.,

Espelage, Bosworth, & Simon, 2000; Shields & Cicchetti, 2001; Smith & Myron-Wilson, 1998). More specifically, several studies have found that children who bully others are significantly more likely to come from parental figures who use an authoritarian parenting style, described as harsh and punitive. For example, in a study of 1,401 Australian students in grades four through seven, parents of children who were classified as bullies or bully/victims were significantly more likely to use an authoritarian child-rearing style than parents of victims, or children not involved in bullying or victimization (Ahmed & Braithwaite, 2004).

Bowers, Smith and Binney (1992) conducted one of the first studies to address family characteristics of children who are involved in bullying. This study examined whether power and cohesion within the family predicted bullying behavior in children. Two hundred children between the ages of 8 and 11 were assessed regarding their perception of power and cohesion within their family. The ethnic composition of this British sample was 54% White, 28% Asian, 10% African/Caribbean, and 8% "other." Several interesting results emerged when comparing responses from subgroups of bullies, victims, bully/victims and controls. First, bullies had significantly lower cohesion scores than both victims and controls, and victims had the highest cohesion scores across all four groups. Second, bullies and bully/victims were significantly less likely to have a father figure at home than victims or controls. There were no significant differences among groups in regards to power, although there was a trend for bully/victims and bullies to perceive themselves as powerful figures in the family. Thus, bullies perceive their families

to be somewhat “spread out” or disconnected, whereas victims are more likely to perceive enmeshment within their family (Bowers, Smith, & Binney, 1992).

Baldry & Farrington (2000) examined parenting style among adolescents involved in bullying, delinquency, or both. Participants included 238 adolescents aged eleven to fourteen. Bullies reported that their parents used an authoritarian parenting style and disagreed with their parents. Delinquent youth characterized their relationship with their parents as conflictual, and low in support. In addition, delinquency and bullying were significantly related among older adolescents and boys.

Stevens and colleagues (2002) also investigated family characteristics of children involved in peer victimization. This study is unique because it examined the perspective of parents as well as the children. Participants included 1,719 children in grades five and six, and one parent of their choice. Significant differences were found between parents and children’s perception of family functioning, such that parents reported better family functioning than did their children. Compared to victims, bully/victims and children not involved, bullies perceived less cohesion, organization and control, but more conflict within the family. Bullies also scored significantly lower than other children in the areas of expressiveness and social orientation. When given hypothetical situations, bullies reported more negative affect, and more “destructive” problem-solving strategies than other children. Parents of bullies reported significantly more punishment of their children than parents of victims, bully/victims, and non-involved students. This study highlights the difference in perception of family functioning between parents and children. More importantly, it highlights perceived differences in family functioning among bullies,

victims, bully/victims, and non-involved students (Stevens, De Bourdeaudhuij, & Oost, 2002).

Espelage, Bosworth and Simon (2000) examined the relation among family characteristics and bullying among American middle school children. Five hundred and fifty-eight children (54% girls) in grades six through eight participated in the study. The majority of the sample (84%) was White, 9% were African-American, 3% were bi-racial, and 3% reported “other” ethnic backgrounds. Results indicated that children who reported physical punishment at home for breaking rules were significantly more likely to report bullying behavior. Adult supervision was also related to bullying behavior such that students who had the greatest amount of time without adult presence were more likely to bully than those with more adult supervision. Lastly, spending time with positive adult role models (e.g., those who advocate non-violent conflict management) was associated with less bullying behavior (Espelage, Bosworth, & Simon, 2000). Parents are not the only interpersonal influence on their children’s bullying behavior. Research suggests that peers also play a significant role.

Peer Influence

Although not examined in this study, peer influences affect the likelihood of a child engaging in bullying. Spending time with peers who break the law, damage property, engage in gang related activity, and hit others have been found to significantly relate to bullying activity (Espelage, Bosworth, & Simon, 2000). Bullies tend to be friends with other bullies or aggressive peers (Pellegrini, Bartini, & Brooks, 1999) and often have a

peer group that supports their behavior by encouraging their aggression (O'Connell, Peplar & Craig, 1999; Salmivalli, Huttunen & Lagerspetz, 1997).

A study examined the contextual effects of the peer-group on bullying. Espelage, Holt and Henkel (2003) hypothesized that homophily of the peer group would influence individual level bullying and fighting. Participants included 422 middle school students from a "rural community, with a high percentage of low-socioeconomic households." The majority of the sample (93%) was Caucasian, 1% African-American, 2% Biracial and 4% reported "other" racial backgrounds. On self-report measures of bullying and fighting, a significant effect for homophily was found. In other words, students tended to associate with peers who reported similar levels of bullying and fighting. In addition, bullying and fighting at the group level was predictive of individual levels of these behaviors, after controlling for baseline of these behaviors (Espelage, Holt, & Lagerzpetz, 1997). Thus, research suggests that peers make a significant contribution in influencing bullying behavior.

Luthar and McMahon (1996) studied peer reputations and their relation to several psychosocial variables among 332 inner-city ninth-grade students. Forty-three percent (43%) of the sample reported their ethnicity to be African American, 29% reported Hispanic background, 19% reported being White, and 9% reported "other" ethnicities. Four types of peer reputation dimension were determined using the Revised Class Play (RCP) including: Aggressive-disruptive, sensitive-isolated, popular-sociable, and prosocial-leader. Scores from the RCP were then used in a cluster analysis, and a four

cluster solution demonstrated the best fit. These clusters included a normative group, aggressive-popular group, prosocial-popular group, and sensitive-isolated group.

Several important findings were revealed in this study, relating peer reputation and aggression. The aggressive-popular group was composed of a disproportionate number of African-American students (odds ratio = $<.005$), and low number of White students (odds ratio = $<.05$). Peer acceptance was as characteristic of disruptive bullies as it was of responsible leaders. Moreover, aggression was significantly positively related to popularity, but not related to peer rejection or isolation. Thus, aggressive behaviors, including bullying, was often perceived as positive by the participants' peer group. The authors suggest that aggression among inner-city adolescents may, in part, reflect sociocultural norms and mores.

Environmental Influences

Neighborhood factors. There are very few studies which examine the influence of the social context of the neighborhood on bullying behavior in children and adolescents. Espelage, Bosworth, and Simon (2000) looked at two neighborhood factors in their study of the social context of bullying: concerns of neighborhood safety and access to guns. Middle school participants in this study were significantly more like to bully peers when guns were accessible and neighborhood safety was a concern. As previously mentioned, a negative relationship between adult supervision, positive adult role models and bullying was also found.

Bowen and Van Dorn (2002) examined the association between community violence and middle school student's perception of school danger. School danger was

operationalized as fights among students, gang fights, students carrying weapons, and destruction of school property. Participants included 857 students who were randomly selected from a nationally representative sample of 39 public middle schools. The findings indicated that for male students only, community violence was significantly related to perception of school danger (Bowen & Van Dorn, 2002). Girls may be less aware of community violence because they are less likely to witness violent crime (Loeber, Farrington, Stouthamer-Loeber, & Van Kammen, 1998), less likely to commit violent crimes and less likely to be victims of violent crime than are boys (Farrington & Loeber, 2000; Kaufman et al., 2000). Similarly, Espelage, Bosworth, & Simon (2000) found that perceptions of neighborhood danger was positively associated with bullying. Thus, violence and crime in the community or neighborhoods where children live may be an indicator of the level of exposure to aggression and violence in schools.

Another study, conducted in England, explored the differences in bullying in urban versus suburban neighborhoods (Percy-Smith & Matthews, 2001). The urban setting chosen in this study was described as "...located in a zone of relative poverty and multiple social deprivation...(with) a limited amount of open space for children to play apart from the street" (p. 54). The suburban location was described as including "...spacious, affluent middle-class family houses...interspersed with abundant green space" (p. 54). Results indicated that adolescents residing in inner city neighborhoods were significantly more likely to report bullying behaviors (57%) than those living in suburban neighborhoods (42%). Participants also reported experiencing higher levels of victimization by bullying in the urban neighborhood (46%) than in the suburban neighborhood (27%). The authors

of this study suggest that one explanation for this difference is that there are "...larger numbers of young people 'hanging out' on the street within an inner urban area, together with a general lack of social opportunity, a close propinquity of different groups of young people, each with their own microcultures, and a sense of ennui for some..." (Percy-Smith & Matthews, 2001, p. 57).

Bullying behavior is correlated with delinquency (Rigby & Cox, 1996) and has been considered one expression of aggression within a larger framework of antisocial behaviors (Farrington & Wikstrom, 1993). Therefore, when examining the social context of bullying, it is important to determine whether the school bullies are also engaged in bullying, aggression or violence on the streets. Andershed, Kerr, and Stattin (2001) examined this question in a Swedish population of eighth-grade students. Participants represented urban, suburban, and rural areas. Results suggest that adolescents who are involved in bullying or violence on the streets are often the same individuals who bully peers at school. Specifically, 63% of the male adolescents and 80% of the female adolescents who reported engagement in frequent violence on the streets were classified as bullies or bully/victims at school. Conversely, males who reported being a bully or bully/victim at school were 17 times more likely than non-bullies to report violence on the streets. Female bullies and bully/victims were 100 times more likely than non-bullies to engage in street violence. Several other interesting correlations were found. For example, males who bully others at school were significantly more likely to carry a weapon on the street. In addition, for both males and females, bullying behavior at school was significantly related to loitering on the streets.

Thus, the initial studies of the neighborhood environment and its relation to bullying suggest that factors such as perceptions of neighborhood safety, exposure to violence, access to a gun, and spatial and socioeconomic differences in locations of residence may contribute to the prediction of bullying behavior among children and adolescents. The setting where youth spend most of their time, however, is school. The following section will examine the contributions of the school environment toward bullying and peer victimization.

School factors. The literature addressing the influence of school factors on bullying is more substantial than that addressing neighborhood factors. One of the most recent studies in this area addresses how the context of the school and classroom affects aggressive behavior (including bullying) in elementary school children. Thomas and Bierman (2006) examine the influence of classroom aggression on the development of aggression in individual students. They hypothesized that exposure to classrooms classified by high levels of aggression (containing many aggressive students) would impact students dependent upon the temporal exposure (primacy, recency, and chronicity). The study examined contextual factors of the school, which have been found to contribute to classroom aggression, including school size, poverty level of students, and urban versus rural location (Colder, Mott, Flay, & Levy, 2000; Rutter, 1983). Lastly, student ethnicity (African American and Caucasian) was considered as a demographic variable of interest in relation to classroom aggression. The sample consisted of 4,907 children in grades one through three. The ethnic composition of the sample was 66% Caucasian, 34%, and African-American and less than 2% of other ethnicities.

The results of this study suggest that the contextual and demographic variables of the school and student population significantly contribute to the likelihood of exposure to classroom aggression. Specifically, African-American children who attended large, urban schools, characterized by high levels of student poverty, were twice as likely to be exposed to classroom aggression as were Caucasian students. School contextual factors contributed 6% to the variance, and student ethnicity contributed 1% to the variance of being exposed to high-aggression classrooms. In regards to the impact of various temporal exposure patterns, there was a cumulative effect such that students exposed to aggressive classroom settings for three years demonstrated higher levels of aggression than students with less recent and less chronic exposure (Thomas & Bierman, 2006).

Juvonen, Nishina and Graham (2006) studied how ethnic diversity in the middle school classrooms contributes to the students' perception of school safety in urban schools. Eleven middle schools were selected for ethnic diversity among low-income communities. The participants consisted of 1,421 sixth grade students. Analyses focused on data from African-American students (36%) and Latino students (64%). Results indicate that ethnic diversity within the classrooms was significantly related to lower levels of peer victimization (bullying) and higher levels of perception of school safety. The authors summarized by suggesting that "attending ethnically diverse schools, like belonging to an ethnically diverse classroom, was associated with the best overall outcomes for Latino and African-American students" (Juvonen, Nishina and Graham 2006, p. 398). A similar study which examined ethnicity and risk for peer victimization found that attending an ethnically diverse school was significantly related to less risk for peer victimization for African-

American students, greater risk for Caucasian students, and had no impact on Latino students (Hanish & Guerra, 2000). This is especially important for African-American children since in 2000, African-American students were more likely to attend a predominately African-American school (70%) than any other time over the last 40 years (Pettigrew, 2004).

From the aforementioned studies, the evidence seems to suggest that environmental factors, such as neighborhood type and school type can contribute to aggression towards peers. Participants in the current study attended urban middle schools serving predominately African-American families from low-resource neighborhoods. According to the 2000 U.S. census data (Kids Count, 2004), 61% of the children in this Southeastern city live in neighborhoods classified as high in poverty. This is more than three times greater than the national average. In addition, 65% of students are eligible for the free or reduced lunch program. Cultural influences, including socialization, may also contribute to differences in aggression and bullying among school children. However, the vast majority of the research on bullying has focused on Caucasian children.

Because African-American children may have different cultural and socialization experiences (e.g., racial socialization), it is important to studying potential influences on bullying for African-American children.

Cultural Influences

Socialization. Socialization is defined by Arnett (1995) as the process by which individuals learn behaviors, values, beliefs and customs of a given culture or social environment. The socialization of children has been largely considered a function of the

family (Harris, 1995), although other influences certainly contribute (e.g., community, peers, school, media). Parents contribute toward their children's socialization by choosing where their children spend their time, and who they spend it with (Maccoby, 1992). Parents also influence socialization of cultural values and beliefs directly, through overt messages and activities (Levine, 1969). Additionally, individuals are socialized through enculturation, when cultural messages and perspectives are learned from the social environment (Bandura, 1986; Jagers, 1997).

Two major socialization themes relevant for African-American children that have received attention in the literature include communalism (interdependence among people) and *verve* ["receptiveness to high levels of sensate stimulation" (Tyler, Boykin, Boelter, & Dillihunt, 2005, p. 294)]. These have been examined among African-American children who reside in low-resource neighborhoods (e.g., Dupree, Spencer, & Bell, 1997; Lee, Spencer, & Harpalani, 2003). One study found that low-income African-American families reported greater use of socialization values endorsing communalism rather than more mainstream values such as individualism and competition. Contrary to finding from prior studies (e.g., Boykin, 2001; Boykin, Tyler & Miller, 2005), however, *verve* was not found to be a strong socializing factor. Children whose parents emphasize communal values may be less likely to be aggressive or bully their peers. Additionally, parents reported some use of socialization practices endorsing individualism. The authors concluded that African-American children, especially those from low-income neighborhoods, likely receive a combination of both cultural and mainstream themes in

their socialization (Tyler, Boykin, Boelter, & Dillihunt, 2005). African-American children also experience racial socialization, discussed next.

Racial socialization is defined by Thornton and colleagues (1990) as practices that “provide information concerning the nature of race as it refers to: (1) personal and group identity, (2) intergroup and group identity, and (3) position in the social hierarchy” (Thornton et al., 1990, pp. 401-402). Three key components of racial socialization have been identified by Huges (2003), including educating children about their culture and ethnicity, preparing children for bias (prejudice), and promotion of mistrust (of those outside their racial/ethnic group) (Huges, 2003).

Caughy and colleagues (2006) examined how neighborhood characteristics influence the racial socialization of African-American children. Participants included 241 African-American first grade children living in an urban setting. Eight-five percent of the sample were African-American, and 12% reported multi-racial backgrounds. Neighborhoods in the study were categorized by level of economic disadvantage, racial composition, social capital, and negative social climate. Negative social climate was operationalized as perceived physical or social disorder, fear of victimization and fear of retaliation. Social capital was operationalized as the willingness of adults to intervene in acts of delinquency, child misbehavior, willingness to assist children in need, and social involvement in the neighborhood. Racial socialization variables in this study included racial pride, Africentric home, preparation for racial bias, and promotion of mistrust (Caughy et al., 2006).

Findings from this study suggest that racial socialization messages of preparation for bias and promotion of mistrust were significantly associated with higher levels of negative social climate of the neighborhood. In other words, in neighborhoods characterized by disorganization and fear of victimization or retaliation, racial socialization included more emphasis on racism and discrimination. This study also examined how socialization impacted externalizing and internalizing behavior problems in children. For girls, preparation for bias, racial pride and Africentric home environment was significantly related to externalizing behavior problems. For boys, promotion of mistrust was associated with externalizing problems, while for girls, it was associated with internalizing problems, such as anxiety and depression. The authors suggest that "... (parental) emphasis on racial barriers resulted in less adaptive anger expression" (p. 1232). Thus, racial socialization messages in neighborhoods characterized by disorganization or disadvantage may sometimes influence children's internalizing or externalizing behavior (including aggression) because of heightened awareness of issues such as racism and discrimination.

Research findings have suggested that neighborhood status, socio-economic status, and culture influence parental socialization of their children (Parke & Buriel, 1998). A few studies suggest that low-SES minority parents living in dangerous neighborhoods use specific parental strategies in order to adapt to the adverse ecological conditions. For example, Baldwin, Baldwin, and Cole (1990) found that poor minority parents using an authoritarian parenting style, had children who were better adjusted than children whose parents used an authoritative style. Another study found that parents increased restrictions

placed on their children when their perception of neighborhood danger increased. Mothers' perception was positively correlated with social competence in their children (O'Neil, Parke, & McDowell, 2001). These types of findings are important because psychosocial adjustment and social competence are negatively associated with aggression (Coie & Dodge, 1998).

The socialization of African-American children by parents and family frequently includes teaching obedience to adults, and sometimes incorporates physical discipline. As a result, African-American parents are sometimes described as strict or "harsh" (Portes, Dunham, Williams, 1986). Yet, this assumption does not take into account the context in which many African-American parents raise their children. Residing in dangerous or low-resource neighborhoods increases involvement in antisocial behaviors, including violence and aggression. Therefore, for African-American families facing severe ecological stressors, enforcing obedience and rules with physical punishment can serve as an adaptive strategy for discipline (Kelley, Power, & Wimbush, 1992).

Another factor which may influence aggression, and specifically bullying, is the socialization of gender role beliefs. The majority of the psychological literature examining the relation between gender-role beliefs and aggression is based on White samples. The increased focus on the use of relational/social aggression in bullying highlights the importance of considering gender socialization in understanding how forms of bullying in school may be influenced by cultural socialization.

African American gender socialization of girls and boys includes emphasis on both masculine (instrumental) and feminine (expressive) traits. Thus, gender role socialization

in African American families is often considered androgynous. One study found that both African American women and men were equally as likely to endorse traits considered to be masculine (instrumental) (Harris, 1996). Therefore, there may be fewer gender differences in aggression or bullying in African American children if parental socialization strategies do not reinforce stereotypical gender behavior. Moreover, more instrumental traits such as assertiveness can be considered adaptive, given the frequent encounters with prejudice and racism that African American individual experience. A study of peer victimization in an urban, African-American middle school sample revealed no differences in bullying aggression, self-efficacy for aggression or self-efficacy for assertion between boys and girls (Esposito, Farrell, & Belgrave, 2005). More research is needed in this area, particularly because the newer research on non-physical forms of aggression (e.g., relational aggression) has mainly included White, middle-class children. Another potentially influential cultural variable on bullying is children's normative beliefs about aggression.

Normative Beliefs about Aggression

Normative beliefs are described as "...individualistic cognitive standards about the acceptability of a behavior" (Huesmann & Guerra, 1997, p.409). This concept, as described by Huesmann and Guerra (1997), is based upon the idea that cognitive 'scripts' are processed through self-regulating beliefs (Huesmann, 1988). Thus, normative beliefs influence actions by providing the individual with a range of potential behaviors, both acceptable and unacceptable. These authors posit that normative beliefs about social behavior are developed from "a socialization process involving perception of social norms,

identification with specific reference groups, and personal evaluation” (Guerra, Huesman & Hanish, 1995, p. 145). Normative beliefs about aggression refer to an individual’s belief about the acceptability of aggressive behavior, and will be investigated in this study. It is hypothesized that aggressive children, such as bullies, would have more normative views of aggression than children uninvolved in bullying peers.

There is evidence to suggest that some children have a normative view of aggression. Aye Maung (1995) reported that aggression and violence in early adolescence was often considered “just something that happens” by adolescents. Anderson and colleagues (1994) state that “it is by no means an exaggeration to say that violence is an accepted part of life, for girls as well as boys” (Anderson et al., 1994, p. 90). When aggressive adolescent offenders were interviewed about bullying and fighting in school, many suggested that the ethos of the school supported aggression as a normal experience (Cullingford & Morrison, 1995). Moreover, evidence suggests that a positive or normative view of aggression is significantly correlated with aggressive behavior (Espelage et al., 2003).

Two studies have examined normative beliefs about aggression among urban school children. Huesmann and Guerra (1997) conducted a one-year longitudinal study with 1,015 elementary school children. Data was collected for three cohorts: second grade, third grade, and fifth grade. The schools were described as serving “poor urban neighborhoods.” The ethnic composition of the sample was 38% African-American, 37% Hispanic, and 18% White. There were several important results from this study. Children’s normative beliefs about aggression were significantly related to their aggressive

behavior. However, the relation between these two variables varied by age. In the youngest children, normative beliefs did not predict future aggressive behavior. Aggressive behavior did, however, predict future normative beliefs about aggression. In the older third grade cohort, normative beliefs predicted aggression, but were not predicted by prior aggression. In the oldest cohort, normative beliefs predicted aggression above and beyond what would be expected from earlier aggressive behavior (Huesmann and Guerra, 1997). Therefore, having normative views of aggression during childhood may actually increase aggressive behavior.

A more recent study examined the relation among individual normative beliefs and classroom normative beliefs about aggression and aggressive behavior in urban, elementary school children (Henry, Guerra, Huesmann, Tolan, VanAcker, & Eron, 2000). Participant included 614 students (51% girls) from fourteen public schools described as economically disadvantaged (62% received federal free or reduced school lunch). The ethnic composition of the sample was 33% African American, 43% Latino, 22% Anglo, and 2% "other." Data was collected from multiple sources, including self-report data from students, teacher-report, peer nominations and observation.

The results of this study indicated that injunctive norms of the class ("classmates' beliefs about the acceptability of aggression") significantly predicted aggressive behavior by influencing students' individual normative beliefs about aggression. When classes had teachers and students who disapproved of aggression, students demonstrated either less aggression or smaller increases of aggression, over time, than students in classrooms that were less discouraging of aggression. Similar to Huesmann and Guerra's earlier study

(1997), younger children had less stable normative beliefs about aggression than did older children. These results emphasize the importance of early childhood as a sensitive time for the formation of normative beliefs about aggression. In addition, this study highlights multiple influences that can shape a child's normative beliefs about aggression, including the "norm salience" of the class and class injunctive norms (Henry et al., 2000).

As previously discussed, the norms of the school and students in the classroom can influence a child's normative beliefs about aggression. Another specific socialization experience that may normalize aggression to children is exposure to aggression and violence on a regular basis. Exposure to violence and aggression is linked to aggressive behavior in both boys and girls. In a sample of African-American, urban middle school students, Farrell and Bruce (1997) found that exposure to violence was correlated with concurrent level of aggression for both boys and girls. Additionally, exposure to violence was related to higher levels of violence for boys than girls. Similarly, another study found the frequency of witnessing violence was significantly related to engaging in violent and aggressive behavior among African-American elementary school students (DuRant, Cadenhead, Pendergrast, Slavens, & Linder, 1994). However, the frequency of witnessing aggression and violence is also related to other contextual factors, such as living in an impoverished and disadvantaged community (e.g., Aneshensel & Succo, 1996). Given that the participants in this study reside in a city recently ranked the ninth most dangerous in the U.S. (among cities with populations of over 75,000 residents), it is likely that these children may be particularly susceptible to aggressive behavior because of their exposure

to violence and aggression and the subsequent cognitive normalization of the experience (Nolan, 2004).

One study found that adolescents from low-resource neighborhoods viewed their surroundings as more dangerous (e.g., crime, violence, drugs) than adolescents from middle or high SES neighborhoods. Perception of neighborhood danger was related to aggression as well as other symptoms of oppositional defiant disorder and conduct disorder (Aneshensel & Succo, 1996). Kupersmidt, Griesler, DeRosier, Patterson, and Dodge (1995) studied 1,271 students in second through fifth grade, and found that African-American children from low-income, single-parent homes in low-SES neighborhoods were significantly more aggressive than children from low-income, single-parent homes in middle-class SES neighborhoods. Attar, Guerra, and Tolan (1994) found that exposure to violence predicted aggression toward peers in a sample of children living in low-resource neighborhoods. Thus, it has been shown that exposure to violence and aggression can predict future aggression in children, but few studies examine how children's beliefs or attitudes about aggression influence their likelihood for engaging in aggressive behavior.

There are several possible explanations of why children may have a positive view of aggression. Two studies found that in comparison to non-aggressive children, aggressive children believed that aggressive behavior leads to positive outcomes or tangible rewards, such as reducing negative treatment from others (Perry, Perry, & Rasmusen, 1986; Slaby & Guerra, 1988). Thus, if aggressive children are rewarded for their behavior, it increases the chances that they will continue to use aggression in other

situations. When positive views of aggression were reduced in children, aggressive behavior decreased as well (Guerra & Slaby, 1990).

Social information-processing theory provides another reason why some children believe aggression to be both normative and positive. In conditions of high perceived threat, such as dangerous neighborhood settings, individuals may be hypervigilant to potentially hostile or threatening cues (i.e., hostile attribution bias). This cognitive bias may lead to the frequent use of aggression as an adaptive or protective strategy (Coie & Dodge, 1996). In other words, when children perceive their environment to be hostile or threatening, aggression may appear to be a good defensive behavioral strategy. Frequent exposure to violence may support a standard of behavior that endorses aggression as a justifiable and efficient means of handling conflict (Bandura, 1973; Huesmann, Guerra, Miller, & Zelli, 1992).

A meta-analysis examined studies on the influence of hostile attribution bias of intent to peers on aggressive behavior in children (Orobio de Castro, Veerman, Koops, Bosch & Monshouwer, 2002). Included in the meta-analysis were 41 studies, with 6,017 participants between the ages of eight and twelve. The research sample significantly underrepresented girls. Thus, the results can only be generalized to boys.

Several prior studies had found that hostile attribution of intent contributes to aggression, behavior problems, problematic peer relationships, and reduces social opportunities to experience and learn prosocial behavior (Dishion, French, & Patterson, 1995; Dodge, 1993; Dodge et al., 1997). Hence, the authors suggested that hostile attribution of intent is likely an essential influence in chronic aggressive behavior problems

(e.g., bullying). Overall effects sizes from this meta-analysis indicate that a strong positive relation exists between hostile attribution of intent and aggressive behavior ($p < .001$). Effect sizes among studies, however, varied greatly. Moderators of the effect sizes included variable such as severity of aggression, type of aggression, sociometric status, age, gender, and methodology of the study (Orobio de Castro, Veerman, Koops, Bosch & Monshouwer, 2002). In sum, if children are exposed to environmental or ecological conditions that predispose them to a hostile attribution bias, chronic aggression problems such as bullying, may be prevalent.

A recent study examined perceived neighborhood danger, positive views of aggression, and aggressive behavior in a sample of 732 predominately African-American fifth grade students. Results suggested that higher levels of perceived neighborhood danger were significantly correlated with higher levels of positive beliefs about aggression. Positive beliefs about aggression were associated with higher levels of aggression and partially mediated the relation between neighborhood danger and aggression. In this sample, boys had higher levels of aggression and more positive beliefs about aggression than did girls (Colder, Mott, Levy, & Flay, 2000).

The previously reviewed literature has examined several influences on normative beliefs of aggression, including school climate, exposure to violence, and residing in a dangerous neighborhood. One final influence on normative beliefs of aggression is what Anderson (1999) describes as the “code of the streets.” Anderson’s thesis suggests that both cultural and environmental factors, such as disadvantage, social dislocation, and

discrimination, contribute to aggression and violence among African American adolescents.

The “code of the streets” describes “a set of informal rules governing interpersonal public behavior, including violence” (Anderson, 1994, p. 80). The underpinning of this code is commanding a level of respect from others that is perceived to be deserved. Any perception that respect has not been given can lead to physical confrontation. Aggression and violence is considered a normal part of life, and largely defensive (Anderson, 1994). When youth live in violent and disadvantaged communities and are exposed to the street code, they likely learn to be aggression, and moreover, pride themselves on being tough and presenting an aggressive self-image (Anderson, 1999; Felson & Steadman, 1983). Anderson argues that individuals who adopt the street culture are often those who are deprived of various prosocial opportunities, and have come to believe that their self-worth is based upon gaining respect through the street code. Moreover, endorsing the street code is believed to demonstrate that the individual is strong and tough despite harsh ecological conditions (Anderson, 1999).

Stewart and Simon (2006) examined the influence of neighborhood, family type, and discrimination on the adoption of Anderson’s “code of the streets” among 720 African American adolescents from 259 different neighborhoods. The authors also examined the street code as a mediator of the relation among neighborhood, family type and discrimination and violence. Family type was represented by two distinct groups: “decent” families and “street” families. These terms were coined by Anderson (1999) because they were frequently used by residents of the neighborhood he examined. Characteristics of

“decent” families included consistent discipline, warmth/support, prosocial behavior, quality time, positive reinforcement, child monitoring, and inductive reasoning.

Conversely, “street” families were characterized by inconsistent and harsh discipline, parental violence, physical aggression, verbal abuse, antisocial behavior, and child neglect (Stewart & Simons, 2006).

As hypothesized, neighborhood disadvantage, violence, and discrimination were significantly, positively correlated with the adoption of the “code of the streets” and violent delinquency. In addition, adolescents whose families were characterized as “street families,” had violent peers, and experienced high levels of strain, were also likely to adopt the code. Gender and socioeconomic status (SES) were not significant predictors.

Moreover, the street code was a significant mediator of the relation between neighborhood disadvantage, neighborhood violence, and discrimination and violent delinquency. The street code mediated 26% of the influence of neighborhood violence, 20% of the influence of neighborhood disadvantage, and 20% of the influence of racial discrimination on adolescent violence. Adolescents who embraced the street code demonstrated a 28% increase in violence over two years after controlling for previous levels of violence.

“...Adolescents reared in a family characterized as street appeared to embrace the street code. This finding is consistent with Anderson’s contention that street families engage in a style of parenting in which they socialize their children to embrace the code of the street as a normative process” (Stewart & Simons, 2006, p. 23).

Media Influences. Although not in the scope of this study, the influence of media on aggression and bullying will be briefly reviewed. There is sufficient empirical evidence

demonstrating the negative effects of media violence on aggressive behavior (Anderson & Bushman, 2001; Anderson & Bushman, 2002). Specifically, the consensus from the literature is that media influences have a direct, positive, linear effect on aggression. Several meta-analytic studies suggest that the effects of television violence are robust, and account for approximately ten percent of the variance in aggression in children (Comstock & Paik, 1991; Wood, Wong, & Chachere, 1991). In experimental studies examining the impact of violence and aggression on television on children's behavior, results indicated that children behave more aggressively immediately after viewing violence on television (Green, 1990; Green & Thomas, 1986). This is not only true for aggression toward peers but also aggression toward inanimate objects (Bjorkqvist, 1985; Josephson, 1987). On the contrary, watching video tape of prosocial behavior has elicited less aggression in children, under experimental conditions (Eron & Huesmann, 1986).

While research has thoroughly examined media influence on general aggression, there are very few studies on the influences of violent media on bullying. Exposure to violent media may contribute to normative beliefs about aggression from repeated exposure to aggressive models. It has been found that exposure to media violence desensitizes individuals to violence in real life, and also increases the risk for aggression (Paik & Comstock, 1994; Renfrew, 1997). Violence and aggression in the media may also influence bullying via social learning principles (Bandura, 1986).

Lee and Kim (2004) examined the relation between exposure to violence in the media and bullying, as mediated by anger and contact with delinquent peers. Five hundred and sixty Korean adolescents between the ages of twelve and sixteen participated in the

study. The results indicated that violent media had a significant and direct influence on bullying at school. Additionally, anger and contact with delinquent friends mediated the relation among these variables. These findings are limited in their generalizability until they can be replicated in other populations (i.e. younger children, different ethnic groups) and cultures.

Music videos are another form of media that often portray violence and aggression. Rich and colleagues (1998) explored gender and racial differences in aggressors and victims of violent rap videos. Fifteen percent (15%) of the videos in the study showed interpersonal violence, and in 80% of these violent videos, the aggressor was portrayed as an attractive figure. Males were three times more likely than females to be the aggressor. In regards to race, Caucasian females were most often portrayed as victims, while African-American males and females were overrepresented as aggressors and victims (Rich et al., 1998). Given that musicians and “rap stars” are often idolized by children and adolescents, it is likely that identification with these figures has the potential to increase aggressive behavior and normative views of aggression. Further research in this area is needed elucidate the relation between exposure to violent media and peer victimization. It has thus far been argued that several individual-level, family-level, and environmental-level variables influence bullying behavior in youth. Conversely, a variety of factors also contribute to the development of empathetic responding and prosocial behavior.

Factors Contributing to Prosocial Behavior

Prosocial behavior is defined as voluntary behavioral acts intended to benefit or assist another individual or group of individuals (Eisenberg & Mussen, 1988). In the

current study, prosocial behavior will be investigated as a dependent variable. In children, such behaviors may include sharing, comforting, or providing instrumental help.

Although societal norms generally promote prosocial behavior, a child must be cognitively sophisticated enough to have internalized these norms, accurately recognize and interpret the needs of another, and identify a way to help. In addition, the child must have self-efficacy for the specific prosocial behavior and not be deterred by potential risk associated with the behavior (Eisenberg, 1986). Hence, the acceptance of societal norms of prosocial behavior is not sufficient for children to act prosocially. Prosocial behavior is best considered as resulting from both individual and environmental influences. The following section will review factors that contribute to prosocial behavior in children, including personal factors, family socialization, and cognitive factors.

Personal Factors. One important personal factor that would seem to correlate with prosocial behavior is empathy, or empathetic emotional responding. Eisenberg, Fabes and colleagues (1990, 1993, 1994, 1996) have examined the relation among empathy and prosocial tendencies in children and adults. In several of these studies, children were shown video tapes of situations likely to induce either empathy or personal distress. Children who exhibited physiological signs of empathy (specific facial features, lowered heart rate, lower skin conductance) were more likely to respond prosocially when given a chance to help than those children who responded to the video with more personal distress. In most cases, boys were more likely to respond with distress and less subsequent prosocial behavior than girls (Eisenberg, Fabes, Carlo, et al., 1993; Eisenberg, Fabes, Miller, &

Shell, et al., 1990; Fabes, Eisenberg, & Karbon, et al., 1994; Miller, Eisenberg, Fabes, & Shell, 1996).

McMahon, Wernsman, & Parnes (2006) examined the influence of empathy and gender on prosocial behavior in urban dwelling African-American adolescents. One hundred and fifty students (64% female) in grades five through eight participated. Findings indicated that empathy had a main effect on prosocial behavior. Additionally, the interaction between gender and empathy was significant such that teachers rated highly empathetic boys as more prosocial than highly empathetic girls. Therefore, the ability to empathetically identify with others may be a key factor in the development of prosocial behaviors, especially in boys.

Other lines of research have focused on personality or temperamental correlates of prosocial behavior. For example, sociability in children was associated with spontaneous prosocial acts (Eisenberg, Cameron, Tryon, & Dodez, 1981; Eisenberg, Pasternack, Cameron, & Tryon, 1984) while shyness in young children may inhibit prosocial behaviors (Eisenberg, Fabes, Karbon et al., 1996). Prosocial children have been rated by adults as socially competent and as having adaptive coping mechanisms (Eisenberg, Fabes, Karbon, et al., 1996). Additionally, prosocial children have more positive peer interactions (Farver & Branstetter, 1994) and are more cooperative (Jennings, Fitch, & Suwalsky, 1987) than children who are less prosocial. In middle childhood and later, studies have found that prosocial children report positive self-esteem or self-concept (e.g., Larrieu & Mussen, 1987; Rigby & Slee, 1993). Lastly, prosocial behavior has been found to be correlated with emotion regulation, positivity and low impulsivity (e.g., Eisenberg, Fabes, Karbon, et

al., 1996; Eisenberg et al., 1981) Thus, prosocial children tend to possess traits which are indicative of social competence in general.

Nelson and Crick (1999) examined the social information-processing of prosocial children. Participants included 675 students in grades four through six. In comparison less prosocial, non-aggressive peers, prosocial children processed social information differently in several ways. For instance, prosocial youth were found to have a “benign attribution bias.” In other words, these individuals were less likely to attribute hostile intent or experience distress in provocative situations. In response to provocative situations, prosocial children evaluated prosocial responses more positively and aggressive responses more negatively than their peers. Additionally, prosocial children were more likely to select relational goals rather than instrumental goals in provocative situations. Therefore, just as aggressive children process social information in a unique fashion, so do prosocial children (Nelson & Crick, 1999). In addition to personal influences on prosocial behavior, family influences have also been identified.

Family Factors. Several factors such as parental discipline, parental warmth, and positivity versus negativity have been studied in relation to prosocial responding in children. Krevans and Gibbs (1996) examined the relation among discipline, empathy, and prosocial behavior in sixth and seventh grade students. Data were collected from students as well as their mothers and teachers. Results indicated that parents who reported use of inductive discipline styles (e.g., when the parent explains why the child needs to change his/her behavior, and how the behavior affects others; Hoffman, 1982; 1994) rather than power assertive styles (e.g., physical punishment) were more likely to have prosocial

children. In addition, children's level of empathy was significantly predictive of prosocial behavior. Finally, parents who relied on inductive discipline techniques were more likely than those who relied on power assertive techniques to have children who were more empathetic. In other words, empathy mediated the relation between discipline and prosocial behavior in this study (Krevans & Gibbs, 1996).

Whiteside-Mansell and colleagues (2003) examined parenting behaviors and the development of problematic and prosocial behavior in Caucasian and African American mother-child dyads. The data from the study originated from the NICHD Study of Early Child Care. Children were three years of age at the time of the study. The parenting dimensions examined included responsive parenting (sensitivity guidance, positive regard, supportiveness and stimulation), harsh parenting (negative regard and hostility), and intrusive parenting (over control and lack of respect for child autonomy). Child variables measured included prosocial behavior, internalizing problems (anxiety, withdrawal, and somatic problems) and externalizing problems (aggression, disruptiveness, and destructiveness).

Responsive parenting was significantly negatively related to both harsh and intrusive parenting, and to internalizing and externalizing behavior in children. Conversely, harsh and intrusive parenting was significantly positively related to internalizing and externalizing behavior. Similarly, responsive parenting was significantly associated with prosocial behavior in children while harsh and intrusive parenting were negatively related to prosocial behavior. No significant differences across racial groups were found for parenting behavior or child adjustment. Hence, non-responsive or negative

parenting behaviors have been found to be associated with less prosocial behavior in young children, as well as more aggression (Whiteside-Mansell et al., 2003).

Several other studies have indicated that power assertive techniques and harsh authoritarian parenting is negatively associated with empathy and prosocial behavior in children (e.g., Janssens & Gerris, 1992; Dekovic & Janssens, 1992). Power-assertive techniques may cause the child to respond prosocially only when externally motivated by fear of punishment, while inductive discipline techniques may increase prosocial behavior by influencing internal motivation (such as empathy). In sum, results of numerous studies suggest that disciplinary style is significantly related to prosocial behavior in children.

Another parental characteristic linked to the development of prosocial behavior is parental warmth. Knafo and Plomin (2006) examined both genetic and environmental contributions toward the relation between parental warmth and positivity and prosocial behavior in 9,319 pairs of twins. Parents rated their children's prosocial behavior at age 3, 4, and 7. Teachers rated participants behavior at age 7. In this study, parental positivity was defined by positive feelings towards the child and non-coercive discipline, while parental negativity was defined as negative feelings towards the child, and coercive, punitive discipline. Genetic influence was determined by comparing rates of similarity in monozygotic twins versus dizygotic twins. Findings indicated that both genetic and environmental influences contributed toward both prosocial behavior and parenting. Specifically, there was a significant positive correlation between parental positivity and children's prosocial behavior. Similarly, parental negativity was negatively correlated with prosocial behavior in twins. These results were consistent for both genders and at all ages.

Teacher reports of prosocial behavior resulted in similar, but weaker correlations. These results emphasize the significance of parental behaviors in influencing prosocial behavior in their children, above and beyond the contributions of genetics and development (Knafo & Plomin, 2006).

Parental warmth and “positive expressiveness” have also been associated with empathy and social functioning in children (both variables related to prosocial behavior). Zhou et al. (2002) examined this relation in a sample of 180 children in grades two through five using a two-year longitudinal design. Social functioning was operationalized in this study as low levels of externalizing behaviors and social competence. The results indicated that parental positive expressivity mediated the relation between parental warmth and child’s empathy. In addition, child’s empathy mediated the relation between parental positive expressivity and children’s social functioning. This study emphasizes the significance of parental characteristics (especially maternal characteristics) in the development of empathetic and socially competent children (Zhou et al., 2002). The following section describes the psychosocial benefits of prosocial behavior.

Psychosocial benefits of prosocial behavior.

Prosocial behavior has been construed as the opposite of antisocial behavior (e.g., Eisenberg & Fabes, 1998) and has often been examined in relation to externalizing behaviors in individuals (Carlo, Hausmann, Christiansen, & Randall, 2003; Crick & Grotpeter, 1995; Eisenberg et al., 1998; Zhou et al., 2002). These studies have indicated that there is at least a modest negative correlation between prosocial and externalizing behaviors. Additionally, antisocial and externalizing behaviors, in general, have received

significantly more attention than prosocial behavior in the psychological and criminological literature because of their deleterious correlates and consequences (e.g., Coie & Dodge, 1998). Thus, the literature of the short and long term benefits of prosocial behavior is still underdeveloped. The following studies, however, reveal some of the recent findings related to the importance of prosociality in children and adolescents.

Carlo, Hausmann, Christiansen, and Randall (2003) examined the behavioral and socio-cognitive correlates of prosocial behavior in adolescents. The sample consisted on 183 participants (58% girls) from a public middle school and high school. Eighty participants were from the middle school and 58 participants were from the high school. The average age of participants was 15.8 years old. The majority of the sample reported their ethnicity as White (70%), 10% reported being African American, and 10% reported other ethnicities. Data was collected from self-report measures of prosocial behavior, suppression of aggression, empathy and sympathy. A teacher report measure of generosity and helpfulness was also collected (Carlo, Hausmann, Christiansen, & Randall, 2003).

For both early and middle adolescents, higher levels of altruism were related to lower levels of aggression, and higher levels of responsibility. Given the modest strength of the relation, however, the authors note that “adolescents who are aggressive are not necessarily less helpful and adolescents who are helpful are not necessarily less aggressive”(p. 129). Early adolescents who endorsed higher levels of prosocial moral reasoning were significantly more likely to also report altruistic behaviors. Among participants in middle adolescence, altruism was negatively related to approval-oriented prosocial moral reasoning. In other words, older youth were less concerned with the

approval of others than were the younger youth. In addition, youth who reported more helpfulness in emotionally evocative context also endorsed prosocial moral reasoning, higher levels of sympathy, ascription of responsibility, greater ability to take another's perspective, and greater ability to understand another's situation. Overall, global prosocial behavior was significantly, positively related to all prosocial tendencies subscales (compliance, anonymous helping, direct, emotional) except for altruism and public helping in middle adolescence (Carlo, Hausmann, Christiansen, & Randall, 2003).

Significant gender differences were found in this sample. In general, girls were more likely than boys to report altruistic, prosocial tendencies. Boys reported more public prosocial tendencies, while girls reported more emotional prosocial tendencies. Age difference also emerged on one variable; middle adolescents reported more anonymous prosocial behavior than early adolescents (Carlo, Hausmann, Christiansen, & Randall, 2003).

Another study examined the trajectories of prosocial behavior and aggression in middle school children (Kokko, Tremblay, Lacourse, Nagin, & Vitaro, 2006). The sample consisted of 1,025 males between the ages of six and twelve from 53 schools in Montreal. Participants were described as residing in low socioeconomic areas. The results indicated that correlations between prosocial behavior and aggression were significant, but low, cross-sectionally and longitudinally. Trajectories for both prosociality and aggression declined over time between the ages of six and twelve. A decrease in prosocial behavior is contradictory with previous literature that suggests prosociality increases with age (Eisenberg & Fabes, 1998). One significant limitation to this study is that girls were not

studied. These findings suggest that although prosocial behavior is negatively related to aggression, it is likely that the relationship is complex and may be mediated or moderated by other factors.

Eisenberg and colleagues (1996) studied the relation between children's prosocial behavior and emotionality, regulation and social functioning. One hundred and fifty-one students in grades three through six participated in this study. Eighty-nine percent (89%) of the sample reported their ethnicity as Caucasian, 4% reported being Black, 3% reported being Hispanic, and 2% reported being Native American. Data was collected through self-report measures, peer nominations, and parent report.

Children classified by others as prosocial were significantly more likely than less prosocial children to score low on negative emotions, and high on measures of constructive coping skills, socially appropriate behavior, and attention regulation. Attention regulation was found to moderate the relation between negative emotionality and prosocial behavior. The authors interpreted the findings by proposing that "the relation between prosocial and socially competent functioning is due to the fact that children who are dispositionally well regulated (particularly if also low in negative emotionality) are better able than other children to attend to social situations and others' needs, as well as to regulate negative emotional reactions that interfere with socially competent and prosocial functioning" (Eisenberg et al., 1996, p. 989).

The literature on the psychosocial correlates of prosocial behavior, thus, has suggested numerous positive findings, as described above. Other research supports these general conclusions. For example, studies have found that prosocial behavior is a

protective factor for aggressive children against peer rejection (Bierman, Smoot, & Aumiller, 1993; Nangle & Foster, 1992; Volling et al., 1993) and criminal behavior (Pukkinen & Tremblay, 1992). There is a paucity of research on the relation between prosocial behavior and bullying, making it a needed area of study in order to inform bullying prevention and intervention strategies.

Statement of the Problem

Bullying among middle school students is a serious problem that carries deleterious psychosocial consequences for bullies, victims, and bully/victims (Nansel et al., 2001). While numerous studies examine peer victimization from the victims standpoint (e.g., Juvonen & Graham, 2001) fewer have focused on bullies who use direct and relationally aggressive strategies against their peers. Empathy is one variable that is likely related to less bullying and more prosocial behavior among children. Additionally, anger has been positively associated with bullying behavior. In considering the population of this study (African American children from an urban environment), normative views of aggression also have the potential to influence both of these variables and the prevalence of bullying in urban middle schools. Thus, understanding the relation of these variables to bullying will make an important contribution to this body of research. This is especially important given that anti-bullying and violence prevention programs often emphasize empathy training and anger management (Olweus, 1993).

The majority of the literature on peer victimization has focused on predominately Caucasian samples (i.e., Grills & Ollendick, 2002; Hodges & Perry, 1999; Olweus, 1992), or on samples of mixed ethnicity (i.e., Graham et al., 2001; Juvonen, Nishana, & Graham,

2000). There is a paucity of research on bullying and its correlates among African-American youth. Research on children in urban settings is especially needed, as the environmental and socio-economic context may be an influencing factor in bullying and aggression, i.e. higher crime, exposure to violence in the community (Fitzpatrick, 1997). Therefore, despite the growing literature on bullying and peer victimization in the psychological literature, the degree to which these findings generalize to urban African-American youth is largely unknown. Studies are needed on this population to inform both prevention and intervention programs which target reducing bullying and violence in middle schools.

The overall purpose of the study is to investigate correlates of bullying among African-American middle school children. The *objectives* of this study are to: 1.) examine the extent of bullying in an African-American, urban middle school sample; 2.) examine the influences of empathy and anger management on overt bullying, relational bullying, and prosocial behavior; 3.) examine the extent to which normative beliefs about aggression moderate the effects of empathy on overt bullying, relational bullying and prosocial behavior; 4.) examine the extent to which normative beliefs about aggression moderate the effects of anger management on overt bullying, relational bullying and prosocial behavior; and 5.) examine gender differences in bullying and empathy.

The *primary hypotheses* are: 1.) lower levels of empathy will be significantly, positively related to bullying, and negatively related to prosocial behavior; 2.) higher levels of anger management will be significantly, negatively related to bullying and positively related to prosocial behavior 3.) normative beliefs about aggression will moderate the

effects of empathy on bullying and prosocial behavior, such that individuals with high normative beliefs about aggression and high empathy will engage in more bullying behavior and less prosocial behavior than individuals with low normative beliefs about aggression and high empathy; 4.) normative beliefs about aggression will moderate the effects of anger management on bullying behavior, such that that individual with high normative beliefs about aggression and anger management skills will engage in more bullying behavior than individuals with low normative beliefs about aggression and anger management skills; 5.) girls will report higher rates of relational aggression than will boys and boys will report higher rates of overt aggression than will girls.

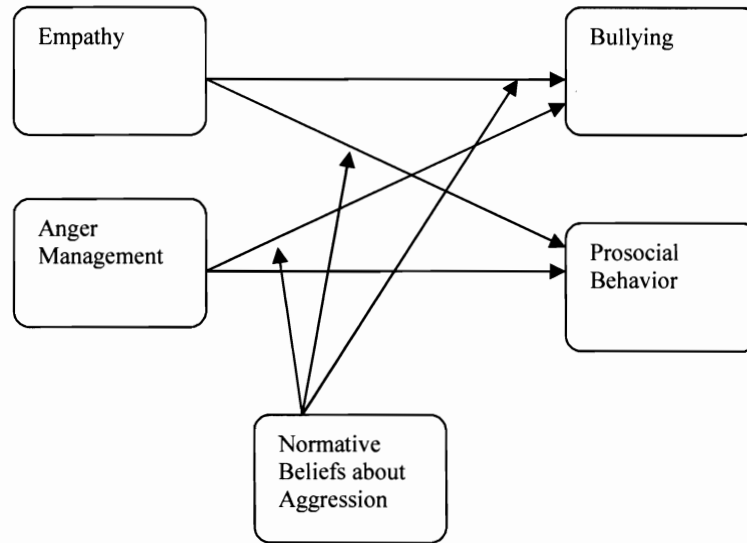


Figure 2

Conceptual Model

Chapter 3

Method

Participants

Data for this study is a subset of data collected from a larger parent study designed to examine the effectiveness of a culturally integrated substance abuse and sexual education prevention program. Although the original intent of the data collection was to evaluate the effectiveness of this program, this study does not address these issues. Data collected at pre-test was used for the current study. The sample consists of students in the sixth, seventh and eighth grades from two public, urban middle schools in a city in the Southeastern, United States. Two hundred and five students returned both parental consent and assent forms and completed the survey. Participation rate was approximately 70%.

The schools in this study serve predominantly African-American communities. The majority of the students in the sample (84%) identified themselves as African-American or Black, 5% identified themselves as bi-racial, 2% identified themselves as Native-American, 2% identified themselves as Asian-American, 1% identified themselves as White, Caucasian, or European and 6% reported their racial background as "other." Thirteen percent (13%) of the sample reported Hispanic ethnicity. To meet the objectives of this study, the sample was restricted to the 177 students who identified themselves as African-American and biracial. Fifty-four percent (55%) of the final sample identified themselves as females and 45% identified themselves as male. Thirty percent (30%) of the students were in the sixth grade, 40% were in the seventh grade, and the remaining 30%

were in the eighth grade. Participants ranged in age from eleven to fifteen, with a mean age of twelve.

Recruitment and Informed Consent Procedures

All students in health and physical education classes in the sixth, seventh and eighth grade of two public middle schools were invited to participate in the study. Students from both regular education and special education classes were included. Assent and consent forms were delivered to the students at school to be given to their parent or legal guardian for review and signature. A verbal overview of the study was given to the student upon receiving the consent forms. Students received an incentive (e.g., lotion, sports cards, stationary) for returning the forms and another for participating in the survey. Incentives for consent forms were still given if the parent or child refused participation. Assent and consent forms were collected in the schools by the student's health teacher who then gave them to the researcher.

Procedure

Surveys were administered to all students who returned signed assent and consent forms. The surveys were given to students during a health or gym period by trained research assistants (graduate students in psychology). Survey booklets were coded with an identification number to protect the confidentiality of the students. The researcher read the directions aloud to the students, and explained that responses would be confidential. The survey was read aloud to students with reading difficulties. Make-up administrations were given at each school for participants who were absent on the day of the assessment.

Measures

Only measures relevant to this study are discussed. These include measures of overt bullying, relational bullying, prosocial behavior, empathy, anger management and normative views of aggression. The following section describes the psychometric properties of the measures of the dependent variables, independent variables, and lastly, the moderator variable.

Aggression and Prosocial Behavior: The Children's Social Behavior Scale (CSBS) (Self-Report) (Crick & Grotpeter, 1995) measured aggressive and prosocial behaviors. The scale was modified from the Children's Peer Relations Scale (CPRS), a measure of overt and relational aggression, prosocial behavior, and loneliness, and published in *Child Development* (1995). After this publication, the scale was renamed to the CSBS, with a self-report, peer nomination, and teacher report format. It is one of the most popular measures of relational aggression (in addition to overt aggression). This 15-item self-report scale was designed to measure physical, verbal, and relational aggression as well as prosocial behaviors. Children are asked to report how often they participate in various aggressive and prosocial behaviors. For example, one item states, "Some kids hit other kids at school. How often do you do this?". Another asks, "Some kids try to keep certain people from being in their group when it is time to play or do an activity. How often do you do this?" Items are scored by frequency of occurrence on a five-point scale: 1 =

Never, 2 = *Almost Never*, 3 = *Sometimes*, 4 = *Almost Always*, 5 = *Always*. For this study, items tapping inclusion and loneliness were not included.

Psychometric data has been published for the peer-report (Crick & Grotpeter, 1995) and the teacher-report (Crick, 1996) forms only. Internal consistency for the peer report measure is strong, with alpha coefficients ranging from .83-.93. For the teacher report measure, both internal consistency (alpha coefficients ranging from .93-.94) and test-retest reliability at six months (alpha coefficients ranging from .56-.78) has been shown. The alpha coefficient for the CBCS self-report in this sample was .86. The alpha for the relational aggression subscale was .85, the alpha for the overt aggression subscale was .93, and the alpha for the prosocial behavior subscale was .80.

Factor analysis CBCS (peer and teacher forms) has supported three distinct factors in this measure: overt aggression, relational aggression, and prosocial behavior, which also supports current theory (Crick, 1996, Rys & Bear, 1997). Construct validity for the CBCS is supported by the finding that girls view relationally aggressive acts as those committed out of hostility, anger, and malice; this is similar to how boys view overtly aggressive acts (Crick, Bigbee & Howes, 1996). Convergent and divergent validity for the CBCS is supported by research. For example, findings show that peer and teacher reports of relational and overt aggression are correlated with peer rejection in boys and girls (Crick, 1996). In addition, overt aggression reported by peers was correlated to externalizing behaviors (convergent), while relational aggression reported by peers was correlated to externalizing and internalizing behaviors in children (divergent) (Crick, 1997). Another finding that supports divergent validity of the measure is that relationally aggressive

middle school girls reported more internalizing problems (lonely, isolated, depressed, low peer acceptance) regardless of the level of engagement in overt aggression (Crick, & Grotpeter, 1995).

Empathy: Empathy was measured with Bryant's Index of empathy in children and adolescents (1982), one of most widely used measures of its kind. This self-report questionnaire consists of 22 items which assess empathetic or non-empathetic tendencies (e.g., "It makes me sad to see a girl who can't find anyone to play with"; "Kids who have no friends probably don't want any"). The child is asked to report how much the item is descriptive of him/herself on a four point scale: *1 = not at all like me; 2 = a little like me; 3 = pretty much like me; 4 = very much like me.* Bryant's Index is an adaptation of Mehrabian and Epstein's (1972) adult empathy scale. Subscales for empathy for boys and girls are included because of the possibility that children are more empathetic with same-sex peers (Feshbach & Roe, 1968). Internal stability of this measure among 7th grade students is acceptable, with a Chronbach's alpha coefficient of .79 (Bryant, 1982). Test-retest reliability for 7th grade students is also good $r=.83$ over short periods of time. Convergent validity was evidenced by significant correlations ($p<.05$) with the adult empathy scale (Mehrabian & Epstein, 1972). Discriminate validity was assessed by comparing the empathy scores with a measure of reading achievement and social desirability. Neither of these areas was correlated with empathy (Bryant, 1982). In this sample, the alpha for Bryant's Empathy Scale was .70.

Anger Management: This 10-item, self-report scale assesses children's use of anger management skills when peer conflicts arise. For example, one item states, "I could

use humor, like a joke, to cool things off,” while another states, “I could walk away from a fight.” Children are asked to indicate how much they agree or disagree with each statement on a five-point scale: *1 = AGREE!*, *2 = agree*, *3 = not sure*, *4 = disagree*, *5 = DISAGREE!* This scale was included in the battery of measures used to evaluate the effectiveness of a culturally-enhanced prevention program in the public middle schools (Belgrave, 2002). The alpha for the anger management scale in this sample was .75.

Normative Beliefs about Aggression-Revised: Normative beliefs about aggression was assessed with a 20-item self-report scale (Huesmann & Guerra, 1997). The current scale is a revised version of the original measure (Huesmann, Guerra, Miller, & Zelli, 1992; Huesmann, Guerra, Zelli, & Miller., 1992), and especially adapted for an elementary school population. The scale was designed to assess children’s beliefs about the acceptability or unacceptability of certain aggressive behaviors. Children are asked to decide whether the behavior is “wrong” or “OK” based on a four-point scale: *1 = It’s perfectly OK*, *2 = It’s sort of OK*, *3 = It’s sort of wrong*, *4 = It’s really wrong*. The items compose two subscales: general belief questions and retaliation belief questions. For example, one item states “It is generally wrong to get into physical fights with others,” and another states, “If you’re angry, it is OK to say mean things to other people.” For the purposes of this study, questions regarding aggression toward same versus opposite sex peers were excluded.

Psychometric data on the revised, shorter measure has been strong. Internal consistency for the entire scale was .86 (N=1,500). Alpha coefficients for the two subscales were also strong, ranging from .80-.82. Strong reliability was shown across

gender, age, and ethnicity (African American, White, and Hispanic), with alpha coefficients ranging from .84 - .90. The alpha for Normative Beliefs about Aggression scale (revised) in this sample was .87.

Chapter 4

Results

The following section will describe the results of this study. The description of the data analysis strategy is followed by descriptive statistics for each variable and correlations among measures. Logistic regression analysis will be presented for each dependent variable (overt bullying, relational bully, and prosocial behavior) separately.

Data Analysis

Descriptive statistics, including means, standard deviations, and ranges, were calculated for all predictor and outcome variables. Independent samples t-tests were run to compare gender differences on each variable. Correlations among all measures were also calculated. Binary Logistic regression was used to test the relation among empathy, anger management, and outcome variables (overt aggression, relational aggression, and prosocial behavior). Normative beliefs about aggression was tested, through regression, as a moderator of empathy and anger management on behavioral outcomes. In the first step, gender was entered as a control variable. In the second step, the predictor variables of empathy, anger management, and the moderator variable of normative beliefs about aggression were entered. In the third step, the interaction terms between the predictor variables and the moderator variable were entered.

Descriptive Statistics for predictor variables.

Empathy. Scores on Byrant's Emaphy Index (1982) ranged from 4 to 20, with higher scores reflecting higher levels of reported empathy. The mean score for this measure was 11.41 (SD = 3.41). Girls reported significantly higher feelings of empathy

($M = 12.49$) than did boys ($M = 10.03$) ($t = 3.40, p < .01$) (See Tables 1 and 2). Norms for comparison are not available for African-American middle school students. However, Bryant's (1982) reported norms for a sample of seventh grade students from both urban and non-metropolitan schools. Seventh grade males in this sample had a mean empathy score of 13.07 ($SD = 3.07$) and seventh grade females had a mean empathy score of 16 ($SD = 2.54$). In comparison, both male and female participants in the current study reported lower levels of empathy.

Anger Management. Observed mean scores on the anger management scale ranged from 2 to 5, with a possible range of 1 to 5. Higher scores indicate greater endorsement of anger management skills. The mean score for anger management was 3.51 ($SD = .65$) (See Tables 1 and 2), and no significant gender differences were found for this variable.

Descriptive statistics for the moderator variable.

Normative Beliefs about Aggression. Seven percent (7%) of the sample endorsed normative beliefs about aggression, reporting that numerous aggressive actions toward peers were considered "sort of OK" or "really OK." The mean score on the Normative Beliefs About Aggression Scale was 1.94 ($SD = .59$) on a scale of 1 to 4, with higher scores indicating more normative beliefs, or greater acceptance of aggression (See Tables 1 and 2).

Descriptive statistics for the outcome variables.

Overt Aggression. Scores on the overt aggression subscale of the Children's Social Behavior Scale (CSBS) ranged from 1 to 5, with higher scores indicating greater frequency of peer directed overt aggression. The mean of this subscale was 2.81 ($SD = 1.23$), with

boys and girls reporting similar levels of peer directed overt aggression (See Tables 1 and 2). Twenty-four percent of the sample (24%) indicated high levels of overt aggression toward peers, and were subsequently classified as bullies. These participants reported that they hit, shoved, threatened to harm, yelled at and called peers mean names “almost all of the time” or “all of the time” (see Figure 1). Thus, participants with a mean score of 4.0 or higher were classified as an overt bully. This cutoff was selected as a conservative estimate of bullying, which is important considering the reported level of aggression in the sample. Of the overt bullies in the sample, 18% reported relational bullying, and 30% reported prosocial behavior.

Relational Aggression. The mean score on the relational aggression subscale of the CBCS was 2.22 (SD = .97). Observed scores ranged from 1 to 5, with higher scores reflecting greater frequency of relational aggression toward peers. Significant gender differences were found on this variable, such that boys reported more frequent relational aggression ($M = 2.48$) than did girls ($M = 2.05$) (See Tables 1 and 2). Six percent of the sample (6%) indicated high levels of peer directed relational aggression and were classified as relational bullies. These participants reported spreading rumors and lies about a peer to classmates, attempting to socially isolate or exclude a peer, and threatening to withdraw friendship unless a peer complies with a demand “almost all of the time” or “all of the time” (see Figure 1). Thus, participants were classified as a relational bully when the mean score on this measure was 4.0 or higher. Of the participants classified as relational bullies, 70% reported over bullying, and 50% reported prosocial behavior.

Prosocial Behavior. Observed scores on the prosocial behavior subscale of the CBCS ranged from 1 to 5, with higher scores indicating greater frequency of prosocial behavior. The mean score on this subscale was 3.38 (SD = 1.01); girls reported significantly more peer directed prosocial behavior ($M = 3.74$) than did boys ($M = 3.17$). Thirty-five percent of this sample (35%) indicated frequently engaging in prosocial behaviors such as doing something nice, helping a peer in need, and cheering up a peer “almost all of the time” or “all of the time” and are classified as prosocial children (see Figure 1). Therefore, participants identified as prosocial had a mean score of 4.0 or higher on this measure. Of the participants identified as prosocial, 9% report relational bullying and 21% report overt bullying.

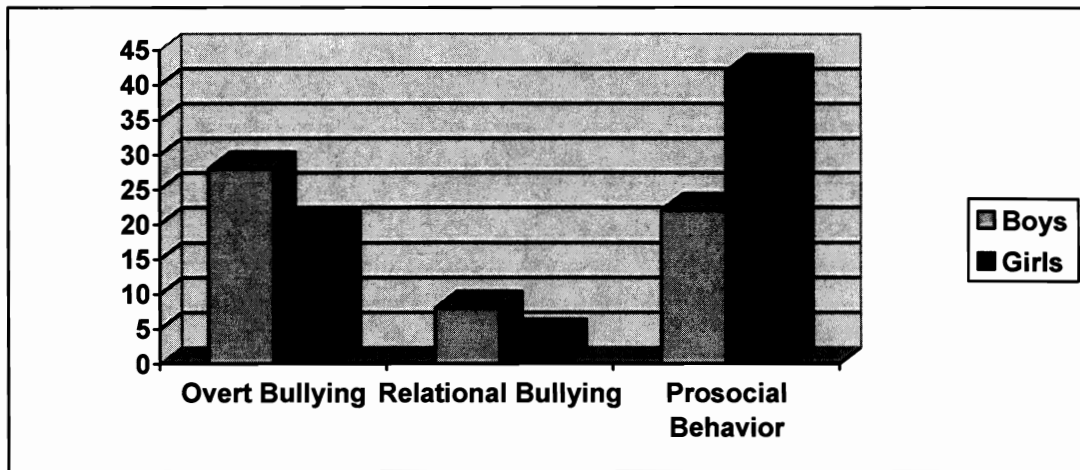


Figure 3

Percentage of participants classified as overt bullies, relational bullies, or prosocial children.

Table 1

Possible and Observed Ranges for Each Measure

Measure	Possible Range	Observed Range
Overt Aggression	1.00 - 5.00	1.00 - 5.00
Relational Aggression	1.00 - 5.00	1.00 - 5.00
Prosocial Behavior	1.00 - 5.00	1.00 - 5.00
Empathy	0.00 - 22.00	3.00 - 20.00
Normative Beliefs About Aggression	1.00 - 4.00	1.00 - 3.73
Anger Management	1.00 - 5.00	1.00 - 5.00

Table 2

Means and Standard Deviations for Each Variable

Variable	Overall		Boys		Girls		t
	M	SD	M	SD	M	SD	
Overt Aggression	2.86	1.21	2.91	1.26	2.82	1.16	-.48
Relational Aggression	2.22	.98	2.45	1.00	2.03	.92	-2.84**
Prosocial Behavior	3.38	1.01	3.11	1.05	3.60	.93	3.25**
Empathy	11.41	3.41	10.03	2.92	12.49	3.40	5.14**
Normative Beliefs	1.94	.59	2.00	.63	1.89	.54	-1.19
Anger Management	3.51	.65	3.44	.60	3.57	.69	1.30

* $p < .05$ ** $p < .01$

Correlations among measures

Table 3 reports the correlations among measures used in this study. Two of the three measures of the predictor variables were significantly correlated. Empathy was associated with fewer normative beliefs about aggression ($r = -.28, p < .01$). Two of the three outcome measures were significantly correlated with each other. The measure of overt aggression was strongly correlated with the measure of relational aggression ($r = .77, p < .01$).

Significant correlations were also found between measures of predictor variables and measures of outcomes variables. Bryant's Index of Empathy was negatively correlated with Overt Aggression and positively correlated with Prosocial Behavior, with correlations ranging in absolute value from $r = .17$ to $.43$, with a median r of $.31$. Normative Beliefs about Aggression was related to overt aggression ($r = .31, p < .01$), relational aggression ($r = .19, p < .05$), and prosocial behavior ($r = -.29, p < .01$). Anger Management was correlated with prosocial behavior ($r = .23, p < .01$) (see Table 3).

Table 3

Correlations Among Measures

Measure	1	2	3	4	5
1. CSBS-Overt aggression	--	--	--	--	--
2. CSBS-Relational aggression	.77**	--	--	--	--
3. CSBS- Prosocial behavior	.03	-.01	--	--	--
4. Bryant's Index of Empathy	-.17*	-.13	.34**	--	--
5. Normative Beliefs about Aggression	.31**	.19*	-.29**	-.28**	--
6. Anger Management	-.13	-.09	.23**	.21**	-.26**

* $p < .05$ level. ** $p < .01$ level.

Regression Analyses

Separate regression analyses were conducted to test the relation between empathy, anger management, and each of the three outcome variables: overt aggression, relational aggression, and prosocial behavior, and the moderating effects of normative beliefs about aggression. In order to decrease the non-essential effects of multicollinearity and to facilitate interpretation, the variables of empathy, anger management, and normative beliefs about aggression were centered at their respective means, and then used to form product terms (Cohen, Cohen, West & Aiken, 2003). In the first block, gender was entered as a control variable. The predictor variables of empathy, anger management, and normative beliefs about aggression were entered in the second block of each model. The two interactions between the moderator and the predictor variables were entered in the third block. The cut value was set at .50 for all analyses. The predictor variables of empathy, anger management and normative beliefs about aggression indicated significant skew. In order to compensate for skew, variables were transformed by taking the square root (Tabachnick & Fidell, 2007). After transformations, there was no significant difference in the results of the regression analysis. Therefore, the non-transformed scores were used in the data analysis to facilitate ease of interpretation. Results are presented individually for each outcome variable.

Overt Bullying. The results of the binary Logistic regression analysis of empathy, anger management, and normative beliefs about aggression on overt bullying are presented in Table 4. The overall model for overt bullying including all the predictors was not significant according to the Model chi-square statistic, $\chi^2(6, 163) = 6.14, p > .05$.

Hypothesis 1 predicted that lower levels empathy would be related to overt bullying. Logistic regression analysis did not support the hypothesis that lower levels of empathy would be predictive of being classified as an overt bully. Hypothesis 2 predicted that fewer anger management skills would be predictive of overt bullying; logistic regression analysis did not support this hypothesis. Hypothesis 3 predicted that normative beliefs about aggression would moderate the influence of empathy on overt bullying. The logistic regression model did not support this hypothesis. Hypothesis 4 proposed that normative beliefs about aggression would moderate the relation between anger management and overt bullying. This hypothesis was not supported. Hypothesis 5 predicted that boys would report higher levels of overt aggression compared to girls. An independent sample t-test did not support this hypothesis ($t = -.67, ns$); boys and girls reported similar levels of overt aggression.

Table 4

Summary of Logistic Regression Analysis for Variables Predicting Overt Bullying

Predictor	Step χ^2	<i>B</i>	<i>SE</i>	Wald	<i>df</i>	Sig.	Exp(<i>B</i>)
Step 1	-.43						
Gender		-.32	.40	.66	1	.42	.73
Step 2	3.20						
Empathy		-.04	.06	.32	1	.57	.97
Anger Management		.25	.31	.65	1	.42	1.28
Normative Beliefs		.54	.38	2.54	1	.11	1.71
Step 3	1.55						
Empathy X Norm Beliefs		.06	.09	.48	1	.49	1.06
Anger Mgmt X Norm Beliefs		-.34	.54	.98	1	.32	.63
Constant		-1.06	.29	13.42	1	.00	.35

* $p < .05$ level. ** $< .01$ level.

Note. The Wald statistics refers to one test of significance of individual logistic regression coefficients for independent variables.

Relational Aggression. The results for Logistic regression analysis of empathy, anger management, and normative beliefs about aggression for relational bullying are presented in Table 5. The overall model predicting relational bullying including all predictors was marginally significant according to the Model chi-square statistic, $\chi^2(6, 164) = 11.83, p = .06$. Hosmer and Lemeshow goodness of fit test statistic was $\chi^2(8, 162) = 8.86$ ($p > .05$) indicating an acceptable match between the predicted and observed probabilities. Although there is no true measure of effect size with logistic regression, “pseudo R^2 ” statistics are used to estimate the percentage of variance in dependent variable explained by the independent variables. The Nagelkerke pseudo R^2 statistic was .19, indicating that the model accounted for a small proportion of the variance in predicting relational bullying. The overall predictive accuracy rate of the model was 94%. However, the accuracy of correctly predicting a relational bully was only 10%. This may be due, in part, to how few “relationally bullies” were identified in the sample.

Hypothesis 1 predicted that empathy would be negatively related to relational bullying. Logistic regression analysis did not support the hypothesis that lower levels of empathy would predict of relational bullying. Hypothesis 2 predicted lower levels of anger management would be predictive of relational bullying. Logistic regression analysis did not support this hypothesis. Hypothesis 3 predicted that normative beliefs about aggression would moderate the relation between empathy and relational aggression. Results of the logistic regression analysis confirmed the hypothesis. Normative beliefs about aggression significantly moderated the influence of empathy on relational bullying, $\chi^2(1, 169) = 6.14, p < .05$. (See Figure 2.) For participants who endorsed higher normative

beliefs about aggression, low levels of empathy significantly increased the likelihood of being classified as a relational bully by 20%. However, when participants with high normative beliefs about aggression had high empathy scores, there was only a 1% chance of being a relational bully. Thus, the interaction was strongly influenced by empathy. For participants with low normative beliefs about aggression, level of empathy only minimally impacted the probability of being a relational bully.

Hypothesis 4 predicted that normative beliefs about aggression would moderate the relation between anger management and relational aggression. Logistic regression analysis did not support this hypothesis. Hypothesis 5 predicted that girls would report more relational aggression than would boys. Consistent with t-tests, there were gender differences in relational bullying ($t = -2.84, p < .01$). However, contrary to the hypothesis, boys reported more relational bullying than did girls. Therefore, the hypothesis is not confirmed.

Table 5

Summary of Logistic Regression Analysis for Variables Predicting Relational Aggression

Predictor	Step χ^2	<i>B</i>	<i>SE</i>	Wald	<i>df</i>	Sig.	Exp(<i>B</i>)
Step 1	1.08						
Gender		-.90	.77	1.38	1	.24	.41
Step 2	1.10						
Empathy		-.10	.14	.49	1	.49	.91
Anger Management		.55	.63	.74	1	.39	1.73
Normative Beliefs		-1.04	.80	1.69	1	.19	.35
Step 3	9.65**						
Empathy X Norm Beliefs		-.42	.17	6.14**	1	.01	.66
Anger Mgmt X Norm Beliefs		1.66	1.01	2.69	1	.10	5.24
Constant		-2.88	.57	25.72	1	.00	.06

* $p < .05$ level. ** $p < .01$

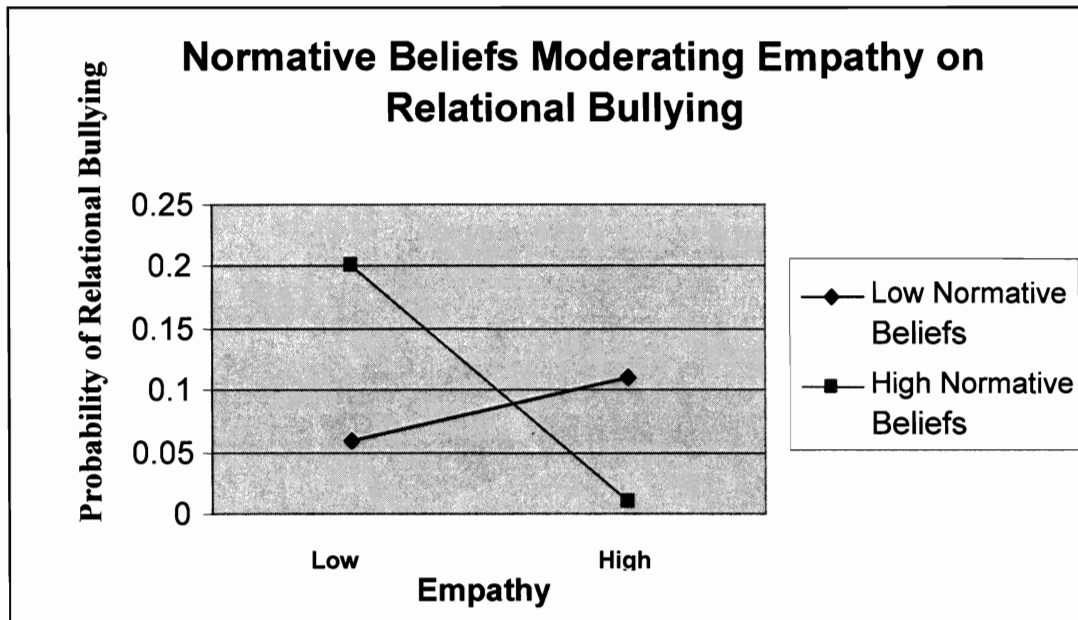


Figure 4

Interaction between empathy and normative beliefs about aggression on the prediction of relational bullying.

Prosocial Behavior. The results of the binary logistic regression analysis of empathy, anger management, and normative beliefs about aggression on prosocial behavior are summarized in Table 6. The overall model for prosocial behavior including all predictors was significant according to the Model chi-square statistic, $\chi^2(6, 167) = 31.38, p < .001$. Hosmer and Lemeshow goodness of fit test statistic was $\chi^2(8, 165) = 10 (p > .05)$ indicating an acceptable match between the predicted and observed probabilities. The Nagelkerke pseudo R^2 statistic was .23, indicated that the model accounts for a moderate proportion of variance in predicting prosocial behavior. The overall predictive accuracy rate of the model was 72%. Normative beliefs about aggression was a significant predictor of prosocial behavior. Compared to participants with higher normative beliefs about aggression, those with lower normative beliefs about aggression were significantly more likely to be classified as prosocial children.

Hypothesis 1 proposed that higher levels of empathy would predict prosocial behavior. This hypothesis was not confirmed, although there was a marginal effect data suggesting a positive relation between empathy and prosocial behavior $\chi^2(1, 172) = 3.37, p = .06$. Hypothesis 2 predicted that greater anger management skills would be related to prosocial behavior. Logistic regression analysis did not support this hypothesis. However, weaker normative beliefs about aggression were related to prosocial behavior $\chi^2(1, 172) = 4.49, < .05$. Participants with lower normative beliefs about aggression were .57 times more likely to be classified as prosocial than those with higher normative beliefs about aggression.

Hypothesis 3 predicted that normative beliefs about aggression would moderate the relation between empathy and prosocial behavior. The logistic regression model did not support this hypothesis. Hypothesis 4 predicted that normative beliefs about aggression would also moderate the relation between anger management and prosocial behavior. Logistic regression analysis did not support the hypothesis.

Table 6

Summary of Logistic Regression Analysis for Variables Predicting Prosocial Behavior

Predictor	Step χ^2	<i>B</i>	<i>SE</i>	Wald	<i>df</i>	Sig.	Exp(<i>B</i>)
Step 1	7.76**						
Gender		.60	.39	2.40	1	.12	1.83
Step 2	22.80**						
Empathy		.11	.06	3.37	1	.06	1.12
Anger Management		.50	.30	2.76	1	.10	1.65
Normative Beliefs		-.75	.35	4.57*	1	.03	.47
Step 3	.83						
Empathy X Norm Beliefs		-.07	.10	.47	1	.49	.94
Anger Mgmt X Norm Beliefs		-.34	.54	.41	1	.52	.71
Constant		-1.20	.31	15.48	1	.00	.23

* $p < .05$ level. ** $p < .01$ level.

Chapter 5

Discussion

The purpose of this study was to examine the influence of empathy, anger management, and normative beliefs about aggression on overt bullying, relational bullying, and prosocial behavior in urban, African-American middle school students. Analyses were computed to determine if logistic regression models could predict overt bullying, relational bullying, and prosocial behavior. Although bullying (peer victimization) has received significant attention over the past decade, few studies have examined African-American children attending public, urban middle schools. Given the negative psychological and social consequences experienced by both bullies and victims (e.g., Prinstein, Boergers, & Vernberg, 2001), understanding predictors of bullying in this under-studied population is important for informing prevention and intervention programs.

Overview of Findings

The results of this study indicated that the logistic model including empathy, anger management, and normative beliefs about aggression significantly predicted prosocial behavior. In addition, the logistic model predicting relational bullying was marginally significant. Normative beliefs about aggression moderated the influence of empathy on relational bullying. Normative beliefs about aggression significantly contributed to the prediction of prosocial behavior, and marginally contributed to the prediction of overt bullying. In addition, empathy and anger management marginally contributed to the prediction of prosocial behavior.

One of the goals of this study was to examine the prevalence of bullying among African-American middle school children. Previous studies have estimated that approximately 10-15 % of middle schools students are classified as bullies (e.g., Nansel et al., 2001; Stolberg & Olweus, 2003). For example, in a nationally representative sample of US students in 6th through 10th grade, 13% were identified as bullies, and 6% were identified as bully-victims (Nansel et al., 2001). However, there is a dearth of research on bullying among African-American children, and it is unknown if prior prevalence estimates are generalizable. In this study, 24% of the participants reported frequent, overt bullying behavior toward peers. These students reported hitting, shoving, threatening, yelling at and taunting peers almost all the time or all of the time. Forty-seven percent (47%) reported engaging in peer-directed physical aggression “sometimes” or more frequently. Six percent (6%) reported frequent relational bullying, including behaviors such as social exclusions and isolation of peers, gossip and rumor spreading. Lastly, 34% of students in this study reported engaging in frequent prosocial behavior, including assisting others in need, saying or doing nice things for peers, and cheering up peers who are sad or upset.

Discussion of Hypotheses

Hypothesis 1: Direct Effect of Empathy on Bullying and Prosocial Behavior

In this study, empathy did not have a direct effect on overt or relational bullying. Empathy was, however, negatively correlated with overt bullying ($r = -.17, p < .05$) and relational bullying ($r = -.13, p > .05$). Very few studies have examined the relation between empathy and bullying, and those study’s findings have been mixed. For example,

Espelage, Mebane, and Adams (2004) found that empathy was negatively related to overt bullying for boys, but not for girls. Similar to findings in this study, Endresen and Olweus (2001) only found weak correlations between empathy and bullying in Norwegian adolescents. Moreover, once positive attitudes toward bullying were controlled for, empathy did not significantly contribute toward bullying behaviors. It appears that the relation between empathy and bullying is complex, and not necessarily direct. Examining potential mediators and moderators (such as normative beliefs about aggression) may contribute to a better understanding of the relation between these variables.

There was a trend in the data indicating that higher levels of empathy predicted prosocial behavior, and this effect was more pronounced for females than for males. Similarly, studies have found that empathy in children is related to prosocial behavior when indirect measures such as facial expression, physiological response, or experimental manipulation are used (Denham et al., 1997; Eisenberg & Fabes, 1998; Eisenberg & Miller, 1987). Self-report of empathy has also been found to be related to adult's ratings of children's prosocial actions (Eisenberg et al., 1999; Krevans & Gibbs, 1996). McMahon, Wernsman, and Parnes (2006) examined factors which contribute to prosocial behavior in African-American adolescents. Consistent with the results of McMahon's study, empathy significantly contributed to prosocial behavior. This finding suggests that a child's ability to understand another's perspective is an important factor in promoting prosocial behavior. Empathetic children likely understand how their caring, comforting or assistance to others contributes to positive feelings in another. Although not examined in this study, it is possible that empathetic children are more frequently the recipients of

prosocial actions of others (parents, teachers, peers, etc.), compared to their less empathetic peers. In other words, social modeling (Bandura, 1973,1986) may increase the likelihood of prosocial behaviors toward peers. It would be beneficial if this hypothesis was examined in future research. Children with higher levels of empathy appear to be more socially competent, given the association between empathy and positive outcomes.

Hypothesis 2: Direct Effect of Anger Management on Bullying and Prosocial Behavior

There was a trend for greater anger management skills to predict prosocial behavior, but not overt or relational bullying. Participants with greater anger management skills were 1.65 times as likely to report prosocial behavior, compared to those with weak anger management skills. This finding is consistent with the idea anger management skills may contribute to more adaptive social information-processing by reducing the influence of the negative emotion (Crick & Dodge, 1999; Lemerise & Arsenio, 2000). Controlling negative emotions may leave children better able to interpret social cues accurately, and respond positively toward peers.

The lack of significance for the direct effect of anger management on overt and relational bullying is in contradiction with prior research findings. For example, Bosworth, Espelage, and Simon (1999) found that anger significantly contributed to bullying, while children with anger management skills were less likely to be involved in bullying. Comodeca and Goossens (2005) also found that compared to other children, bullies reported more anger and retaliation. The finding from this current study suggests that anger management skills may not be sufficiently effective in reducing bullying in this population. Alternatively, there may be subtypes of bullies, some who aggress out of

anger, but others who aggress without a strong experiencing of anger. A measure of anger in addition to anger management may have helped clarify this result. Additionally, the self-report measure of anger management may not have accurately distinguished those with stronger anger management skill from those with weaker ones. Participants may have reported inflated anger management skills driven by a social desirability bias or because they lack insight on their true ability to manage anger.

Hypothesis 3: Normative Beliefs Moderating Empathy

It was hypothesized that normative beliefs about aggression would moderate the relation between empathy and bullying, and empathy and prosocial behavior. The results of these analyses indicated that normative beliefs about aggression was only a significant moderator of the relation between empathy and relational aggression. The interaction indicated that empathy was a strong moderator of relational aggression, only under conditions of high normative beliefs. In other words, children who are accepting of aggressive behavior are dramatically less likely to relationally bully when they endorse high levels of empathy. Even though the graph of the interaction appears that for those with low normative beliefs about aggression and high empathy increase their chances of being a relational bully, subsequent analyses indicated this small increase is likely due to margin of error, and not a significant effect. When participants with high normative beliefs about aggression were removed from the analysis, empathy did not have a main effect on participants with low normative beliefs about aggression. In addition, the interaction was not significant. Lastly, normative beliefs about aggression had a significant direct effect on prosocial behavior, indicating that participants who were less accepting of aggression

were more likely to engage in prosocial behavior than those who were more accepting of aggression.

As previously discussed, normative beliefs about aggression refer to one's belief in the acceptability of aggression (Eron, 2001). Research has demonstrated that normative beliefs about aggression can either encourage or discourage aggressive behavior. For example, one study found that aggression in early childhood predicted increases in normative beliefs about aggression in later childhood. Moreover, normative beliefs also predicted increases in aggression over time (Huesmann & Guerra, 1997). Crane-Ross and colleagues (1998) found that perceiving aggression as an acceptable behavioral response was predictive of aggressive behavior. Lastly, Erdley and Asher (1998) found that children who have normative beliefs about aggression were more aggressive with peer, but also less prosocial. These results support the current finding that weaker normative beliefs about aggression predicted prosocial behavior, and influence the effect of empathy on relational aggression for those participants with high normative beliefs about aggression.

The finding of moderation supports the idea that understanding the relation between empathy, bullying and relational aggression is better explained when the children's perspective on the acceptability of aggression is accounted for. It has been suggested that normative beliefs not only influence an individual's selection of appropriate behaviors, but also influence one's emotional reaction to other's behavior (Guerra, Huesmann, & Hanish, 1994; Huesmann, Guerra, Miller, & Zelli, 1992). Therefore, a child's normative beliefs about aggression can influence his/her own emotional reaction to peers, such anger management. The more accepting of bullying and aggression a child is,

the less influential his/her own anger management skills will be in preventing bullying actions.

It is unclear why normative beliefs about aggression did not moderate the relation between empathy and overt bullying. It is possible that in a highly aggressive population, such as the one surveyed in this study, empathy is less related to overt bullying than other variables (e.g., exposure to violence and crime). Normative beliefs about aggression likely influence variables that are strongly predictive of bullying or aggression. Further research with this population is needed to determine these predictors.

Hypothesis 4: Normative Beliefs Moderating Anger Management

It was hypothesized that normative beliefs about aggression would act as a moderator of the relation between anger management and bullying and prosocial behavior. Normative beliefs did not moderate the influence of anger management on overt bullying or prosocial behavior. However, normative beliefs about aggression did marginally influence the relation between anger management and relational aggression. Thus, when participants had high anger management skills, normative beliefs about aggression did not influence relational bullying. However, for participants with low anger management skills, there was a trend for stronger normative beliefs about aggression to predict more relational aggression.

To date, there is no other research examining the relation between anger management and normative beliefs about aggression. It is likely that normative beliefs influence a child's social information processing, which would include the ability to access and select anger management skills (Camodeca & Gossens, 2005). Hence, just as a strong

endorsement of the acceptability of aggression affects the influence of empathy on prosocial behavior, it also seems to influence the effectiveness of anger management on relational bullying. Relational bullies with strong normative beliefs about aggression appear less able to reduce relational aggression with anger management than relational bullies with weaker normative beliefs about aggression.

Contrary to the hypothesis, normative beliefs did not moderate anger management for overt bullying or prosocial behavior. Anger management was not a strong predictor of relational or overt bullying, and differences on normative beliefs about aggression did not change the relation among these variables.

Hypothesis 5: Gender differences in Overt and Relational Bullying

The hypothesis predicting gender differences was not supported. There were no significant gender differences in overt bullying. Girls and boys reported similar levels of peer directed overt aggression. Moreover, the finding related to relational aggression was in the opposite direction as hypothesized. There was a significant gender difference in relational aggression, but with boys reporting more relational aggression than girls. Research has repeatedly found gender differences in the use of overt and relational aggression (boys use more overt aggression and girls use more relational aggression) (Cairns et al., 1989; Olweus, 1993). However, few studies have examined relational aggression in urban, African-American middle school students.

Cultural socialization of gender stereotypes vary, thus patterns of aggression may differ across ethnic or racial groups (Albert & Porter, 1988). Thus, the discrepancy in overt and relational bullying in this sample may be due in part to the socialization of

African-American children. Some theorist suggest that both African-American males and females endorse traits considered “masculine” or “instrumental” including dominance, aggression and assertion, and “feminine”, such as expressiveness (e.g., Dade & Sloan, 2000; Harris, 1996; Lewis, 1975). Thus, it is reasonable to speculate that the contradictory difference in bullying aggression may result from culturally influenced androgynous gender role characteristics and behaviors.

The finding that girls report similar levels of overt aggression toward peers is noteworthy. Even considering cultural or ethnic differences in gender roles, most studies find that boys engage in more physical aggression than girls (e.g., Cairns & Cairns, 1994; Xie et al., 2002). For example, in a sample of African-American children attending urban public schools, Xie, Farmer, and Cairns (2003) found that middle school boys reported higher levels of peer-directed physical aggression than middle school girls. However, because the majority of the aggression literature is based upon studies with boys (e.g., Coie & Dodge, 1998), it is important to direct future research toward understanding the trajectory of physical aggression in African-America female adolescents. This is especially important considering the latest statistics from the National Report on Juvenile Offenders and Victims (2006) indicate a rise in violent crime among African-American adolescent girls.

Aggression

As previously discussed, results of this study indicate that the participants in this sample reported relatively high levels of aggression. Approximately one of out four students reported frequent peer-directed physical aggression. There are several important

issues to consider in interpreting this finding. First, participants in this study attend schools which serve predominately low-resource communities where violence is seen. Exposure to violence is a crucial consideration in understanding aggression in children. In a study examining aggression and environmental risk among African-American youth living in low-income neighborhoods, exposure to violence significantly contributed to aggressive behavior (Fitzpatrick, 1997). Specifically, witnessing violence and being victimized significantly distinguished aggressive from non-aggressive youth. Thus, high reported levels of aggression in this sample may be due, in part, to specific and unique environmental influences.

Related to exposure to violence, students who witness aggression and violence in their surroundings may develop aggressive behaviors as an adaptive strategy. Especially among some young African-American males, projecting an image of “bravado” or “toughness” is important. An aggressive behavioral style may deter provocation or physical attacks by others. This is likely true for the adolescent females who face the same environmental stressors. Thus, it is imperative to appreciate that aggression in this sample may have an immediate adaptive, self-protective quality to it, even though the long term outcomes of aggressive behavior are clearly not adaptive.

Another factor potentially contributing to high levels of aggression in this sample may be the connection between aggression and perceived popularity. Studies have found that in some peer cultures, overt and relational aggression are related to perceived popularity (LaFontana & Cillessen, 2002; Parkhurst & Hopmeyer, 1998; Rodkin et al., 2000; Rose et al., 2004). For example, Vaillancourt, Hymel, and McDougall (2003) even

found a relation between bullying and perceived popularity. These students used both aggressive and prosocial strategies to manipulate peers in order to maintain sociometric status. Therefore, another reason participants may have reported high levels of aggression is because these behaviors may be reinforced by feelings of perceived popularity, acceptance, “coolness” or “toughness.” Similarly, peer-directed aggression such as bullying may be strongly related to struggles for social dominance. It has been argued that social dominance includes both aggressive strategies, but also affiliative ones (peer acceptance, inclusion, respect) (e.g., Pelligrini & Bartini, 2001). Considering these broader social influences, bullying behaviors may be conceptualized as more than aggression.

Limitations

There are several limitations to this study that should be noted. This study examined bullying and prosocial behavior among African-American middle school children, in an urban school setting. Therefore, the results of this study may be limited in their generalizability to this population and context. Another limitation of this study is that it utilized a cross-sectional design, which does not allow for the examination of causality. By definition, bullying aggression continues over time (Olweus, 1993). Looking at bullying behavior longitudinally would allow for more accurate classification of bullies versus non-bullies, and a better understanding of the continuity of bullying in urban African-American middle school children.

A methodological limitation of this study is the sole use of self-report measures, which suggests that patterns of relations among variable may have resulted from shared

method variance. Additionally, studies relying on self-report measures from children is often criticized for its limited accuracy. This can be particularly problematic when children are asked to report about behaviors that are considered negative, such as aggression, bullying, or normative beliefs about aggression. A social desirability bias may influence children to underreport negative behaviors or over report positive behaviors. Including measures from teachers, parents and peers (peer nomination inventories) may have added strength to this study.

Implications

The findings from this study have several implications for research. There is a paucity of research examining bullying among urban, African-American middle school students. Given the high rates of overt aggression and bullying endorsed by this sample, and the potential consequences of peer victimization, continued research within this population is necessary. Because neither empathy nor anger management were strong predictors of bullying, other potential internal and external predictors need to be identified. The unique experience of African-American children living in under-resourced and sometimes dangerous environments suggests that research findings based largely on Caucasian samples are not generalizable. Therefore, examining environmental influences on peer-directed aggression should be considered a priority. Specifically, research investigating the influences of neighborhood status, exposure to violence and crime, exposure to aggression in school, and exposure to racism on bullying and peer victimization would contribute a more comprehensive picture of this phenomenon.

The results of this study provide important information that can be used to inform interventions for victimization in urban middle schools. Empathy and anger management skills did not appear to influence children's aggressive behavior in this sample. Further research is needed to corroborate this finding. If anger management and empathy training do not reduce bullying aggression in certain populations, other social-cognitive interventions need to be researched and evaluated. Revision and evaluation of violence prevention program to include effective anti-bullying techniques should be seriously considered.

Although participants did not report strong normative beliefs about aggression, their self-reported aggressive actions indicate that there is an unspoken norm within their peer group about the acceptability of aggression or bullying. Anti-bullying interventions should focus on changing the ethos of the school. Changing children's underlying normative beliefs about aggression may be much more influential in changing their behavior than addressing more interpersonal traits such as empathy or anger management. Given the susceptibility of middle school children to peer pressure and group norms, it follows that addressing the problem at a school level could be powerful. Olweus' (1993) school-wide anti-bullying program has similar aims. This program focuses on changing the ethos of the school, in part by addressing not only students, but also teachers, parents and school administration about the incidence and problems associated with bullying. In addition, students in the program are given the responsibility to take an active role when witnessing bullying among their peers. Classroom rules are developed to promote the norm that bullying is unacceptable, and students are encouraged to intervene when

witnessing a peer be victimized. Promoting prosocial behavior is also an important piece of this intervention. Tailoring programs such as this one for urban African-American middle school children would be a worthy endeavor.

Findings from this current study also highlight the importance of incorporating prosocial skills building within any anti-bullying program. Although empathy did not significantly reduce bullying, empathetic children were more likely to engage in prosocial behavior. Thus, empathy training should still be considered as a program component to help encourage children to be more socially competent, and develop healthier relationships with their peers. Finally, prevention programs should be introduced in elementary school rather than middle school, where bullying is already prevalent.

Conclusion

This study examined predictors of bullying and prosocial behaviors in urban, African-American middle school students. Empathy, anger management, and normative beliefs about aggression were tested through logistic regression as predictors of overt bullying, relational bullying, and prosocial behavior. Children identified as prosocial in this sample had low normative beliefs about aggression, and higher levels of empathy than non-prosocial children. There was also a trend for prosocial children to report greater anger management skills. Relational bullying was significantly predicted by the interaction between empathy and normative beliefs about aggression. Participants who endorsed strong normative beliefs about aggression were significantly less likely to engage in relational aggression if they scored high on empathy, compared to those with strong normative beliefs who scored low on empathy. Participants in this study reported highly

aggressive behavior, with 24% of the sample being identified as overt bullies. Implications for future research and intervention programs are discussed.

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APPENDIX A

The Revised Normative Beliefs about Aggression Scale (Huesmann, & Guerra, 1997) is a self-report measure of children's cognition regarding the acceptability or unacceptability of certain aggressive acts.

- 1 = It's perfectly OK
- 2 = It's sort of OK
- 3 = It's sort of wrong
- 4 = It's really wrong

Suppose a boy says something bad to another boy, John.

- 1. Do you think it's OK for John to scream at him?
- 2. Do you think it's OK for John to hit him?

Suppose a boy says something bad to a girl.

- 3. Do you think it's wrong for the girl to scream at him?
- 4. Do you think it's wrong for the girl to hit him?

Suppose a girl says something bad to another girl, Mary.

- 5. Do you think it's OK for Mary to scream at her?
- 6. Do you think it's OK for Mary to hit her?

Suppose a girl says something bad to a boy.

- 7. Do you think it's wrong for the boy to scream at her?
- 8. Do you think it's wrong for the boy to hit her?

Suppose a boy hits another boy, John.

- 9. Do you think it's wrong for John to hit him back?

Suppose a boy hits a girl.

- 10. Do you think it's OK for the girl to hit him back?

Suppose a girl hits another girl, Mary?

- 11. Suppose a girl hits a boy.

Suppose a girl hits a boy.

- 12. Do you think it's wrong for the boy to hit her back?

13. In general, it is wrong to hit other people.
14. If you're angry, it is OK to say mean things to other people.
15. In general, it is OK to yell at others and say bad things about them.
16. It is usually OK to push or shove other people around you're mad.
17. It is wrong to insult other people.
18. It is wrong to take it out on others by saying mean things when you're mad.
19. It is generally wrong to get into physical fights with others.
20. In general, it is OK to take your anger out on others by using physical force.

APPENDIX B

The index of empathy for children and adolescence (Bryant, 1982) is a self-report measure of empathetic and non-empathetic tendencies.

1= no

2= yes

1. It makes me sad to see a girl who can't find anyone to play with.
2. People who kiss and hug in public are silly.
3. Boys who cry because they are happy are silly.
4. I really like to watch people open presents, even when I don't get a present myself.
5. Seeing a boy who is crying makes me feel like crying.
6. I get upset when I see a girl being hurt.
7. Even when I don't know why someone is laughing, I laugh too.
8. Sometimes I cry when I watch TV.
9. Girls who cry because they are happy are silly.
10. It's hard for me to see why someone else gets upset.
11. I get upset when I see an animal being hurt.
12. It makes me sad to see a boy who can't find anyone to play with.
13. Some songs make me so sad I feel like crying.
14. I get upset when I see a boy being hurt.
15. Grown-ups sometimes cry when they have nothing to be sad about.
16. It's silly to treat dogs and cats as though they have feelings like people.
17. I get mad when I see a classmate pretending to need help from the teacher all the time.
18. Kids who have no friends probably don't want any.
19. Seeing a girl who is crying makes me feel like crying.
20. I think it is funny that some people cry during a sad movie or while reading a book.
21. I am able to eat all my cookies even when I see someone looking at me wanting one.
22. I don't feel upset when I see a classmate being punished by a teacher for not obeying school rules.

APPENDIX C

Children's Social Behavior Scale- Self-Report (CSBS-S)

The CSBS-S is a self-report measure of overt aggression, relational aggression, and prosocial behaviors (Crick, & Grotpeter, 1995). (Modified)

1= Never

2=Almost never

3=Sometimes

4=Almost all the time

5=All the time

1. Some kids tell lies about a classmate so that the other kids won't like the classmate anymore. How often do you do this?
2. Some kids try to keep certain people from being in their group when it is time to play or do an activity. How often do you do this?
3. Some kids try to cheer up other kids who feel upset or sad. How often do you do this?
4. When they are mad at someone, some kids get back at the person by not letting the person be in their group anymore. How often do you do this?
5. Some kids hit other kids at school. How often do you do this?
6. Some kids help out other kids when they need it. How often do you do this?
7. Some kids yell at others and call them mean names. How often do you do this?
8. Some kids push and shove other kids at school. How often do you do this?
9. Some kids tell their friends that they will stop liking them unless the friends do what they say. How often do you tell friends this?
10. Some kids try to keep others from liking a classmate by saying mean things about the classmate. How often do you do this?
11. Some kids threaten to hit or physically harm other kids at school. How often do you do this?
12. Some kids say or do nice things for other kids. How often do you do this?

APPENDIX D

The Anger Management Scale assess children's efficacy for controlling the experience of anger, emotionally and behaviorally.

- 1 = AGREE!
- 2 = Agree
- 3 = Disagree
- 4 = DISAGREE!

1. I could control my mad feelings if I wanted to.
2. I could stay out of fights by choosing other solutions.
3. I could walk away from a fight.
4. I could do things like counting to 10 to calm down.
5. I really would have little control over what I would do.
6. I could use humor, like telling a joke, to cool things off.
7. I would not even want to control my anger.
8. I would be proud to be the person who can keep cool when there is a fight starting.
9. It would be hard for me to keep calm.
10. Fighting is the first thing I do to handle a problem.

Vita

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