

KIDS HELPING KIDS:
THE INFLUENCE OF SITUATIONAL FACTORS ON PEER INTERVENTION IN
MIDDLE SCHOOL BULLYING

Natalie M. Siegel

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Approved by
Advisor: Samuel Song
Chair: Steven Knotek
Reader: Patrick Akos
Reader: Jill Hamm
Reader: Barbara Wasik

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ABSTRACT

NATALIE SIEGEL: Kids Helping Kids: The Influence of Situational Factors on Peer

Intervention in Middle School Bullying

(Under the direction of Samuel Y. Song, PhD)

Bullying significantly impacts the social-emotional health of all students in school. Much research has focused on the bullies and their victims. Unfortunately, we know little about the reactions of peers who witness bullying, known as bystanders. Bystanders have immense power to intervene and effectively stop bullying; yet, few children actually do so. To help prevent bullying, we need to determine what factors are related to peer intervention in bullying.

Numerous studies have suggested that empathy is related to prosocial behavior in children in a variety of situations; yet, bullying situations remain relatively unexplored in the literature. The purpose of this dissertation was to contribute to the literature by examining the relation between *situational empathy* and *peer intervention* when witnessing bullying. Other theoretically important factors like *type of bullying* and *gender* were also examined. Accordingly, the three research questions answered in this study were the following: (1) Does witnessing bullying elicit empathy towards victims of bullying? (2) What peer intervention strategies do middle-school students report when they witness bullying? (3) Do empathy and gender predict reported peer intervention?

A total of 265 middle-school students participated in this study. Participants completed self-report surveys on involvement in bullying and social desirability. Next, participants watched vignettes of physical and relational bullying and after each clip were asked how they felt and why, how the victim felt and why, and what they would do if they had witnessed it. Responses were coded using the Empathy Continuum Scoring System (Strayer & von Rossberg-Gempton, 1992).

Consistent with hypotheses, results suggested that (1) children were more likely to intervene in physical bullying than relational bullying; (2) children reported instrumental intervention strategies most frequently in both bullying situations, and (3) both empathy and gender significantly contribute to children's intervention behavior similarly for both bullying situations. Gender findings were that girls were more likely to help overall; while boys and girls responded similarly to physical bullying, they responded very differently to relational bullying. Limitations of the present dissertation and implications for practice are discussed.

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CHAPTER I

INTRODUCTION

During the last 10 years it has been found that bullying is a common occurrence for children in schools. Bullying occurs worldwide and prevalence rates are similar across countries: approximately 75% of children have been bullied in school at some time in their lives (Carney & Merrell, 2001). In the United States, a large-scale survey of more than 15,500 children in grades 6-10 found that over the last school semester 19.4% of children bullied others, 16.9% of children were bullied on a moderate to frequent basis, and 6.4% of children were both bullied and bullied others (Nansel, Overpeck, Pilla, Ruan, Simons-Morton, & Scheidt, 2001). Taken together, a total of 29.9% of children were involved in bullying on a moderate to frequent basis. In another study, when children were queried more in-depth about their experiences with bullying within the last year, prevalence rates rose to 24.1% of children who had bullied others and 44.6% who were bullied (Haynie, Nansel, Eitel, Crump, Saylor, Yu, & Simons-Morton, 2001).

Bullying is clearly a pervasive problem in American schools; it is associated with social, emotional, and academic maladjustment of those directly involved. For example, Kochenderfer and Ladd (1996) found that victimization was a precursor to academic maladjustment and loneliness. Victimization is also associated with anxiety, depression, and somatic symptoms (Swearer, Song, Cary, Eagle, & Mickelson, 2001). On the other hand, bullies are at-risk for crime, alcohol abuse, attention-deficit hyperactivity disorder,

depression, and oppositional-defiant or conduct disorder (Kumpulainen, Rasanen, & Puura, 2001).

To prevent the numerous deleterious effects of bullying, numerous antibullying programs have been developed that promote prosocial behaviors like peer intervention. Some programs achieve their goals by including empathy training components. Empathy is shared affect, or vicariously experiencing what another is feeling. The rationale for including empathy components in antibullying programs is that empathy will make children more likely to intervene when they witness their peers being bullied and behave more prosocially in general.

Numerous studies suggest that there is a positive relation between empathy and prosocial behavior in children in many different contexts (Eisenberg & Miller, 1987; Strayer & Schroeder, 1989). Yet, research has not adequately explored the nature of these variables in bullying situations specifically. Thus, the purpose of this study was to contribute to the literature by 1) determining whether children have empathy for victims of bullying, 2) exploring the types of interventions used by children to stop bullying, and 3) examining the relation between *empathy* and *peer intervention* specifically in bullying situations. These data may inform current bullying prevention efforts and the promotion of prosocial behaviors in schools.

This chapter will begin by setting the context for bullying in middle schools. It will then introduce the relation between empathy and prosocial behaviors, and show how this conceptual relation could potentially be integrated into the bullying context through the promotion of peer intervention in bullying. This relation is hypothesized as a theoretical

basis for prevention programming, though seldom studied, which leaves a need for systematic research in this important area.

The Middle School Peer Ecology

Bullying is commonly studied within a social-ecological framework (Swearer & Espelage, 2004). This model suggests that the behaviors of children involved in bullying (i.e., victims, bullies, bully-victims, and bystanders) are “encouraged and/or inhibited as a result of complex relationships between the individual, family, peer groups, school, community, and culture” (Swearer & Espelage, 2004, p. 3). Within this framework, then, the peer ecology is the proximal environment where children directly interact with other children at school and influence each other’s behaviors (Rodkin, 2004). For example, the peer ecology can be perceived as a supportive place where children protect each other from bullying (Song & Siegel, 2006; Song & Stoiber, 2008) or it can be perceived as a hostile environment that rewards aggressive behaviors.

Studies have come to the conclusion that the middle school peer ecology is a very complex place where aggressive behaviors are a normative part of life (Doll, Song, & Siemers, 2004). Aggression among children can be viewed on a continuum from normal jostling where both parties have equal power and the intent is friendly, to bullying where there is malicious intent and unequal power between the bully and victim (Doll, Song, & Siemers, 2004). Studies using social networking techniques have suggested that children form social hierarchies in middle schools and aggression is used to gain and maintain power and social status within and between peer groups (Farmer, Estell, Bishop, O’Neal, & Cairns, 2003).

Xie, Cairns, and Cairns (1999) used social networking techniques to identify three configurations of peer groups in middle school. Overall, middle-school children tend to be in same-sex groups with 5-6 members who share the same classes. Each group configuration was made up of children who shared teacher- and self-reported characteristics. The “high competence” configuration was made up of children who were low in aggression and high in popularity, athleticism, academic competence, and friendliness (36%). The “average” configuration was made up of children who were average in all these areas (45%). The “risk” configuration was characterized by high aggression and low academic competence, popularity, athleticism, and friendliness. Thus, it appears that social groups in middle school form according to similarities on these characteristics. When analyzed by gender, girls who were popular tended to be the most powerful members of the groups (i.e., they enjoyed high network centrality) whereas boys who were aggressive had the highest network centrality. To further complicate matters, recent studies have differentiated between *perceived* peer popularity (i.e., children whom other students report are popular) and *sociometric* definitions of popularity (i.e., children who score highly on measures of prosocial behavior). It is suggested that perceived peer popularity is the most powerful factor in the formation of peer groups (Farmer, Leung, Pearl, Rodkin, Cadwallader, & Van Acker, 2002) rather than sociometric ratings of prosocial and antisocial behavior.

Traditionally, sociometric studies have found that aggressive children are disliked by peers and prosocial children are well-liked by peers. However, Farmer et al. (2003) point out that perceived popularity in middle school “is associated with dominance, aggression, and being stuck-up” (p. 993). Thus, there is a subset of aggressive children who are

popular and influential leaders in school. These children are highly socially competent and adaptively use a variety of aggressive and prosocial strategies when interacting with other children. In addition, they are often central members of powerful social groups; boys who use physical and verbal aggression and especially girls who use social and relational aggression show higher levels of network centrality than their non-aggressive peers (Xie, Farmer, & Cairns, 2003). On the other hand, there are “model” prosocial children who are perceived by peers as being “cool, athletic, leaders, cooperative, and studious” (Rodkin, Farmer, Pearl, & Van Acker, 2000, p. 19; Farmer et al., 2003).

This picture of the “popular bully” contrasts the traditional stereotype of a bully as an unpopular child with social skill deficits. Sutton, Smith, and Swettenham (1999) critiqued the social skills deficit view of bullies. They referred to the intrinsically social nature of bullying as evidence of basic social understanding: 80% bullying usually occurs in the presence of others, and bullies most often say that they bully to “to feel power” and “to look cool.” Sutton and colleagues argued that high social perspective-taking skills were necessary for skilled social manipulation, avoidance of detection, and choosing of methods to best exploit the victim’s vulnerability. In concordance with literature on conduct disorder, sociopathy, and Machiavellianism, they state that bullies “may understand emotions but not share them” (p. 122). Thus, theoretically, although popular bullies have the cognitive skills to manipulate social situations, their emotional competency and capacity for affective empathy may be lacking. A better understanding of the combined affects of cognitive and affective empathy may be key to inhibiting aggressive bullying behaviors and motivating peer intervention in bullying.

Theoretical Framework

Feshbach and Feshbach's Model

This dissertation relies on the theoretical frameworks posited by Feshbach and Feshbach (1975, 1982) and Eisenberg (1986). Philosophers, social psychologists, and developmental psychologists had long hypothesized that empathy is the basis for prosocial responding and motivation for helping. However, until Norma and Seymour Feshbach began researching empathy in the 1960's, there was little theoretical consensus on its form, function, and assessment. Feshbach and Feshbach (1982; see also Feshbach, 1975; and Feshbach & Roe, 1968) developed a three-component theoretical model of empathy: "the affective empathic experience in an observer perceiving another person's emotional reaction is conceptualized as a shared emotional response that represents the resultant outcome of three interactive elements" (1982, p. 404). Two elements are cognitive: the first is the capacity to identify and discriminate the emotional reaction of the other, and the second is perspective-taking and role-taking ability. While these two elements are necessary precursors to empathy, they are not sufficient for true empathy. The third element is affective ability to experience and respond to emotional arousal.

Both affective and cognitive elements inhibit aggression and promote prosocial behavior. Numerous studies have found a positive relationship between empathy and prosocial behaviors (e.g., Eisenberg & Miller, 1987). Because of these findings, Feshbach and Feshbach theorized that empathy inhibits aggression because the prosocial behaviors elicited by empathy are inherently incompatible with aggression: "...perceiving a situation from another's perspective as well as from one's own should promote prosocial, mutually satisfactory solutions to potential conflict situations" (Feshbach, 1979, p. 238).

In addition, witnessing someone in pain and distress, even if one inflicted that pain on the other, “should elicit distress responses in an empathic observer...the painful consequences of an aggressive act, through the vicarious affective responses of empathy, may be expected to function as inhibitors of the instigator’s aggressive tendencies” (Feshbach, 1979, p. 239).

Eisenberg’s Model

Nancy Eisenberg (1986) took this basic conceptual definition and developed a rather sophisticated theoretical model describing the role of empathy in prosocial behavior for both adults and children. First and foremost, empathy needs to be triggered by an observer noticing that another is in need of help. To interpret the situation as requiring assistance, many factors come into play: individual differences in the ability to attend to and infer from a situation, socialization history, self-efficacy for and identification of intervention strategies, and perhaps most influential, situational factors. Social psychological research strongly suggests that situational factors affect one’s processing and interpretation of the situation and need (Batson, 1991; Dovidio, Allen & Schroeder, 1990). Situational factors may include visual proximity, type of emergency, amount of detail/information provided about the situation, and priming effects. This dissertation examined the situational factors of type of bullying and gender of the observer because previous literature suggested that they may be related to bullying intervention.

Next, after one perceives the event as requiring assistance, affective, cognitive, and dispositional empathy serve as motivating factors for action. Affective factors predominate when the situation is clearly an emergency or crisis and immediate action is required. When the need is not quite so urgent, individuals have time to cognitively

evaluate and perceive the situation of the person, consider the costs and benefits of helping, and make attributions about the cause of the situation. These two factors can be combined for a single optimal measure of general situational empathy (Strayer & von Rossberg-Gempton, 1992). Lastly, personality characteristics (i.e., dispositional empathy) play a role in motivating prosocial behavior; but, research has found stronger links between affective and cognitive empathy and prosocial behavior than dispositional empathy. Dispositional empathy appears to be more closely tied to aggressive behaviors than prosocial behaviors (Miller & Eisenberg, 1988; Eisenberg & Miller, 1987). It is the influence of these initial situational and motivational factors on prosocial behavior that is the focus of the current study. However, Eisenberg's model goes on to describe how there is sometimes a discrepancy between these elements and actual behaviors. For help to occur, there also has to be a correspondence between the behavior, personal goals (i.e., values), probability that the help will be successful (i.e., self-efficacy for intervention), and perceived expectations of the social group. Thus, programs designed to promote prosocial behavior need to consider all these factors.

Bystander Intervention

The majority of research and public interest in bullying has been in response to tragic and highly-publicized events. For example, Olweus' classic research on bullying did not become influential until 1982 when three 14-year-old boys committed suicide in Norway because of severe school bullying. As a result, the Norwegian government enacted nation-wide bullying intervention and prevention programs (Espelage & Swearer, 2003). Similarly, bullying became a subject of public interest in the United States in the 1990's when investigations into a series of school shootings suggested that bullying had led

students to commit serious acts of violence. Dozens of intervention programs were developed, many of which were tertiary in nature targeting bullies and victims. Recently developed programs have tried to be more proactive and prevent bullying problems in school. Whole-school approaches have gained popularity. The administration, teachers, and peers all adopt an anti-bully attitude and encourage prosocial behavior such as helping victims of bullying (Smith, Schneider, Smith, & Ananiadou, 2004). Whole-school programs are, in part, based on the observation that all children are involved in bullying either directly or indirectly by encouraging or stopping it. Yet, despite the face validity of these programs, research has found them to be complicated for practical implementation, and outcomes are highly dependant on systematic monitoring (Song & Stoiber, 2008; Smith, Schneider, & Smith, 2004).

Bullying does not occur in isolation; in fact, 85% of bullying incidents occur in the presence of other children (Atlas & Pepler, 1998; Craig & Pepler, 1995). People who witness bullying but are not directly involved are called *bystanders*. For example, bystanders may see victims attacked physically, hear rumors about victims, or notice victims excluded from activities. In this dissertation, bystanders will refer exclusively to children and peers, though adults working in the school can be bystanders as well. Bystanders have the ability to intervene in bullying, comfort victims, and prevent future bullying in a way that cannot be achieved by adult overseers alone (Song & Siegel, 2006; Song & Stoiber, in press). For example, bullying occurs more frequently in unsupervised places like the playground where adults are not present (Craig, Pepler, & Atlas, 2000). Children often do not tell adults about bullying, possibly because of embarrassment, fear of retaliation, not wanting to get the other person in trouble (Unnever & Cornell, 2004).

In addition, “tattling” is related to low peer acceptance (Lancelotta & Vaughn, 1989).

Yet, the research on how bystanders intervene and factors that influence the decision to intervene is quite lacking.

Studies support the effectiveness of peer intervention in bullying. Preliminary findings by Song and Siegel (2006) suggested that children who received protection from their peers were less likely to be bullied. Similarly, Staub (2003) found that victims of bullying who received support from bystanders were happier than those who do not. Indeed, through naturalistic observations, Hawkins, Pepler, and Craig (2001) found that when peers intervened in bullying, they are successful in stopping it 57% of the time. Unfortunately, the percentage of time children helped when they saw others being bullied ranged from only 6-19% in studies (Atlas & Pepler, 1998; Craig & Pepler, 1998; Tapper & Boulton, 2005). Conversely, peers *encourage* the bully between 18-53% of the time (Tapper & Boulton, 2005). Research needs to better understand this discrepancy between aggressive and prosocial behaviors in bystanders during bullying.

The Problem

The issue is clear: How do we use our knowledge of empathy and prosocial behaviors to get children to intervene when they witness bullying? Numerous studies suggest that empathy motivates prosocial behaviors such as helping or comforting others in need (Strayer & Schroeder, 1989; also see Eisenberg & Miller, 1987; and Miller & Eisenberg, 1988 for metaanalyses). Many anti-bullying programs have assumed that peer awareness and empathy training for students are key resources against bullying (for example, Steps to Respect, S.S. Grin, Bully Busters, and Bully-Proofing). Though these programs have been successful in decreasing bullying behaviors, whether they reach their goals of

increasing peer intervention is unclear. The few studies directly examining empathy and bullying in schoolchildren have focused specifically on bullies and victims and not bystanders (Endersen & Olweus, 2001; Espelage, Mebane, & Adams, 2004; Coleman & Byrd, 2003; Warden & Mackinnon, 2003). Additionally, it is difficult to disentangle the affects of the empathy education and the other parts of the program (Stetson, Hurley, & Miller, 2003), making it unclear if there is a true relation between empathy and peer intervention behaviors in bullying situations.

These are important variables and relations for bullying research because of the practical implications for school anti-bullying programs. As an added bonus, bullying programs that include empathy components may generalize and have an effect on prosocial behaviors in situations outside of bullying. Feshbach's (1983) Empathy Training Program has shown that comprehensive empathy training can be effective promoting general prosocial and helping behaviors in school children. To apply this knowledge to bullying and inform future prevention programs that promote children's social and emotional well-being, an in-depth look is needed into how children think, feel, and act when they witness bullying.

Purpose

The purpose of this dissertation was to contribute to the literature by describing the empathic and behavioral responses of bystanders when witnessing bullying and the relation between these factors, specifically, empathy and peer intervention. In addition, situational factors like type of bullying and gender will be considered. Accordingly, the major research questions posed in this study were:

1. Does witnessing bullying elicit empathy towards victims of bullying?

2. What peer intervention strategies do middle-school students report when they witness bullying?
3. Do empathy and gender predict reported peer intervention?

CHAPTER II

LITERATURE REVIEW

The following literature review begins by defining bullying, describing various forms of bullying, and providing common characteristics of bullies and victims. Next, the role of bystanders and their ability to intervene in bullying is described at length. Then, conceptual and measurement issues in empathy research are explored, including a discussion of the methods used in this dissertation study. Gender, race, and grade-level effects on empathy are also explored. Finally, the available research on empathy and bullying is reviewed, summarized, and applied to the current dissertation study.

Definition of Bullying

Bullying research began in Norway in the 1970's when Dan Olweus coined the term "mobbing," now commonly referred to as bullying. Bullying is defined as the "use of one's strength or status to intimidate, injure, or humiliate another person of lesser strength or status" (Olweus, 1993). Three conditions must be met for an incident to be considered bullying: 1) the incidents must be chronic and repeated over time, 2) there must be an imbalance of power between the perpetrator and the victim, and 3) the behaviors must be intentionally mean. The term "bullying" is often used interchangeably with "peer victimization"; however, peer victimization is a general term that focuses more specifically on the plight of the victim and the power and frequency qualifiers are not necessary.

Types of Bullying

Contemporary research on bullying differentiates between several different types of bullying. Though researchers use various names and conceptualizations, there are generally three types of bullying commonly identified in the literature. Traditionally, physical bullying and verbal bullying have been the most common categories (Olweus, 1993). Physical bullying is the threat of or actual physical injury. Examples include hitting, pushing, and throwing objects. Verbal bullying involves teasing, insulting, and name-calling.

In their seminal article, Crick and Grotpeter (1996) identified a previously neglected type of aggression they called “relational bullying.” Relational bullying is the manipulative use of peer relationships to isolate, harm, or humiliate the victim. Examples include spreading rumors or excluding someone from social activities if he/she does not conform. These three categories are not mutually exclusive and often co-occur in real-life situations. Verbal bullying especially co-occurs commonly with other types of bullying.

Bullies and Victims

Many studies categorize children as bullies, victims, or bully-victims. “Bully” refers to the one who perpetrates an aggressive act over another; the aggressive acts are directed towards the “victim.” These two groups are not mutually exclusive – some children engage in both behaviors. Such children have been labeled bully-victims. Attempts to “profile” bullies and victims have yielded complex results. Notably, due to the complex psychological issues involved and the dynamic nature of bully-victim roles, researchers have recently conceptualized the phenomenon of bullying as a continuum of behaviors

and experiences rather than categories. This section will describe common characteristics of bullies and victims.

Bullies

Generally, bullies tend to be externalizing, aggressive, angry, and impulsive. They have reduced anxiety, positive attitudes towards bullying, and negative attitudes toward peers (Espelage & Swearer, 2003; Swearer, Song, Cary, Eagle, & Mickelson, 2001). Bullies are at-risk for crime and alcohol abuse. Kumpulainen, Rasanen, and Puura (2001) found that of all groups involved in bullying, male bullies were most likely to be diagnosed with a psychiatric disorder; the most common disorders among bullies were attention-deficit hyperactivity disorder, depression, and oppositional-defiant or conduct disorder. However, it appears that the bully “profile” may vary by type of bullying: female bullies who engage in relational bullying may be academically and emotionally higher functioning than male bullies who engage in physical bullying.

Bullies were traditionally thought to be unpopular people having low-self esteem and low social skills. Research has found this belief to be inaccurate in some cases. Many bullies, especially girls who use relational bullying techniques, have high self-concept and social cognition necessary for the complex and coercive social manipulation that they engage in (Kaukiainen, Bjorkqvist, Lagerspetz, Osterman, Salmivalli, et al., 1999). In fact, Woods and Wolke (2004) found a positive association between relational bullying of others and academic achievement. An inverse relationship has been found between academic self-efficacy and other forms of bullying (Andreou & Metallidou, 2004).

Victims

Generally, victims of bullying tend to have poor social skills and display internalizing symptoms: they are high in depression, anxiety, and somatic symptoms (Swearer, Song, Cary, Eagle, & Mickelson, 2001; Nishina, Juvonen, & Witkow, 2005); they are low in self-worth and quality friendships (Bollmer, Milich, Harris, & Maras, 2005; Doll, 1996). Kochenderfer and Ladd (1996) found that victimization was a precursor to academic maladjustment and loneliness. Victims may respond to bullying by refusing to go to school or places where bullying occurs, running away from home, and even attempting suicide in extreme cases (Haynie et al., 2001). As a result, victims have difficulty paying attention in school (Hanish & Guerra, 2002) and academic achievement suffers (Lopez & DuBois, 2005; Schwartz, Gorman, Nakamoto, & Toblin 2005).

Olweus (1993) identified two types of victims: *passive victims*, who are generally rejected by peers, physically weaker than their peers, and do not retaliate. *Provocative victims* are often hyperactive, inattentive, and aggressive; and they retaliate when bullied. Provocative victims are likely to also be “bully-victims.” However, these classifications are insufficient to capture the wide range and outcomes of children who are bullied.

Bystanders and Peer Intervention in Bullying

Peer intervention in bullying has been studied using various methodologies: through sociometric measures, intervention studies, naturalistic observations, and self-report. Despite the importance of the peer ecology in bullying prevention, few studies have attempted to identify factors that influence the ways in which children respond and intervene when they witness bullying. Of the studies available, gender appears to be a significant variable that warrants inclusion in this dissertation.

Sociometric Studies

Bystander reactions to bullying were first studied by Christina Salmivalli and her colleagues. In the first major study published on participant roles in bullying, 573 Finnish children in the 6th grade were surveyed using self- and peer- report questionnaires that asked about children's behavior in bullying situations (Salmivalli, Lagerspatz, Bjorkqvist, Osterman, & Kaukiainen, 1996). Six participant roles were identified: bully, reinforcer of the bully (encourages the bully by watching, laughing, etc), assistant (follower) of the bully, defender of the victim (helps and comforts the victim, confronts the bully), victim, and outsider (ignores bullying situations). Eighty-seven percent of children could be placed in one of these roles. The most common roles were the bystander roles of outsider (40.2% of girls, 7.3% of boys), reinforcer (37.3% of boys, 1.7% of girls), and defender (30.1% of girls, 4.5% of boys). The least common roles were the assistant (12.2% boys and 1.4% girls), bully (10.5% boys and 5.9% girls), and victim (11.8% boys and 11.5% girls).

These data suggest that the majority of children play indirect roles in bullying, and that gender may have a significant affect on how one reacts to witnessing bullying. The reinforcer role was the most common for boys, while the defender and outsider roles were the most common for girls. When boys witness bullying, they tend to join in and/or watch, while girls tend to either ignore or try to stop the situation.

In a follow-up study, Salmivalli and Voeten (2004) confirmed that gender was the most significant factor in predicting behavior during bullying episodes; however, the defender role in this study was defined as a composite of three items describing very different interventions: 1) comforting the victim or encouraging the victim to tell the

teacher, 2) telling the bully to stop, and 3) trying to make the bullying stop. It is possible that the responses to each item would vary by gender and type of bullying; unfortunately, a breakdown of responses to each item was not reported. These peer interventions may be more typical for girls than boys; boys may intervene in ways not captured in this measure. Salmivalli et al. suggested that the large gender discrepancy in prosocial characteristics of the defenders is partially caused by the gender effects found in empathy research: girls are generally much more empathetic than boys, and as will be discussed later, empathy is thought to be a major motivator for prosocial behavior.

The role of the defender is the most relevant to anti-bullying programs that promote peer intervention in bullying and to this dissertation. The defender is the prosocial helper of the group who generally sides with and consoles the victim, and intervenes in and stops other peers from bullying. It is troubling that only 17.3% of children can be identified as defenders, and that boys rarely defend each other. Recent personality and sociometric studies have found defenders to be popular, prosocial, friendly, altruistic, and high in empathy and self-esteem (Jolliffe & Farrington, 2006; Goossens, Olthof, & Dekker, 2006; Gini, Albiero, Benelli, & Altoe, 2007; Tani, Greenman, Schneider, & Fregoso, 2003). While it is clear that there may be significant gender differences in peer intervention in bullying, these studies do not differentiate among varieties of bullying and do not measure *situational* empathy (to be discussed later).

Intervention Studies

Cowie (2000) found a similar gender trend in an intervention study where a peer support system against bullying was established in a school. The intervention consisted of volunteer “peer supporters” who were trained to confidentially talk to and empower

students who had bullying problems. Of the volunteer peer supporters, 74% were girls and 26% were boys; and, the volunteers reported that they were most often approached for help by students of the same sex. Cowie suggested that "...many boys do not choose to use their caring abilities unless they are sure that such action will not threaten their perception of what it is to be masculine" (2000, p. 94).

Naturalistic Observation

Studies using naturalistic observation to directly examine peer intervention in bullying found no gender differences. Hawkins, Pepler, and Craig (2001) videotaped 58 children identified as bullies, victims, and bully-victims in grades 1 through 6 at lunch and recess. Previous work by this Canadian research group (e.g., Atlas & Pepler, 1998; Craig & Pepler, 1998) suggested that peers intervened only approximately 10% of the time. Peer intervention was mostly prosocial and non-aggressive when it occurred in the classroom; when peer intervention occurred on the playground, 68% of interventions were prosocial while 32% were socially inappropriate or aggressive.

The purpose of the 2001 study was to explore the frequency, duration, nature, and effectiveness of peer interventions between boys and girls. Unlike the previous studies, peers intervened in 19% of bullying episodes and, of those, were successful 57% of the time. Aggressive interventions occurred 47% of the time; non-aggressive interventions occurred 53% of the time. Aggressive versus non-aggressive interventions and boy versus girl interveners were equally effective. Boys were present more frequently during bullying than girls (61% versus 39% of the time) but there were no significant gender differences in intervention. Hawkins et al. suggested that boys were present more frequently because they play in large groups, while girls play in small groups or dyads;

so, boys are more likely to be in the proximity of bullying. In addition, girls bully in covert ways that are difficult to recognize. Thus, gender differences reported in other studies may be due to differences in measurement techniques and reporting.

Interventions lasted between 1 second and 1 minute 58 seconds; two-thirds of effective interventions lasted 10 seconds or less. For both genders, the most common types of intervention were verbal assertion, physical aggression, or a combination of verbal and physical assertion. Children were more likely to intervene when the bully or victim were of the same sex as the bystander. This study did not differentiate between responses to different types of bullying.

In another observational study, Tapper and Boulton (2005) observed 77 children ages 7 to 11 in the UK. This study examined children's responses to different types of aggressive acts, not bullying specifically. Results varied by type of aggression, but overall, children supported the victim only 9% of the time. Indirect verbal aggression elicited the least support (7%) while direct physical aggression elicited the most victim support (15%). Conversely, peers reinforced the aggression 30% of the time overall. Peers were most likely to reinforce the aggression when it was direct relational, indirect verbal, or indirect relational. Again, no significant gender differences were found.

Self-Report

Although these studies suggest that peer interventions during bullying are relatively uncommon, most children express a desire to intervene. In a recent study by Rigby and Johnson (2006), children were shown two video clips of children being bullied in school, one depicting physical bullying and the other verbal. The students then viewed a bystander reacting by defending the victim, encouraging the bully, or ignoring the

situation; participants were asked whether they would respond similarly in that situation. Across variables, 43% of students reported that they “certainly” or “likely” would support the victim. Students were more likely to support the victim in verbal bullying situations than physical bullying. Primary-school girls were more likely than boys to support the victim; however, these gender differences dissipated by secondary school. Participants were also asked about the frequency of actual intervening behaviors over the past year. Though most students reported having helped at least once, primary students reported helping more frequently than secondary. Only 14.2% of primary students and 24.6% of secondary students reported “never” intervening. No significant gender differences were reported for this item, or for a social desirability measure that was administered as a control.

Application of Theory

Though inconclusive, the results of these studies suggest that peers encourage aggression when victims are not present, or when the whole group is involved like in relational bullying; but, actually witnessing victims being harmed physically or emotionally elicits affective or cognitive responses in the bystanders that motivate them to intervene. This interpretation is supported by Latané and Darley’s (1969) model for bystander intervention, and Eisenberg’s (1986) models of empathy-related responding. First, one must notice the incident. Directly witnessing an event causes an automatic empathic-related response (Hoffman, 2000). This early part of the decision making process involving initial reactions is the one that will be examined in the present study.

Second, the incident must be recognized as requiring assistance; for example, the need for help must be unambiguous and explicit. This is more likely to be expressed through

cues elicited in direct forms of aggression. Relational aggression is often covert, and the source of the aggression and the need for intervention is often hidden. In addition, some common types of bullying like verbal bullying are viewed as a typical part of growing up not requiring any special intervention. Third, one must assume responsibility for providing help. If there are many people around (e.g., relational bullying which requires a group effort, or boy's playground activities where many people are present) individual sense of responsibility is diffused. It is easier to assume that someone else will help. Most social psychological studies of bystander intervention have examined adult samples during emergency situations (e.g., someone has a seizure, or is being robbed). Aside from the aforementioned studies, it has not been studied in children's bullying. There is also an untested alternative theory to assuming responsibility in the case of children: Children, and especially adolescents, often do not want to go against the group or draw attention to themselves. Adolescents want to "fit in"; thus, in times when no direct harm is occurring, or when many others are present, it is easier and more socially rewarding to go along with the group (Latané & Nida, 1981). In this case, peer pressure triumphs over empathy.

A noticeable gap in this literature is the omission of studies describing bystander intervention behaviors during bullying. The simple differentiation between prosocial and antisocial intervention in the Hawkins, Pepler, and Craig (2001) study was the only analysis on the nature of peer interventions in bullying found in the search of the literature. There are numerous studies on individual reactions to being bullied like coping and help-seeking behaviors (Hunter & Borg, 2006; Hunter, Boyle, & Warden, 2004; Cowie & Olafsson, 2000; Westcott & Davies, 1995; Kristensen & Smith, 2003) and students' suggestions on how victims should react to bullying (Kanetsuna, Smith, &

Morita, 2006; Camodeca & Goossens, 2005), but there are no in-depth studies on types of bystander intervention behaviors. This dissertation study contributes new information on children's responses to *witnessing* bullying and the different ways in which they intervene in bullying.

Empathy: Conceptual and Measurement Issues

The following sections first provide brief explanations of terms commonly found in the empathy literature, followed by descriptions of common approaches to the conceptualization of empathy in the research. These different conceptualizations have implications for the measures used in research studies; this dissertation takes a comprehensive approach, by viewing empathy as a multidimensional construct. Next is a review of measures of empathy and their strengths and limitations. Last is a review of the empathy measure used in this dissertation study, the Empathy Continuum.

Differentiation of Common Terms

In empathy literature, the terms *empathy*, *sympathy*, and *personal distress* are used to explain different emotional and behavioral reactions to witnessing someone in distress. When studying empathy, it is important to distinguish which concept is being studied, as each has its own preferred methods and measures. The concept discussed in this dissertation is empathy. Empathy is a set of emotional and cognitive constructs that allows one to experience the state of another. When one witnesses another in distress, there is first an automatic empathic reaction. Through cognitive processing, this reaction can then turn into sympathy or personal distress.

Hoffman (2000) posits that empathy becomes sympathy when the cause of the distress is beyond the victim's control. Sympathy is not an affective match, but a general feeling

of concern for another person because of his or her situation. Sympathy and empathy motivate one to help another person. While they are distinct constructs, these two terms are often used interchangeably and not always differentiated in the literature.

The initial empathic reaction also could lead to personal distress. Personal distress is characterized by an egocentric aversive emotional reaction to the situation. The focus changes from the other's situation to one's own distress. The behavioral outcome could be helping, ignoring, or escaping; it is determined by the easiest way to relieve one's own distress.

Conceptual Issues in Empathy Research

Empathy as a Multidimensional Construct

Historically, empathy has been conceptualized and measured by researchers as being either affective or cognitive processes (Strayer, 1987). Researchers have recently begun to integrate the two approaches into a multidimensional definition of empathy. This multidimensional approach conceptualizes empathy as “an emotional reaction based on the comprehension of another's emotional state or condition that is identical or similar to that state... empathy involves both cognitive and emotional elements” and requires at least minimal distinction between self and other (Mussen & Eisenberg, 2001, p. 105). Affect and cognition are appropriately viewed as interacting processes in the development and occurrence of empathy.

Cognitive Perspectives of Empathy

The cognitive perspective of empathy focuses on the understanding of the perspective and feelings of another. This perspective was adopted in the social cognition literature, and empathy became synonymous with constructs like *perspective taking* and *role taking*.

This cognitive approach was based, in part, on Piaget's theory that empathy is a product of decreases in children's cognitive egocentrism and increases in their perspective taking ability (Hoffman, 2000; Strayer, 1987). Thus, these abilities would not fully develop until children reach a preoperational stage of cognitive development. Piaget, however, acknowledged that other cognitive and affective processes likely contribute to empathy, illustrated by the fact that infants and toddlers respond to emotions and behave altruistically. Unfortunately, researchers of cognitive empathy generally discarded affective processes in their methodologies. Cognitive empathy has usually been measured using tests of social prediction and role-taking or by using cues like pictures or stories to measure recognition of affect. It is a subject of debate whether the tasks in these measures truly tap into empathy, or if other cognitive and sensory processes are responsible.

Affective Perspectives of Empathy

Affective perspectives of empathy can be described as shared emotion. As Hoffman described, the feelings experienced are "more appropriate to someone else's situation than to one's own situation" (1982, p. 282). This emotion is an automatic response to situational and physiological cues and facial expressions. In reaction to the pervasiveness of purely cognitive conceptualizations of empathy in the literature at the time, major theorists on empathy such as Norma Feshbach and Martin Hoffman emphasized the integral role of affect in their models of empathy (Hoffman, 1975; Feshbach & Roe, 1968; Feshbach & Feshbach, 1975). Rather than focusing on the *content* of empathy as affect, they focus on empathy occurring through an affective *process*. Affective measures of empathy have focused on determining an emotional match through self-report, facial expression, and physiological responses.

Previous Measures of Empathy

Dispositional Empathy

Many self-report questionnaires measure dispositional empathy; that is, empathy is conceptualized as a personal trait, rather than a reaction to a specific situation. Examples of such measures commonly used with children and/or adolescents include Bryant's Index of Empathy for Children and Adolescents (1982), Hogan's Empathy Scale (1969), and Davis' Interpersonal Reactivity Index (1983). Of these three measures, Bryant's is the only one specifically for children and adolescents; it is a psychometrically validated modified version of Mehrabian and Epstein's Emotional Empathy Questionnaire for adults (1972). However, many studies with children still utilize the adult version. Davis' scale is the most widely used because it has four subscales that measure different affective and cognitive empathy-related responses: empathic concern (i.e., sympathy), personal distress, perspective taking, and fantasy (i.e., tendency to imagine oneself in the role of a fictional character from a book, movie, etc.).

Studies have attempted to link these measures to prosocial behavior in children; they first measured *dispositional* empathy, and then compared it to a set of unrelated responses elicited within a different context. Not surprisingly, the relationship between empathy and prosocial behavior using these measures is inconsistent.

Situational Empathy

In response to a series of studies attempting to relate dispositional empathy to behavior in specific situations, Strayer (1987) suggested that empathic responses and subsequent behaviors should be elicited within the same context. This is called *situational* empathy, or empathic responses to cues within a specific situation, and is more strongly related to

helping. Though dispositional and situational empathy measures are moderately correlated (Eisenberg & Fabes), they are distinct constructs. Situational empathy has been found to be more strongly related to prosocial behavior than dispositional empathy.

Picture-story indices. Perhaps the most common way of measuring situational empathy in children has been the use of variations of picture-story indices. The Feshbach Affective Situations Test for Empathy was the first picture-story index developed (FASTE; Feshbach & Roe, 1968); in the FASTE, an emotionally evocative situation is presented through a series of pictures. The participant is interviewed and empathy is scored as a match between one's own affect after the story is presented and the affect of the main character. Iannotti (1985) developed a similar picture-story index by presenting pictures while telling stories about them. Like the FASTE, the participants are then asked about their feelings and those of the main characters.

There is debate as to the level of affective match needed on these indices; some believe that similar, and not exact, emotion is sufficient. Often, the desired affective response is predetermined by the researchers, and children are scored on whether their affect is "correct" for the story. However, as Strayer points out:

“...regardless of experimental consensus, except in the simplest of instances, an emotional episode is veridically open to several interpretations, which are based on the occurrence of facial expressive ‘blends’ of emotion and on other cues among which observers select those that are personally most salient for them. Therefore it seems more ecologically valid and meaningful when measuring empathy to use any plausible emotion the subject attributes to the other person as the emotion to be matched in assessing the subject's own reported emotion as empathic.” (2002, p. 232)

There are several considerations when using picture-story indices that must be controlled for: 1) social desirability effects, 2) constraint of responses due to unfamiliarity with the researchers, and 3) ability to identify and label one's emotions. In

addition, the ecological validity of using pictures and cartoons to elicit emotion is questionable. Perhaps most importantly, this method does not consider participant's reasons for the way they feel or rationalizations for the way the characters feel; this lack of probing also does not differentiate between empathic concern and personal distress, which are shown to affect one's behavioral responses in a situation. In addition, it was observed that pictures can sometimes be confusing to children when situational cues do not match the affective cues in the picture (e.g., a child looking sad at his or her birthday party); when this happens, children and adolescents tend to base their responses on the situational cues (Eisenberg & Fabes, 1990).

Physiological, facial, and gestural indices. The picture-story methodology has been modified to use both physiological measures of heart rate and skin conductance and facial expressions. Nancy Eisenberg and colleagues developed and validated these techniques for measuring situational empathy (reported in Eisenberg & Fabes, 1990). The participants' physiological reactions are monitored or their facial expressions are videotaped as they are presented with videos or listen to audiotapes of emotionally evocative situations.

Facial and gestural coding systems like the Facial Action Coding System developed by Ekman and Friesen (1975) have been found to produce reliable results in identifying emotions. When used to measure situational empathy, an individual's emotional reaction as expressed facially or gesturally is matched to the emotion presented in the stimulus. Or, when differentiating between types of empathic responses, specific facial expressions are theorized to correspond to responses (e.g., concerned attention for sympathy; mild apprehension or nervous mouth for personal distress; Eisenberg & Fabes, 1990). Because

facial expressions and gestures are spontaneous, and can be collected without the experimenter in the room, they are less vulnerable to social desirability. Unfortunately, studies with children show that through socialization processes, as children get older they tend to neutralize or mask negative affect (Strayer, 1983). In addition, individual differences in intensity of facial and gestural expression may limit the predictive ability of facial and gestural coding.

Physiological measures of heart rate and skin conductance are more promising, and are not subject to social desirability effects. They may also be effective in identifying different types of empathic responses. For example, accelerated heart rate is related to an aversive reaction likely to produce egoistic concern for oneself, that is, personal distress. Skin conductance has also been used as a measure of intensity of emotions and can mark overarousal, which is also related to personal distress. Indeed, Eisenberg and Fabes (1990) found a positive relationship between facial, gestural, and physiological measures of sympathy reactions and prosocial behavior, and a negative relationship between personal distress reactions and prosocial behavior.

Self-report measures may be preferable to the physiological and facial expressive measures for several reasons: 1) Though some speculate that affect can be identified through consistent patterns of physiological responses, others believe that they simply measure general arousal and can be affected by familiarity or novelty of stimuli. 2) Physiological measures can be invasive and difficult to use with children. 3) Training researchers on physiological measures can be time-consuming and costly. 4) Perhaps due to socialization affects, higher levels of affect are reported in verbal inquiries than in physiological and facial expression measures.

Current Measure of Situational Empathy:

Self-Report of Empathy in Simulated Emotional Situations

The recent use of videotapes and audiotapes has addressed the lack of ecological validity and mismatched cues in picture-story indices of empathy. Videotaped situations are more realistic, contextually rich, and elicit more intense emotion than looking at still pictures. In this methodology, videos are shown to participants; then, as in picture-story induces, participants are asked about their emotional reactions to the video and the emotional reaction of the main character. Another common way to simulate emotional situations in social psychology experiments is to enact situations around participants, often without their knowledge. Participants' reactions in the situation are recorded, and sometimes participants are interviewed about the experiences.

Empathy Continuum Scoring System

To address concerns that only affective empathy had been measured in previous methodologies counter to Piaget's theory that "cognitive and emotional processes develop interactively at all ages" (Strayer, 1993, p. 189), Janet Strayer developed the Empathy Continuum Scoring System (Strayer & von Rossberg-Gempton, 1992), which will be referred to as the *EC* throughout the rest of this paper. After viewing a video, questions address affective and cognitive components of empathy. Specifically, participants are asked how they felt, how much, and why; then, how the main character in the vignette felt, how much, and why. Answers are coded using the EC coding system.

In the EC system, affective empathy is coded similarly to the procedures on the FASTE (Feshbach & Roe, 1968). First, the affective match between the character in the vignette and oneself is coded either 0 (no emotion or discordant emotion), 1 (similar

emotions in character and self), 2 (same emotion, same intensity) or 3 (same emotion, different intensity). Next, if affective match is not coded as 0, reasons for one's emotions are categorized into level of cognitive empathy.

To code cognitive empathy, Strayer developed a system based on Hoffman's (1975, 2000) theory of developmental levels of empathy and the increasing complexity of differentiation between the self and other. As a result, there are six levels of cognitive empathy on the EC, based on one's attribution of another's emotion: 1) no attribution or irrelevant attribution, 2) external events, 3) minimal focus on person in a specific event, 4) association with one's own experience, 5) responsiveness to character's emotional state or experiences, and 6) explicit role-taking. There is also a category for no empathic reaction that is coded when the prerequisite of affect match/similarity is not met. A number from 0-19 corresponds to each combination of affective and cognitive empathy. This continuum measures development and complexity of empathy, rather than intensity or frequency.

Validity. The EC methodology has been used in numerous studies including recent studies with typically developing children, children with behavioral and emotional difficulties, and children with chronic illness of all ages (Cohen & Strayer, 1996; Robinson, Roberts, Strayer, & Koopman, 2007; deWied, Goudena, & Matthys, 2005; Roberts & Strayer, 1996; Strayer & Roberts, 1989; Chisholm & Strayer, 1995; Sterling & Friedman, 1996; Krevans & Gibbs, 1996). One benefit of this methodology is that cognitive and affective empathy can be analyzed separately or together, and it was designed to be adaptable to any type of video vignettes of interest.

In support of this methodology, Barter and Renold (1999) state that “vignettes provide a valuable technique for exploring people’s perceptions, beliefs and meanings about specific situations, and are especially useful for sensitive areas of inquiry that may not be readily assessed through others means” (p. 5). There are several considerations for the implementation of vignettes in research methodology: 1) stories must be believable and plausible to participants, avoiding overly eccentric or disastrous events; 2) vignettes need to be detailed enough to provide sufficient context, but vague enough to allow participants to make decisions as they typically would; 3) similar personal experiences may enhance participants’ engagement with the story; 4) probing may minimize the social desirability effect of initial responses; and 5) the vignettes must be simple enough for the participants to follow and understand. As with any methodology, researchers need to be aware of how methods affect outcomes and relationships between variables.

Empathy, Aggression, and Prosocial Behavior in Children

Perhaps the most influential research on the relationship between empathy, aggression, and helping has been conducted by Nancy Eisenberg, Paul Miller, and Janet Strayer. The following sections will describe key studies by these researchers that provide a framework for the methodology and hypotheses of this dissertation.

Eisenberg and Miller’s Meta-Analyses

Nancy Eisenberg and Paul Miller conducted two frequently cited meta-analyses on the relationship between empathy and prosocial behavior (Eisenberg & Miller, 1987) and empathy and aggressive behavior (Miller & Eisenberg, 1988) in both children and

adults¹. The results of these studies were organized by methodology used. In the prosocial behavior study, 20 studies using picture story indices were examined; the relationship between this measure and prosocial behavior was not significant. All other measures of empathy were significantly correlated to prosocial behaviors; self-report indices of empathy in simulated situations ($r=.24$) and physiological indices of empathy ($r=.36$) were among the strongest correlated. Conversely, in their study of aggressive behaviors, while all empathy measures were negatively correlated to aggression, dispositional questionnaire methods produced the only significant correlation. These meta-analyses suggest that while situational empathy is more predictive of prosocial behaviors, dispositional empathy is more predictive of antisocial behaviors. This has an important implication for future methodologies: if we want to examine the effect of empathy on prosocial behaviors (like peer interventions in bullying), we should use measures of situational empathy like self-report indices in simulated situations, not dispositional empathy questionnaires that have been previously used.

Strayer's Study

Following these meta-analytic findings, Strayer and Schroeder (1989) wanted to “examine the role of empathy and emotion in explaining differences in children’s motivation to help and the helping strategies they propose” (1989, p. 88). A total of 113 children ages 5-14 individually viewed six video vignettes (approximately thirty minutes of viewing total) depicting a wide range of emotions. Criteria for choosing the videos included 1) likelihood of eliciting specific emotions, 2) unlikelihood of previously viewing the film, 3) situations that are likely to be similar to previous experiences of

¹ It should be noted that no studies using Strayer’s Empathy Continuum scoring system were part of these metaanalyses.

children, 4) appropriateness of intervening prosocially, and 5) applicable to all age ranges. After viewing the vignettes, children were interviewed. They were asked to describe each vignette to assure understanding, and then asked to identify the emotions of the character and themselves, and the intensity of the emotions. Interviewers queried as to the reasons for the emotions. The EC Scoring System was used to code these responses. Lastly, children were asked if they felt like helping the character in the video, and if so, what they would do. These responses were categorized into instrumental, verbal, social, material, aggressive, or other types of helping.

Children reported wanting to help approximately half the time. Number of strategies increased with age for boys, but not girls; however, girls reported more helping strategies overall than boys. This suggests that socialization factors influence prosocial behaviors in girls at an early age; boys do not reach this level of socialization until early adolescence. Instrumental strategies were proposed most often, followed by verbal, then aggressive strategies. Younger children were most likely to endorse aggressive strategies, while older children were most likely to choose verbal strategies.

Results suggested that children are very accurate in determining the affect in a video; very few children did not answer with the targeted emotion. Willingness to help varied by type of emotion. Children were least likely to offer help if the character's emotion was happy (36%) or angry (28%), and most likely to offer help if the character felt sad (56%) or scared (71%). Children were most likely to respond to sadness and fear by helping instrumentally or verbally. Fear was the only emotion for which willingness to help and number of strategies increased with age.

On the Empathy Continuum, affective empathy was analyzed first. The willingness to help increased in the presence of affective empathy; surprisingly though, it did not increase with age. Next, the mean EC Score was examined; again, a higher EC score suggested greater willingness to help and greater number of helping strategies. Notably, a significant amount of the variance in helping responses was accounted for by level of cognitive empathy; and, helping was moderately correlated with EC score ($r=.42$). Numerous other studies using similar methodologies by Strayer and her colleagues suggest a positive relationship between EC score and helping behaviors (e.g., Strayer, 1993; Roberts & Strayer, 1996) and a negative relationship between EC score and aggressive behaviors (e.g., Strayer & Roberts, 2004) in children as young as five years of age. These studies established that 1) there is a relationship between prosocial behavior and empathy in children, 2) the cognitive complexity of empathy increases with age, and 3) both cognitive and affective empathy contribute to helping behaviors.

Development of and Grade-level Differences in Empathy

The following sections discuss developmental changes in empathy across childhood and grade-level differences.

Developmental Theory

Martin Hoffman created the most detailed and well-know developmental model of empathy in children (1975, 2000). Hoffman proposed five developmental levels of empathy based on children's growing ability to differentiate themselves from others. The first developmental level of empathy is *global empathy*; this is a newborn infant crying in reaction to the sound of another infant's cry. Infants do this from birth, and their responsive cries are identical to those of the stimulus cry. When infants reach 11-12

months of age, they begin to experience *egocentric empathy*. This is similar to global empathy, but infants will whimper, stare, and engage in the same comfort-seeking behaviors as if they were hurt themselves. This occurs because of a poor sense of self-other differentiation and a focus on making oneself feel better. Next, in *quasi-egocentric empathy*, infants will begin adding helping behaviors to their repertoire in replace of self-soothing behaviors; they will kiss, hug, or seek help for the victim, depending on what they find comforting in distressing situations. Fourth, during toddlerhood when children realize others have thoughts and feelings different and independent from their own, they will experience *veridical empathy for another's feeling*. Helping becomes more effective because they can predict what another may find comforting, and integrate feedback.

Lastly, once children develop a full understanding of themselves versus others between ages 7 and 11, they experience *empathy beyond the situation*. They are able to consider past experiences, personalities, and typical reactions of victims. "Mature empathy is thus a response to a network of cues, including another's behavior and expression and everything known about him" (Hoffman, 2001, p. 66). The development of empathy is a life-long process and, just because one experiences empathy does not mean that a helping reaction will occur. In addition, as discussed previously, many factors can neutralize empathic distress including attitudes about the victim, stereotypes, and social pressures.

Grade-Level Differences in Empathy and Helping

Although there is much research on the relationship between empathy and prosocial behaviors in preschool and late adolescence through adulthood, there is very little research in between. It is clear that preschoolers experience empathy (Chapman, Zahn-Waxler, Cooperman, & Iannotti, 1987; Iannotti, 1985; Feshbach & Feshbach, 1969); and

yet, the literature on the relationship between empathy and prosocial behavior in preschoolers is inconclusive. In fact, some studies found a positive relationship between empathy and aggression in boy preschoolers; this is thought to be a product of social immaturity and emotional regulation (Feshbach & Feshbach, 1969). As children get older however, the positive relationship between empathy and prosocial behavior and the negative relationship between aggression and empathy becomes more robust, and is relatively stable by late childhood throughout adulthood (McMahon, Wernsman, & Parnes, 2006; Lovett & Sheffield, 2007; Eisenberg, Cumberland, Guthrie, Murphy, & Shepard, 2005).

The research available on helping suggests a curvilinear relationship with age. Midlarsky and Hannah (1985) attempted to replicate the findings of Staub (2003), which suggest that low levels of helping increase after kindergarten, reach a peak in elementary school, decrease in middle school to a low point in seventh grade, and then increase again in high school. Two-hundred-fifty-six schoolchildren in the first, fourth, seventh, and tenth grades were taken on “class trips” to a museum. At the museum, students were individually put in a situation where a confederate of the researchers, either a preschool child or a same-aged peer, pretended an injury of varying intensity. Subsequent behaviors were observed. Results confirmed Staub’s previous pattern of findings; 80% of children offered help, but there were expected grade-level differences. First graders were the least helpful, followed by seventh graders, then tenth graders, with fourth graders being the most helpful. Of note, there was no significant difference in helping between first and seventh graders. Overall, seventh graders who were confronted with a low-intensity injury in a same-aged peer were the slowest to respond. In addition, girls helped

preschool-aged children more than same-aged children; there was no difference here for boys. This implies that middle-school students, especially girls, may not be likely to help victims of bullying in their grade at school. Girls may be more likely to help by comforting the victim after the fact (Midlarsky & Hannah, 1985).

Gender, Race, and Empathy: Similarity Bias

Despite being a question for almost 40 years, the influence of race and gender on empathy is unclear. The direct and indirect studies available on gender, race, and empathy are described within the framework of the similarity bias theory.

Gender Theory and Research

Generally, researchers subscribe to the theory posited by Feshbach and Roe in 1968 that children tend to feel more empathy for others who have characteristics similar to themselves. Following a study by Stotland and Dunn (1963) suggesting that adults felt more empathy for others of the same gender and skill level, Feshbach and Roe examined this hypothesis for gender in 6- and 7-year-old children using the Feshbach Affective Situations Test for Empathy.

Overall, a significant interaction was found between sex of the stimulus and sex of the participant; that is, boys felt more empathy for boys; girls felt more empathy for other girls. When affective empathy was scored very specifically and rigidly, requiring a precise verbal response, girls expressed significantly higher levels of empathy than boys. However, the difference dissipated when scoring guidelines were relaxed so that only positive and negative affect was matched. In addition, no gender differences were found on a measure labeled “social comprehension,” which would later be referred to as cognitive empathy. This was the first of many studies to suggest that, while girls report

significantly higher levels of empathy than boys, these gender differences may be an artifact of the instrument, and perhaps level of verbal expression about emotions for young children. Feshbach and Roe conclude by saying that “similarity facilitates empathic responses” (1968, p, 144).

Race Theory and Research

In 1968, as schools were beginning to be desegregated, Feshbach and Roe stated:

“...in integrating a school and in working with children from different racial and ethnic groups, the focusing on group differences, including positive group qualities, to foster group identity and self-image of group members, may result in decreased sharing of social feeling and empathy between children of different groups and even between teacher and child. Equal emphasis should be placed on the similarities among children which relate to and promote common affective experiences. The social application of empathy findings must, of course, await further knowledge in this area.” (p. 144)

Unfortunately, there have been very few studies since that time that examined race and empathy in children. In 1984, Freeman stated, “Research concerned with the effect of racial similarity on empathy is virtually nonexistent” (p. 236). Using a similar methodology to Feshbach and Roe (1968), Freeman attempted to contribute to our knowledge in this area by examining both affective and cognitive empathy in 3 to 5-year-old white boys and girls using story vignettes about either white and black children. The results partially confirmed the hypothesis: boys had higher cognitive empathy scores for children of the same race. No differences were found for girls.

Ingroup/Outgroup Bias

Nesdale, Griffith, Durkin, and Maass (2005) contributed to our knowledge of the relationship between empathy, ingroup/outgroup norms, and attitudes using a clever experimental methodology. Nesdale et al. wanted to investigate the relationship between empathy and attitude towards ethnic groups; they hypothesized that children who were

high in empathy would be more sensitive to the struggles of minority children, and thus have a more positive attitude towards them. Anglo-Australian children in grades 1-6 were administered a dispositional measure of empathy. Next, they were individually taken to a room and told they would take part in a drawing competition. They were told that they were placed on a team of drawers “just like them.” Photographs were revealed of children who made up the “other team”; children were matched by gender, but race was manipulated to be either Anglo-Australian or another ethnic group. Children then responded to a measure of “liking” the other group members. While empathy did not influence liking of group members of the same ethnicity, it significantly predicted liking the ethnically different other group. Children who reported more empathy tended to like the ethnically different group more.

Next, Nesdale et al. wanted to see if group norms would interact with these variables. Thus, a verbal prompt was added before the children filled out the “liking” scale. They were told either: your group likes to work with other kids, especially those who are different; or your group does not like to work with other kids, especially those who are different. As expected, there was a positive relationship between empathy and peer liking in the inclusion manipulation. Interestingly, in the exclusion manipulation children liked ethnic minority children less and empathy did not have a significant impact. No gender differences were found in this study. These findings suggest that: 1) group norms could be a potential mediator between empathy and attitude, 2) empathy could be used as a tool to promote race relations and ethnic attitudes, and 3) the relationship between empathy and race is complex and warrants further investigation.

The Effect of Racism on Helping

Many studies in the social psychology literature on racism have studied the effect of race on helping behaviors in adults. Two metaanalyses suggest that white adults provide less help to black than other white adults, especially when giving help was more inconvenient or when the level of emergency increased (Crosby, Bromley, & Saxe, 1980; Saucier, Miller & Doucet, 2005). In other words, racial minorities were helped less than white people when the situational factors made it easier to rationalize; this suggests underlying prejudice that is normally inhibited. Unfortunately, studies on minorities helping while people are rare. While the characteristics of the target person have been investigated in these studies, they have not examined whether gender or race affects the empathy and helping in children. In conclusion, there is some evidence to support the similarity bias theory; but, more research is needed.

Empathy and Bullying

No studies have directly examined the relationship between bystander empathy and peer intervention during bullying. The few studies directly examining empathy and bullying in schoolchildren have focused specifically on bullies and victims (Endersen & Olweus, 2001; Espelage, Mebane, & Adams, 2004; Coleman & Byrd, 2003; Warden & Mackinnon, 2003). This section will summarize the available studies on empathy and bullying, starting with studies focusing on empathy in bullies and victims; then moving onto empathy and bullying interventions in teachers. Each section is broken up by type of empathy measure used: general emotional responses, dispositional empathy, and situational empathy. Lastly, successful prevention programs that incorporate empathy skills training are described.

Empathy in Bullies and Victims

Emotional Responses to Bullying

Though it did not examine empathy, the first relevant study examined emotional reactions of school bullies and their victims. Borg (1998) surveyed 6282 children in Malta in first through sixth grades. The questionnaire asked about the incidence, nature, and reactions to bullying from the perspective of both the bully and the victim. Lists of emotions were provided and students were asked to endorse the emotions they felt after being bullied or bullying others. Self-declared victims of bullying reported feeling vengeful (38.3%), angry (37.1%), and self-pity (36.5%), indifferent (24.7%), or helpless (24%). Significantly more boys than girls felt vengeful; the opposite was true for self-pity. Although half of bullies reported feeling sorry after bullying (49.8%), they concurrently reported frequently feeling indifferent (40.6%) or satisfied (20.9%). Significantly more girls reported feeling sorry than boys (52.7% versus 47.8%). “Feeling sorry” likely entails a form of empathic-related responses like guilt or sympathy.

Victims’ behavioral responses following bullying were also queried. Although 38% of girls told a best friend about the incident, only 12.5-13% sought out help from a friend or friends. This wide discrepancy did not exist among boy respondents; these behaviors varied between 17-20.9 % among boys. Interestingly, these rates of seeking out help from friends correspond to the number of students who intervene in bullying in other studies.

Dispositional Empathy

Endersen and Olweus (2001) conducted the first study available specifically examining empathy and bullying. They aimed to study gender and age differences in empathy, and to explore the relations between empathy, bullying behavior, and attitude towards

bullying. Their sample was taken from a longitudinal study of 2286 students. Two self-report measures developed by Olweus were administered: the Empathic Responsiveness Questionnaire (comprised of two scales of affective empathy: empathic concern and empathic distress) and two subscales of the Bully/Victim Questionnaire (attitude towards bullying and bullying others). Girls reported significantly more empathy than boys; in addition, both sexes reported more empathy for girls in distress than for boys in distress. Significant negative correlations were found between the “empathy” and “positive attitude towards bullying” ($r = -.41$ for girls and $-.40$ for boys); and “empathy” and “bullying others” ($r = -.15$ for both sexes); gender differences were not significant. In other words, children who reported high empathic concern did not have a positive attitude toward bullying and did not bully others. Further, a path analysis suggested that attitude towards bullying mediates that relationship between empathic concern and bullying behaviors. The correlation between the empathic distress subscale and the attitude and behavior scales was close to 0.

Espelage, Mebane, and Adams (2004) attempted to replicate Endersen and Olweus' (2001) findings and examine victimization in addition to bullying others. Data were part of a longitudinal study on bullying; 268 children in the sixth, seventh, and eighth grades participated. Involvement in bullying was measured by the University of Illinois Bullying, Fighting, and Victimization Self-Report Scales; relational aggression was measured by a self-report scale developed by Crick (1996). Empathy was measured using a variety of subscales from established measures: the Consideration of Others subscale from the Weinberger Adjustment Inventory (Weinberger & Schwartz, 1990); the Perspective-Taking and Empathic Concern subscales from the Interpersonal Reactivity Index (Davis,

1983); and the Engagement in Caring Acts subscale from the Children's Peer Relationship Scale (Crick & Grotpeter, 1996). Significant gender differences were found for all measures, with girls scoring higher on the empathy measures. Gender differences were highest for the Caring Acts subscale and lowest for the Perspective-Taking subscale.

This is consistent with previous research that suggests gender differences occur when empathy is measured in affective terms, but not when it is measured in cognitive terms (Eisenberg & Strayer, 1987). This issue was further clarified when the empathy scales were intercorrelated; all empathy measures were highly positively correlated with one another for the girl sample. Among boys, while the measures were moderately correlated, there was a higher correlation among the affective measures than with the perspective-taking measure, suggesting that while these constructs are highly interrelated for girls, but may be separate constructs among boys. Correlations between the empathy scales and bullying others suggest a moderate negative relationship (-.21 to -.33); in other words, higher empathy is associated with bullying others less. Though the relational aggression and fighting scales did not measure bullying behaviors per se, negative correlations were found with the empathy scales.

Next, Espelage et al. categorized children into bully, victim, bully-victim, and no status groups. Significant group differences were found for two of the empathy subscales: Caring Acts and Consideration of Others. On the Caring Acts subscale, victims reported perpetrating significantly more caring acts than all other groups; bully-victims reported perpetrating significantly less caring acts than no status students. Victims reported significantly more Consideration of Others than bullies and bully-victims; there was no

significant difference between victims and no status children. Bully-victims reported significantly less consideration than no status children, but were equivalent to bullies. In sum, victims reported the highest levels of Caring Acts and Consideration for Others, while bully-victims reported the lowest levels. It is alarming that *no status* children and *bullies* did not differ significantly on any measure of empathy. Lastly, the researchers found that attitude toward bullying mediated the relationship between empathy and bullying.

Coleman and Byrd (2003) and Warden and Mackinnon (2003) also studied empathy and bullying, though this relationship was not the major focus of their studies. Coleman and Byrd (2003) studied interpersonal correlates of peer victimization among 52 7th and 8th grade students. Forgiveness, not empathy, was the major focus of the study; however, the Emotional Empathy Scale by Mehrabian and Epstein (1972) was administered, along with self-report and teacher-report measures of peer victimization. No significant relationship was found between empathy and either measure of peer victimization.

Warden and Mackinnon (2003) attempted to study socio-cognitive characteristics of peer nominated prosocial children, bullies, and victims among 131 9- and 10-year-old children. Along with a sociometric measure, Bryant's Empathy Index (1982) was used to measure empathy; and a social behavior questionnaire was constructed to measure prosocial behaviors, relational bullying, and physical bullying. The only empathy analyses suggested significant differences in empathy between the three groups of children, with prosocial children reporting the most empathy and bullies the least. Victims' mean empathy scores were in between these two groups. However, these results

were skewed by significant gender differences. Antisocial girls still reported more empathy than prosocial boys, though exact numbers were not reported.

Summary of Findings on Empathy in Bullies and Victims

As expected, bullies, like aggressive children in other studies, have little empathy. Victims do experience empathy, but how much is unclear. While prosocial children experience high levels of empathy, it is unclear how other uninvolved children react. A major methodological issue with these studies is that they first measured empathy as a personality trait (*dispositional* empathy), and then compared it to another set of responses elicited within the specific context of bullying; the participants were not reporting on their empathic responses to specific bullying situations. In addition, because of the focus on bullies and victims, intervention behaviors were not examined. To date, there are no known studies of student's *situational empathy* and *intervention* during bullying situations. There are, however, three studies available examining the relationship between teachers' empathy and intervention during bullying.

Empathy and Bullying Intervention by Teachers

Dispositional Empathy

To examine contextual factors in bullying and individual differences that contributed to intervening in bullying, Craig, Henderson, and Murphy (2000) surveyed 82 female and 34 male student teachers. Participants were asked to read 18 vignettes in the Bullying Attitudes Questionnaire (developed by the researchers for the study) describing bullying scenes varying by type of bullying (verbal, physical, or relational) and whether the teacher witnessed the bullying. After each vignette, participants were asked to rate the seriousness of the incident, how likely they were to intervene, and if they would

categorize the incident as bullying. In addition, personality measures were administered: the Personal Attributes Questionnaire (Spence, Helmreich, & Stapp, 1978), which measured masculine and feminine attributes; the Questionnaire Measure of Emotional Empathy (Mehrabian & Epstein, 1972), which measured dispositional affective empathy; and the Just World Scale (Rubin & Peplau, 1975), which measured perceptions of whether others deserve their fates in a variety of situations.

First, situational factors were analyzed; witnessing the event appeared to have an effect on whether the incident was labeled as bullying for relational aggression, but not for other types of bullying. For all three types of bullying, witnessing the event increased teacher's perceived seriousness of the situation and likelihood of intervention. Physical bullying, followed by verbal bullying, was most likely to be labeled bullying, to be perceived as serious, and to elicit intervention. Next, individual personality differences were analyzed to predict labeling an incident as bullying, perceived seriousness of the situation, and likelihood of intervention. Empathy predicted a small but significant amount of variance in the following multiple regression models: seriousness of physical bullying (11%), labeling verbal aggression (16%), perceived seriousness of verbal bullying (16%), intervention in verbal bullying (9%), labeling relational aggression (9%), seriousness of relational bullying (14%), and intervening in relational bullying (11%). Sex contributed a very small amount to some of the models, and the other personality measures were not significant predictors.

Situational Empathy

In 2004, Yoon conducted a similar study with one major difference: empathy was measured as situational, not dispositional. This small difference made a large impact on

the results. Ninety-eight teachers (70% female) enrolled in graduate level classes participated. Yoon slightly modified the Bullying Attitude Questionnaire to make six vignettes that varied only by type of witnessed bullying. After each vignette, teachers were asked to rate the perceived seriousness of the situation, how sympathetic they felt toward the victim (considered empathy here), and likelihood of intervention; teachers were also asked to describe how they would react to the situation. Finally, self-efficacy in behavior management was assessed using several items from the Teaching Efficacy Scale (Gibson & Dembo, 1984). The combined multiple regression model accounted for 61% of the variance in predicting likelihood of teacher intervention in bullying. Each factor yielded significant standardized beta coefficients: perceived seriousness (.54), empathy (.29), and self-efficacy (.21).

Lastly, Bauman and Del Rio (2006) replicated the methodology in Yoon's (2004) study and extended it by examining the types of interventions teachers proposed. Eighty-two students in a teacher preparation program participated; 95% were female. Type of bullying accounted for 71% of the variance in perceived seriousness, 53% of the variance in empathy, and 45% of the variance in teacher intervention. For all variables, the mean rating was highest for physical bullying, followed by verbal and then relational bullying; and, significant differences were found between each type of bullying. With regards to empathy, this means that teachers feel the most empathy for victims of physical bullying, and the least for victims of relational bullying.

In sum, these studies suggest that empathy is a significant predictor of how teachers react to bullying; but, the issue is complex and more research is needed. Most importantly, these studies do confirm the need for *teacher* empathy training to be

included in bullying programs. Further, we need to know if these results can be generalized to *students*. Major limitations of these studies were that 1) the majority of participants were female, and 2) the methods for measuring empathy were limited. Yoon (2004) and Bauman and Del Rio (2006) extended the research by measuring situational empathy rather than dispositional empathy. Yet, they used only one item to assess empathy. In addition, although the construct was called empathy, it is more accurately named sympathy. As stated earlier, empathy and sympathy are related but separate constructs but it is common for researchers to not differentiate between the two. This dissertation has extended this research by examining situational empathy using a comprehensive measure in a sample of middle-school students with even gender distribution.

Promoting Prosocial Behaviors as Prevention: Empathy Training

One approach to bullying prevention is to teach children empathy skills. This technique was initially employed in intervention programs focused on modifying the behaviors of bullies. This is based on the idea that empathy inhibits aggression. However, empathy skills training can also readily be applied to prevention programming. This is important because studies suggest that empathy skills training increases prosocial behavior among children. In addition, prosocial behaviors have been found to spread among peers and affect social interactions between teachers and students.

Children's prosocial actions influence the behavior of the peers and educators around them at all ages. In a longitudinal study involving toddlers, Persson (2005) found that those with prosocial interaction styles were more likely to be the recipients of prosocial acts from peers, and less likely to be the recipients of aggressive acts. Conversely,

children with aggressive interaction styles were less likely to be the recipients of prosocial behaviors from peers. For adolescents, McNamara-Barry and Wentzel (2006) found that prosocial goal pursuit and prosocial behaviors were significantly related to those of their friends. Children's prosocial behaviors affect teachers, as well: McComas, Johnson, and Symons (2005) found that teachers were more likely to respond to the prosocial behaviors of low-aggressive children than high-aggressive children.

In sum, children who act prosocially are likely to be recipients of future prosocial behavior. Children are also likely to reciprocate the helpful behaviors directed at them. When children witness or experience prosocial behaviors being rewarded, they are likely to perform those behaviors in the future (Feshbach & Feshbach, 1982). Thus, promoting prosocial behavior through empathy will not only increase peer intervention in bullying, but increase helping in general and create happier and safer environments for students. The following programs show how these ideas can be applied to classrooms.

Empathy Training Program

Feshbach and Feshbach (1982) first demonstrated the effectiveness of an empathy training program in promoting prosocial behavior and reducing aggression in a diverse sample of third and fourth graders in Los Angeles. Aggressive and non-aggressive children were identified and participated in the group. There were 10 weeks of 20-50 minute sessions three times per week. The purpose of the program was to encourage perspective-taking, expressing feelings, and identifying emotions. Activities to encourage cognitive empathy included videotaping children acting out several different roles in one scene and then watching and discussing it; imagining what things looked like from different visual perspectives; identifying different people's preferences; and telling

stories from different character's points of view. Affective empathy was enhanced through identifying feelings from photographs, acting out different emotions, and listening to recorded emotional conversations. While this program succeeded in decreasing aggressive behaviors, the control group activities did so also. Of great interest to this dissertation was the finding that the empathy training program significantly increased prosocial behavior, while there was no change in the control group (Feshbach, 1979; Feshbach & Feshbach, 1982). Because prosocial behavioral changes were systematically found for both aggressive and non-aggressive children, empathy training strategies were then expanded from interventions for aggression to prevention programs as well.

Second Step Program

Because of the promising results, empathy training has been integrated into contemporary prevention programs, the most well-known and empirically-based being the Second Step Program (Frey, Hirschstein, & Guzzo, 2000). Second Step is a universal primary prevention program for preschool through high school. The goal of the program is to prevent violence and promote social, behavioral, and emotional competency through training in empathy, social problem-solving, and impulse control. The empathy unit focuses on the same three elements of empathy from Feshbach and Feshbach's conceptual model: identifying emotions in oneself and others, perspective-taking, and responding with appropriate emotionality to others. Many activities to promote these skills are similar to those in the Empathy Training Program, and also include lessons on discriminating between actions that are intentional versus accidental and objectively judging fairness.

When classroom teachers facilitated Second Step activities twice per week for 4-5 months, outcome evaluation studies found that Second Step was effective in decreasing aggressive behavior and increasing prosocial behavior, especially in unstructured settings like the playground and lunchroom (Grossman, Neckerman, Koepsell, Liu, Asher, et al., 1997). These changes endured over the school year. It was estimated that in a typical school day, the Second Step program resulted in 30 fewer aggressive behaviors and 800 additional neutral/prosocial behaviors per classroom (Frey, Hirschstein, & Guzzo, 2000).

Steps to Respect. The Committee for Children (2001) expanded their Second Step program to specifically address bullying prevention in the Steps to Respect program. Steps to Respect is a whole-school bullying prevention program for children in grades 3-6. Though not the primary emphasis, social-emotional skills such as positive peer relationships and empathy for victims is part of the curriculum. The first published evaluation of the program suggested a 25% decrease in bullying behaviors (Frey, Hirschstein, Snell, Edstrom, Mackenzie, & Broderick, 2005); this included both actual bullying and bystander behaviors encouraging bullying. Unfortunately, studies on this program have not yet addressed whether the program increased prosocial behaviors, like helping (i.e., peer intervention) in bullying; thus, there is a question left in the literature as to whether empathy increases prosocial behavior, in the form of peer intervention, in bullying. Together, the Second Step and Steps to Respect programs suggest the utility and effectiveness of empathy training in reducing aggression and bullying and increasing prosocial behaviors. The latter is significant for prevention because of the generalizability of prosocial behaviors among children.

Current Study

The current study sought to answer three research questions regarding the relationship between empathy, gender, type of bullying, and peer intervention during bullying situations. Each question is presented below with subsequent hypotheses.

Question 1: Does Witnessing Bullying Elicit Empathy Towards Victims of Bullying?

While experiments have elicited empathy in children in a number of situations (e.g., in an emergency, or for children with disability or disease), and bullying studies suggest that many children have supportive attitudes towards victims (Rigby & Johnson, 2006), no studies have determined specifically whether children experience empathy towards victims of bullying. In addition, although it is inconclusive whether there are true gender differences in empathy or if they are due to social desirability and methodological issues, studies using similar methodologies and age groups have found that girls report more complex empathy than boys on the EC (Strayer & Schroeder, 1989).

- *Hypothesis 1a:* More children will report some degree of empathy (i.e., score >1 on the Empathy Continuum) toward victims of bullying than no report of empathy.
- *Hypothesis 1b:* After controlling for social desirability, girls will report more developmentally complex empathy than boys.

Question 2: What Peer Intervention Strategies do Middle-school Students Report

When They Witness Bullying?

Several self-report studies have found that the majority of middle-school children say they would help in emergency situations (Midlarsky & Hannah, 1985) and in bullying

(Rigby & Johnson, 2006), although other methodologies found that actual rates of helping are much lower.

There is very little research on *how* children help when they witness bullying. Strayer and Schroeder (1989) found that instrumental strategies were employed most frequently by children, followed by verbal and aggressive; however, this was not specifically for bullying. Hawkins, Pepler, and Craig (2001) found that aggressive interventions were almost as common as prosocial interventions in bullying. Unfortunately, no studies have yet examined whether interventions differ by type of bullying. It is hypothesized that middle-school children will have developed the ability to read the cues of the situation, and their decision making-process of which intervention is appropriate will be determined by type of bullying. This decision making-process will follow Latané and Darley's (1969) model for bystander intervention, and Eisenberg's (1986) models of empathy-related responding. For example, physical bullying, where the need for help is clear and unambiguous, will facilitate instrumental or aggressive peer intervention strategies. These are both immediate responses to "emergency" situations. Relational bullying will elicit verbal and social peer interventions because the aggression is covert and occurs through verbal and social channel. Because no direct harm is occurring during relational bullying, and the situation may not be recognized as requiring assistance, social and verbal strategies that involve comforting the victim after the fact may be most appropriate.

- *Hypothesis 2a:* Significantly more students will report that they would intervene than not intervene.

- *Hypothesis 2b:* For physical bullying, instrumental strategies will be reported more frequently than any other strategies for both boys and girls.
- *Hypothesis 2c:* For relational bullying, verbal and social strategies will be reported more frequently than other strategies for both boys and girls.

Question 3: Do Gender and Empathy Predict Reported Peer Intervention?

Studies have suggested a positive relationship between empathy and prosocial behavior that is stable by early adolescence (Eisenberg et al., 2005; Hoffman, 2000; Eisenberg & Miller, 1987); this relation remains untested in the literature for bystanders during bullying. Based on the promising findings in the available research, it is likely that this relation between prosocial behavior and empathy will extend to peer intervention and type of peer intervention in bullying. Though the evidence is inconclusive, based on previous findings gender is also likely to predict peer intervention and peer intervention type. In addition, gender has demonstrated effects relevant to this dissertation on multiple factors (e.g., type of bullying, social desirability). Lastly, there will probably be an interaction (moderating) effect between gender and empathy on peer intervention given previous links founds between gender and affective empathy. See Figure 1 for a graphic representation of the hypothesized relationships to be tested.

- *Hypothesis 3a:* Empathy and gender will significantly predict the probability of peer intervention for both relational and physical bullying.
- *Hypothesis 3b:* Empathy and gender will significantly predict the probability of different types of peer intervention for both relational and physical bullying.
- *Hypothesis 3c:* Gender will significantly moderate the relationship between empathy and peer intervention.

CHAPTER III

METHODS

Participants

Two rural middle-schools in North Carolina (grades 6-8) participated in this study. A total of 265 students participated. The resulting sample was unbalanced in gender and race -- 57% were girls and 78.1% were white. It is unclear why more girls participated in the study. The overrepresentation of white participants is consistent with the ethnic makeup of one school where the majority of participants attended (the schools were 78% and 62% white). Grade levels were evenly represented (6th grade: 33.2%; 7th grade: 32.8%; 8th grade: 30.6%). Complete demographic information is available in Table 3.

Middle school students were included in this study because of 1) the relatively stable relationship between empathy and prosocial behavior by that age (Eisenberg et al., 2005; McMahon et al., 2006), and 2) children will have reached the last level of empathic development proposed by Hoffman (2000). Elementary school students were excluded because the cognitive and emotional development of elementary school children may not be sufficient to process the social issues portrayed in the video vignettes with the level of complexity desired. High school students were excluded because the types of bullying that will be examined in this study are relatively uncommon in high school. Students who did not possess sufficient English language skills or were in a self-contained special education classroom were excluded from this study. According to teacher and principal

report in both schools, all students who were not in self-contained classrooms possessed sufficient English language skills to participate.

Methods

The protocol used in this study is provided in Appendix I. It includes the following measures: situational empathy, peer intervention, type of bullying, experience with bullying, and social desirability.

Situational Empathy

Students' responses were coded using the Empathy Continuum (EC) Scoring System (Strayer & von Rossberg-Gempton, 1992). As described previously, the EC was developed specifically to measure both affective and cognitive empathy in response to specific situations. The EC Scoring System is a laboratory method administered by showing a vignette and then posing questions on how the character felt in the vignette and why, and how the participant felt after watching it and why. Questions and responses were presented in a written open-ended survey format. Previous studies found that affective responses in the EC can be categorized into one of seven basic human emotions: happy, sad, angry, afraid, surprised, anxious/nervous, or concerned (Strayer & Schroeder, 1989). Due to inability to query children's responses in a paper-and-pencil format, these emotions were listed and the participants were asked to circle their primary emotional response. They were also provided the options of circling "nothing/neutral" or "other" and to fill in their own response in the space provided. Table 1 from Strayer and Schroeder (1989, p. 91) describes in detail the coding system for the Empathy Continuum.

Validity. Validation for the EC has been found in various studies. Several studies have indicated that there is a negative relationship between EC score and antisocial behaviors (Cohen & Strayer, 1996; Robinson, Roberts, Strayer, & Koopman, 2006; deWied, Goudena, & Matthys, 2005) and a positive relationship between EC score and prosocial behaviors (Roberts & Strayer, 1996). In addition, EC score has been found to moderately correspond to dispositional empathy questionnaires (Cohen, 1992, as cited in Strayer, 1993) and to facial expression coding (Strayer & Roberts, 1997; Chisholm & Strayer, 1995).

Reliability. In previous studies, interrater reliability was very good for the EC, ranging from 85% to 93% (Strayer, 1993; Cohen & Strayer, 1996; Robinson, Roberts, Strayer, & Koopman, 2006; deWied, Goudena, & Matthys, 2005). In this study, 90% interrater reliability was reached using the formula ($Agreements / [Agreements + Disagreements]$) * 100 (Alberto & Troutman, 2006).

Peer Intervention

Responses to question #7 (*would you help*) on the vignette questionnaires were coded dichotomously (yes/no), and responses to #8 (*describe what you would do to help*) were coded nominally for type of intervention using a version of McCoy and Masters' Intervention Strategy Coding System (1985) adapted by Strayer and Schroeder (1989). McCoy and Master's original scoring system contained superordinate categories of intervention, aggressive and compassionate, each with six subordinate categories (physical, verbal, social, material, hindering/helping, and other). Because the main focus of this study was prosocial responses, and not aggressive responses, Strayer's adaptation that focuses on the compassionate categories and compresses the aggressive responses

into one category was appropriate. The resulting categories of intervention strategies were: instrumental, verbal, social, aggressive, other, and no help. Examples of instrumental strategies are: *I would stand up for her*, *I would tell the bully to stop*, or *I would go get a teacher*. Examples of responses for verbal interventions are: *I would tell people the rumor was not true* or *I would tell him things to make him feel better*; for social interventions: *I'd be her friend*; and for aggressive intervention: *I'd punch him* or *get revenge*. The original intervention strategy coding system was developed by McCoy and Masters (1985) "such that categories met the criteria of being a) reliably identifiable and b) valid in light of previous research concerning children's general social interactions and their beliefs about the experiential determinants of emotion" (p. 1216). See Table 2 for descriptions of each coding category from Strayer and Schroeder (1989, pp. 90 & 92). Interrater reliability for the Intervention Strategy Coding System in this study was 100%.

Type of Bullying

Commercial videos depicting bullying episodes lasting 2-3 minutes were purchased. A variety of clips were considered: two primarily depicting physical bullying, and three primarily depicting relational bullying. A panel of experts in bullying rated the clips on a scale of 1-7 on three criteria: 1) depiction of physical bullying, 2) depiction of relational bullying, and 3) depiction of the three components of bullying (i.e., chronic events, imbalance of power, and intentional/mean behavior). The clips that best differentiated physical and relational bullying, and best met the three-tiered definition of bullying, were chosen for use in the study. Both types include elements of verbal bullying; this is more realistic and true to children's actual experiences with bullying. Qualitatively, the clips

seemed emotionally evocative during administration – gasps and exclamations were heard from the students in reaction to the events in the clips.

Several additional considerations were made when choosing and showing the videos to control for any potentially confounding variables. The physical bullying vignettes involved primarily male characters, and the relational bullying vignettes involved primarily female characters. The video clips involved primarily white children because the participants were primarily white. The bullying video clips were shown in the same order for each group administration.

Experience with Bullying

It seems logical that children's previous experiences with bullying may affect their empathic responses to witnessing bullying. Thus, being bullied was controlled for using the University of Illinois Victim Scale (Espelage & Holt, 2001), a 4-item scale that measured students' experiences of victimization (coefficient alpha = .86). Internal consistency for the Victim Scale in this sample was adequate (coefficient alpha = .84). Bullying others was controlled for using the University of Illinois Bullying Scale (Espelage & Holt, 2001), a 5-item self-report scale that measures the perpetration of bullying behaviors (coefficient alpha = .84). Internal consistency for the Bullying Scale in this sample was adequate (coefficient alpha = .77).

Social Desirability

Social desirability (the tendency to present oneself in a way that will be favorable to others) was controlled for using four items from the Lie Scale of the RCMAS. Using factor analytic techniques, Stark and Laurent identified two factors in the 9-item Lie Scale that reflected respondents' desire to "Present as Good" and "Present as Not Bad"

(2001, p. 557). Two items with the highest loadings from each factor (.56-.78) were selected to form the 4-item social desirability measure used in the present study. The resulting internal consistency for the Social Desirability Scale in this sample was low (coefficient alpha = .55).

Procedures

Data were collected in the spring of 2007. Consent forms with brief cover letters attached were distributed to all students who met the inclusion criteria at the principal's request. The consent forms were distributed and collected by teachers and provided a brief description of the purpose of the study and the measures used. The principle investigator also met with the teachers in faculty meetings and described the study and the procedures.

In accordance with the IRB at UNC, active consent and assent was obtained from parents and children. Parents were asked to indicate whether they gave permission for their child's participation and then to have their child return the form to their teacher. Children were provided with a small incentive (i.e., a pen) for returning consent forms regardless of parent's consent decision. When the survey was conducted, children with parental permission were also asked to provide assent, being assured that their participation was voluntary. After the survey was completed, children were given another small incentive (i.e., a pencil) for participating in the study. The IRB approval, consent form, and assent form are provided in Appendices II, III, and IV.

The two participating middle schools had a total population of 1354 students. Consent forms were to be distributed to all eligible students. All teachers were provided with enough consent forms for their homeroom class. After two weeks, teachers were provided

with additional consent forms and asked to redistribute them to students who did not yet return the forms. It is unknown how many consent forms were actually distributed and it is possible some teachers chose not to participate. A total of 353 consent forms were returned, or 26%. Of the returned forms, 47 parents (13%) withheld consent, while 306 (87%) parents granted consent to participate. Of the 306 students whose parents granted consent, 267 (87%) participated in the study. The 39 children whose parents granted consent but did not participate were either absent from school on the days data were collected, or they chose not to come to the group sessions. Very few students chose not to grant assent and participate in the group sessions. Of the 267 protocols that were completed and collected, 2 were discarded because of extensive incomplete data yielding them invalid, for a total sample of 265.

Survey data were collected by the principle investigator and volunteer graduate students. Data collection occurred over several large group sessions at the schools; there were between 25 and 40 children per session. Students were assigned to sessions alphabetically and by grade. The students were instructed by their principal or teachers to report to the school's multipurpose room a few minutes before the session began. Upon entering the room, they were asked to sit in every other seat. Forms and pencils were distributed. The purpose of the study was explained, and the assent process was reviewed. After the informed assent process, the participants were told that the researchers were interested in learning about how children thought and felt in different situations that were common in school and that it was very important to answer all questions honestly. Participants were assured that their answers would remain completely confidential and would not be shared with anyone at their school including students, parents, teachers, and

administrators. Participants were told that they could stop participating at any time.

Talking was not permitted during the administration of the survey and participants were encouraged to refrain from discussing their answers with each other. Students were then instructed to complete the bullying scales and the social desirability scale.

Next, as recommended by Strayer (1992, p. 5), the researcher stated, “What you’ll be watching is about real people and things that really happened. We show this on TV so that everyone can see the same things.” A total of three clips were shown on an LCD projector. Before each clip, a brief introduction to the clip was provided, and after each clip, the questions were read aloud and students were instructed to answer the questions from the EC and the peer intervention measures. Each session lasted approximately 45 minutes (one class period).

- First, a “practice” video clip depicting children interacting in a neutral social situation was shown. After clip #1, the researchers read items 1-3 from page 2 of the protocol aloud (the EC questions) and asked if there were any questions. After all questions were clarified, participants were given time to answer items 1-3. When the researchers observed that participants had completed questions 1-3, they repeated this process with items 4-6, then again with items 7-9. Items 1-6 were part of the Empathy Continuum, and items 7-9 were part of the peer intervention measure.
- Second, the video clip depicting physical bullying was shown, and the above steps were repeated.
- Third, the video clip depicting relational bullying was shown, and the steps above were once more repeated.

Data Analysis

A variety of statistical techniques were used to analyze the data collected. For the purposes of clarity and organization, the following sections describe the statistical procedures used in the data analysis. The results of these analyses are presented in Chapter IV.

Coding

The principle investigator (PI) trained a research assistant (RA) to code using the training protocol from the Empathy Continuum Scoring System Manual developed by Strayer and von Rossberg-Gempton (1992). The RA was trained by the PI until 90% interrater reliability on the EC was reached on ten protocols. The RA and the PI then both coded each protocol and coding was compared. All discrepancies in coding were discussed and resolved. Interrater reliability for the Intervention Strategy Coding System was 100%. All data was entered and analyzed by the PI using SPSS for Windows Version 15.0.

Question 1: Does Witnessing Bullying Elicit Empathy Towards Victims of Bullying?

A one-sample chi-square test was performed to test the null hypothesis that the proportion of children who reported empathy was no different than expected by chance. Next, analysis of covariance was used to compare empathy by gender while controlling for social desirability.

Question 2: What Peer Intervention Strategies do Middle-school Students Report When They Witness Bullying?

First, one-sample chi-square tests were run to assess whether the proportions of children who would and would not intervene when witnessing bullying were significantly

different than would be expected by chance. Follow-up analyses were then run separately by gender.

Next, one-sample chi-square tests were run separately by gender to assess whether the proportions of peer intervention strategies reported were significantly different than would be expected by chance. Follow-up analyses were run to examine each possible combination of intervention strategies. The peer intervention strategies included in these analyses were *instrumental*, *verbal*, *social*, and *aggressive*. Strategies categorized as *other* were excluded from the analysis because of the lack of specificity and heterogeneity of responses in that group; crosstabular analyses found that the *other* group did not differ from the remaining peer intervention categories by any demographic variable. Responses categorized as *no help* were excluded from analyses because the focus of analyses was *types* of intervention, not lack thereof.

Question 3: Do Gender and Empathy Predict Peer Intervention?

Due to the categorical nature of the type of peer intervention, binomial and multinomial logistic regression was used to determine the predictive value of empathy and gender on the probability of peer intervention. Logistic regression is often preferred over discriminant analysis for categorical data analysis because it is very flexible, requires very few assumptions, and is more interpretable than discriminant analysis (Norusis, 2006). Logistic regression requires that “the observations are independent and that the variables are linearly related to the log of the odds that an event occurs” (Norusis, 2006, p. 314). The observations in the present sample were independent. Although there were violations of linearity in the logits for the continuous variables (empathy, social desirability, bullying, and victimization), models in which they were replaced by their

logarithm did not differ substantively from the models with the untransformed values. Therefore, the simpler models were analyzed (Tabachnick & Fidell, p. 574). As a result, the logistic regressions may underestimate the degree of relationship of empathy to peer intervention (Garson, n.d.).

Bivariate crosstabular analyses were run to determine if any demographic variables (i.e., race, grade, and school) should be controlled for in the logistic regression models in addition to the theoretically important covariates of social desirability, bullying, and victimization. None of these variables were significant, and thus not included in subsequent analyses. Logistic regression was then used to examine the effects of gender and empathy on peer intervention. Binary logistic regression was used to determine whether gender and empathy predict whether the student would intervene or not (yes/no coding). Multinomial logistic regression was used to determine if the probability of different types of peer intervention could be predicted from gender and empathy. All variables were entered and compared to a constant-only model; this entry method was chosen because it provided consistency between binary and multinomial analyses and because the theoretically important variables were previously identified.

CHAPTER IV

RESULTS

Exploratory Analyses

Exploratory analyses were conducted to see if the independent and dependant variables in this study varied by race, grade, or school. No differences were found for any of these variables. As a result, these demographic variables were not included in subsequent analyses.

Question 1: Does Witnessing Bullying Elicit Empathy Towards Victims of Bullying?

Hypothesis 1a: More Children Will Report Some Degree of Empathy (i.e., score >1 on the Empathy Continuum) Toward Victims of Bullying Than No Report of Empathy

For physical bullying, the mean score on the EC scale was 8.01. Frequency counts found that 21 children scored a 0 or 1 on the Empathy Continuum; that is, they reported no empathy towards a victim of physical bullying. A dichotomous variable was created to represent whether children reported empathy towards the victim (EC score > 1) or not (EC score of 0 or 1). A one-sample chi-square test was conducted to assess whether the percentages of children who did and did not report empathy were significantly different than would be expected by chance. The results of the test were significant $\chi^2 (1, N=263) = 185.7, p=.000$.

For relational bullying, the mean score on the EC scale was 8.20. Frequency counts found that 45 children scored a 0 or 1 on the Empathy Continuum; that is, they reported

no empathy towards a victim of relational bullying. A dichotomous variable was created to represent whether children reported empathy towards the victim (EC score > 1) or not (EC score of 0 or 1). A one-sample chi-square test was conducted to assess whether the percentage of children who did and did not report empathy was significantly different than would be expected by chance. The results of the test were significant $\chi^2 (1, N=264) = 114.68, p=.000$. These results support Hypothesis 1a, that most children respond empathically towards victims of both physical and relational bullying.

Hypothesis 1b: After Controlling for Social Desirability, Girls Will Score Significantly Higher on the EC Than Boys

Analysis of covariance (ANCOVA) was conducted separately for physical and relational bullying. The independent variable was gender, the dependant variable was empathy, and social desirability was the covariate. For physical bullying, a preliminary analysis evaluating the homogeneity-of-slopes assumption indicated that the relationship between the social desirability and empathy did not differ significantly as a function of gender, $F(1, 251)=.12, p=.73$, partial $\eta^2=.00$, and therefore the analyses proceeded. The ANCOVA was significant, $F(1, 252)=17.97, p=.00$. The mean EC score for girls was 8.94 (SD=3.47); for boys, the mean EC score was 7.07 (SD=3.44).

For relational bullying, a preliminary analysis evaluating the homogeneity-of-slopes assumption indicated that the relationship between social desirability and empathy did not differ significantly as a function of the gender, $F(1, 251)=1.07, p=.31$, partial $\eta^2=.00$, and therefore the analyses proceeded. The ANCOVA was significant, $F(1, 252)=20.24, p=.000$. For girls, $M=9.39, SD=4.02$; and for boys, $M=6.93, SD=4.5$. Together, these

results support Hypothesis 1b, that girls score significantly higher on the EC scale than boys for both physical and relational bullying.

Question 2: What Peer Intervention Strategies do

Middle-School Students Report When They Witness Bullying?

Hypothesis 2a: Significantly More Students Will Report That They would Intervene Than Not Intervene

When witnessing physical bullying, the majority of children reported that they would intervene. A one-sample chi-square test was conducted to assess whether the percentages of children who would and would not intervene when witnessing physical bullying were significantly different than would be expected by chance. The results of the test were significant, $\chi^2 (1, N=262) = 171.54, p=.000$. Follow-up tests indicated that this held true for both boys ($\chi^2 [1, N=104] = 40.85, p=.000$) and girls ($\chi^2 [1, N=151] = 120.70, p=.000$). See Figure 2 for a graphic representation of these percentages.

For witnessing relational bullying, a one-sample chi-square test was conducted to assess whether the percentages of children who would and would not intervene in relational bullying were significantly different than would be expected by chance. The results of the test were significant ($\chi^2 [1, N=262] = 68.53, p=.000$). Follow-up tests indicated that this held true for girls ($\chi^2 [1, N=151] = 93.78, p=.000$) but not boys ($\chi^2 [1, N=103] = 1.18, p=.278$). See Figure 2 for a graphic representation of these percentages.

Hypothesis 2b: For Physical Bullying, Instrumental Strategies Will be Reported More Frequently Than Any Other Strategies for Both Boys and Girls

This hypothesis was supported. A two-way contingency table analysis was conducted to evaluate the significance of gender in peer intervention strategy reported for physical

bullying. The two variables were gender (boy and girl) and peer intervention strategy (instrumental, social, verbal, and aggressive). Intervention strategy did not differ significantly by gender (Pearson's χ^2 [3, $N=197$] = 7.12, $p=.07$).

Table 5 shows that instrumental strategies were endorsed most frequently by both genders -- 71.4% of boys and 86.7% of girls. One-sample chi-square tests were conducted to assess whether the percentages of peer intervention strategies reported for physical bullying were significantly different than would be expected by chance. The results of the test were significant for both boys (χ^2 [3, $N=77$] = 94.48, $p=.000$) and girls (χ^2 [3, $N=120$] = 245.00, $p=.000$). Follow-up tests indicated that 1) the percentage of instrumental strategies was significantly higher than all other strategies for both boys and girls; and 2) the percentage of aggressive strategies was significantly higher than social or verbal strategies for both boys and girls. See Table 6 for Pearson chi-square values and p values for each combination. See Figure 3 for a graphic representation of the distribution of intervention strategies for physical bullying.

Hypothesis 2c: For Relational Bullying, Verbal and Social Strategies Will be Reported More Frequently Than Other Strategies for Both Boys and Girls

This hypothesis was partially supported. A two-way contingency table analysis was conducted to evaluate the significance of gender in peer intervention strategy reported for relational bullying. The two variables were gender (boy and girl) and peer intervention strategy (instrumental, social, verbal, and aggressive). Intervention strategy did not differ significantly by gender, Pearson's χ^2 [3, $N=148$] = 7.50, $p=.058$.

Table 7 shows that girls reported instrumental strategies most frequently (32.7%), followed closely by social strategies (30.8%). Boys reported verbal strategies most

frequently (41.5%). One-sample chi-square tests were conducted to assess whether the percentages of peer intervention strategies reported for relational bullying were significantly different than would be expected by chance. The results of the test were significant for both boys (χ^2 [3, $N=41$] = 9.63, $p=.022$) and girls (χ^2 [3, $N=107$] = 8.85, $p=.031$). Follow-up tests indicated that 1) the percentage of verbal strategies reported by boys was significantly higher than social and aggressive strategies and 2) the percentage of aggressive strategies reported by girls was significantly lower than instrumental and social strategies. See Table 8 for Pearson chi-square values and p values for each combination. See Figure 3 for a graphic representation of the distribution of intervention strategies for relational bullying.

Question 3: Do Gender and Empathy Predict Peer Intervention?

Hypothesis 3a: Empathy and Gender will Significantly Predict Peer Intervention

Physical bullying. For physical bullying, binary logistic regression analysis was performed on peer intervention as outcome and two predictors, gender and empathy, controlling for social desirability, bullying, and victimization. A test of the full model with all predictors and covariates against a constant-only model was statistically significant, χ^2 (5, $N=254$) = 13.44, $p = .02$, indicating that the predictors, as a set, distinguished between *helping* and *not helping*. The variance accounted for in peer intervention for physical bullying was small, Nagelkerke $R^2 = .11$. However, the logistic summary measures reported in logistic regression are smaller, and not comparable in magnitude, to those obtained in linear regression (Norusis, 2006, p. 326). Prediction success was impressive for helping (100%) but very unimpressive for predicting not helping (0%); 90.6% of cases overall were correctly predicted by the model.

Table 9 shows regression coefficients, p values, odds ratios, and 95% confidence intervals for odds ratios for each of the predictors and controls in the physical bullying model. According to the Wald criterion, both empathy ($z=4.373$, $p=.037$) and gender ($z=3.832$, $p=.05$) reliably predicted peer intervention. The odds ratio (OR) represents the factor by which the odds change when the predictor variable increases by one unit and all of the other variables stay the same. Thus, for physical bullying, girls were two-and-a-half times more likely to help than boys. A 1-point increase in empathy increases the odds of helping by a factor of 1.14.

Relational bullying. For relational bullying, binary logistic regression analysis was performed on peer intervention as outcome and two predictors, gender and empathy, controlling for social desirability, bullying, and victimization. A test of the full model with all predictors and covariates against a constant-only model was statistically significant ($\chi^2 [5, N=253] = 55.812$, $p < .000$), indicating that the predictors, as a set, distinguished between *helping* and *not helping*. The variance accounted for in peer intervention for relational bullying was moderate, Nagelkerke $R^2 = .30$. Prediction success was impressive for helping (93.7%) but unimpressive for predicting not helping (37.1%); 79.8% of cases overall were correctly predicted by the model.

Table 10 shows regression coefficients, Wald statistics, odds ratios, and 95% confidence intervals for odds ratios for each of the predictors and controls in the relational bullying model. According to the Wald criterion, both empathy ($z=10.928$, $p=.001$) and gender ($z=23.926$, $p=.000$) significantly predicted peer intervention. For relational bullying, girls were over five times more likely to help than boys. A 1-point increase in empathy increased the odds of helping by a factor of 1.14. Interestingly, this

was the same odds ratio for empathy as found for physical bullying. Thus, the influence of gender fluctuates by type of bullying, while the influence of empathy remains constant between types of bullying.

Hypothesis 3b: Empathy and Gender will Significantly Predict Type of Peer Intervention

Multinomial logistic regression analyses were performed to assess prediction of type of peer intervention outcome (instrumental, social, verbal, and aggressive) on the basis of gender and empathy, while controlling for bullying, victimization, and social desirability. The reference category for the dependant variable was “no help.” The “other” peer intervention category was not included in the analyses due to lack of specificity in the category.

Physical bullying. A test of the full model with all predictors and covariates against a constant-only model was statistically significant ($\chi^2 [20, N=228] = 43.584, p = .002$), indicating that the predictors, as a set, distinguished between *type of peer intervention* and *not helping* in physical bullying. The variance accounted for in peer intervention for physical bullying was moderate, Nagelkerke $R^2 = .21$. Prediction success was unimpressive. Although 71.8% of cases overall were correctly predicted by the model, when broken down by peer intervention type correct classification rates were 97.5% for *instrumental*, 0% for both *verbal* and *social*, 11.1% for *aggressive*, and 4.2% for *no help*. Clearly, cases were overclassified into the largest group: instrumental.

Table 11 shows odds ratios and 95% confidence intervals for odds ratios for each of the predictors and controls in the physical bullying model. The overall model was significant. When broken down by peer intervention type, only *instrumental* and *verbal* strategies differed significantly from *no help* based on the predictor variables. Both

empathy ($z=4.39$, $p=.036$) and gender ($z=5.17$, $p=.023$) differentiated *instrumental* peer intervention from *no help*. Girls were three times more likely to use instrumental strategies than boys. A 1-point increase in empathy increases the odds of *instrumental* peer intervention by a factor of 1.15. For *verbal* peer interventions, empathy differentiated this strategy from *no help* ($z=5.08$, $p=.024$) – a 1-point increase in empathy increases the odds of *verbal* peer intervention by a factor of 1.43.

Relational bullying. A test of the full model with all predictors and covariates against a constant-only model was statistically significant ($\chi^2 [20, N=216] = 88.04$, $p = .000$), indicating that the predictors, as a set, distinguished between *type of peer intervention* and *not helping* in relational bullying. The variance accounted for in peer intervention for relational bullying was moderate, Nagelkerke $R^2 = .36$. Prediction success was unimpressive. Overall classification rates were unimpressive, with 42.4% of cases being correctly predicted – 23.3% for *instrumental*, 3.8% for *verbal*, 25.7% for *social*, 3.3% for *aggressive*, and 43.8% for *no help*.

Table 12 shows odds ratios and 95% confidence intervals for odds ratios for each of the predictors and controls in the relational bullying model. Gender significantly discriminated between *no help* and *peer intervention* for all types (instrumental $z=16.61$, $p=.000$; verbal $z=7.27$, $p=.007$; social $z=20.07$, $p=.000$; aggressive $z=12.86$, $p=.000$). Being a girl significantly increased the odds of all peer intervention types; this effect was *strongest* for *social* peer intervention. Girls were twelve times more likely than boys to use social peer intervention strategies when witnessing relational bullying ($OR=12.06$). The effect of gender was *weakest* for *verbal* peer intervention ($OR=3.33$), though girls were still three times more likely than boys to utilize this strategy when witnessing

relational bullying. Increases in empathy increased the odds of *instrumental*, *verbal*, and *social* peer intervention types by similar factors. *Aggressive* peer interventions were not significantly affected by empathy; interestingly, *bullying others* significantly contributed to the differentiation between *aggressive* peer interventions and *not helping*. A 1-point increase in *bullying others* increased the odds of *aggressive* peer intervention by a factor of 2.65.

Hypothesis 3c: Gender Will Significantly Moderate the Relationship Between Empathy and Peer Intervention

Multinomial logistic regression analyses were performed to assess whether gender moderated the relationship between type of peer intervention (instrumental, social, verbal, and aggressive) and empathy, while controlling for bullying, victimization, and social desirability. The reference category for the dependant variable was “*no help*.” The “*other*” peer intervention category was not included in the analyses due to lack of specificity in the category. Separate analyses were conducted for relational and physical bullying. Likelihood ratio tests of the interaction were not statistically significant physical bullying ($\chi^2 [4, N=228] = 3.53, p = .474$) or for relational bullying ($\chi^2 [4, N=216] = 2.93, p = .569$). Thus, the full model suggested in hypotheses 3a and 3b are the most accurate portrayals of the data presented in this paper. See Figure 4 for a graphic representation of this model.

CHAPTER V

DISCUSSION

The present study sought to examine the influence of empathy and gender on peer intervention in bullying. While previous research attempted to identify the frequency of peer intervention in bullying, there is a gap in our knowledge of 1) factors related to helping during bullying situations in school, and 2) the strategies children use to intervene in bullying. To date, there are no known studies of student's situational empathy and intervention during bullying situations. Consistent with Rigby and Johnson's study (2006) employing self-report techniques, the majority of children reported that they would intervene if they saw a classmate being bullied. The current study supports previous research (Tapper & Boulton, 2005) that found children were more likely to intervene in physical bullying (89.4%) than relational bullying (74.7%). This finding may be explained by Latané and Darley's (1969) theory that people are more likely to help when the need for help is unambiguous and considered an emergency, as when there is physical harm being done. Children also reported that they would use instrumental intervention strategies (e.g., go get a teacher, tell the bully to stop, stand up for the victim) most frequently across both situations.

This study found that both empathy and gender significantly contributed to children's intervention behavior. Children's empathic responses were the same for relational and physical bullying, and girls reported more complex empathy than boys. Girls were more

likely to help overall. However, while boys and girls had similar responses for physical bullying, they had very different responses to relational bullying.

Research Question 1: Does Witnessing Bullying Elicit Empathy Towards Victims of Bullying?

Data supported Hypothesis 1a, which predicted that most children would respond empathically to witnessing bullying; and Hypothesis 1b, which predicted that girls would report more complex empathy than boys, were supported. This indicates that witnessing bullying elicited emotional and cognitive responses in the average middle-school child in this study. Children generally attributed their reactions to the victim's specific situation (i.e., being bullied and mistreated by others), though girls more frequently considered the victim's emotional state or integrated personal experience into their reactions to the situation – both more complex forms of cognitive empathy. This was consistent with the numerous studies that suggested girls were more empathic than boys, and that girls developed socialization processes earlier than boys. This held true for both physical and relational bullying. In short, children's empathic reactions are influenced by gender, but not type of bullying.

Research Question 2: What Peer Intervention Strategies do Middle-School Students Report When They Witness Bullying?

The main aim of Question 2 was to describe the nature of peer interventions in response to vignettes about middle-school bullying. Hypothesis 2a, which predicted that most students would intervene in both types of bullying, was partially supported. Although a significant majority of girls reported that they would intervene in both relational and physical bullying, a significant majority of boys would only help in

physical bullying. Slightly more boys reported that they would intervene in relational bullying, but the difference did not reach statistical significance. This was an interesting, though not surprising, finding. Relational bullying is much more frequent among girls than boys in middle school (Archer & Coyne, 2005). Boys may see relational bullying as a female problem; they may be unwilling to involve themselves in girls' gossip and rumors because such affiliation could threaten their masculinity (Cowie, 2000). Alternatively, boys may think no intervention is necessary because there is no physical harm being done. Girls may be more sensitive to relational bullying, and more willing to intervene, because they 1) are likely to have experienced it, 2) are aware of the emotional harm being done, 3) can interpret the subtle nonverbal cues, and 4) are involved in the competition for social status taking place (Archer & Coyne, 2005).

Hypothesis 2b, which predicted that instrumental strategies would be reported most frequently for physical bullying, was supported: 71.4% of the boys and 86.7% of the girls who said they would intervene reported instrumental strategies. Instrumental strategies (e.g., standing up to the bully, telling the bully to stop, getting an adult to help) and aggressive strategies (e.g., hitting the bullying, getting revenge) were reported more frequently than the other strategies for both boys and girls. Very few children reported social strategies (e.g., hanging out with the victim, being his friend) or verbal strategies (e.g., giving advise, talking to him) as interventions for physical bullying. This was consistent with Hawkins, Pepler, and Craig (2001) who found that usually when children intervened they stopped bullying quickly, and that aggressive strategies were as common as prosocial strategies. Though they did not indicate type of bullying, we may hypothesize that the majority of the bullying they observed was physical.

Hypothesis 2c, which predicted that verbal and social strategies would be reported most frequently for relational bullying, was partially supported. As expected, boys reported verbal strategies most frequently (41.5%), and intervention strategy did not differ significantly by gender. Somewhat unexpectedly, girls reported instrumental strategies most frequently (32.7%), followed closely by social strategies (30.8%). Girls may feel more comfortable and confident in instrumentally intervening in relational bullying than boys. Boys may not have felt comfortable directly intervening in female situations, and used verbal strategies to help the victim after the bullying incident was over.

It is interesting to note that the intervention strategies tended to match the tone of the bullying. Physical bullying often elicited physical solutions, that is, aggression in the form of fighting and/or hitting. Relational bullying elicited responses that helped strengthen personal relationships and social engagement; for example, being friends with the victim, spending time with the victim, and providing the victim with verbal reassurance and comfort. This partially supported the interpretation of Latané and Darley's (1969) model for bystander intervention, and Eisenberg's (1986) models of empathy-related responding, that the perceived seriousness of the bullying affected type of response.

However, it appeared that instrumental strategies were popular solutions to both forms of bullying. Instrumental strategies (such as finding a teacher to intervene, telling the bully to stop, and actively supporting the victim) are commonly promoted by school faculty and bullying programs. This tells us that the central message of these programs is being received: bullying needs to be stopped. The children in this sample were well

aware of what they were supposed to do when they witnessed bullying. Eisenberg's model, which is the theoretical framework for this study, reminds us that there is sometimes a discrepancy between cognitive factors and actual behaviors. For help to occur, there also has to be a correspondence between the behavior, personal goals (i.e., values), probability that the help will be successful (i.e., self-efficacy for intervention), and perceived expectations of the social group. Thus, programs designed to promote prosocial behavior need to consider all these factors.

Research Question 3: Do Gender and Empathy Predict Peer Intervention?

Within the context of Question 2's description of children's responses to the vignettes, Question 3 tested the effect of different combinations of predictor variables on peer intervention. Hypothesis 3a posited that gender and empathy would predict peer intervention when witnessing bullying while controlling for bullying, victimization, and social desirability. This hypothesis was supported for both physical and relational bullying. This was consistent with the large body of research that suggested empathy was related to prosocial behavior; this study was the first to show that this holds true for bystanders observing bullying.

Girls were more likely to help than boys in both types of bullying, though this effect was much stronger for relational bullying. The effect of empathy on peer intervention was the same for both types of bullying. In other words, the more empathy children experience in bullying situations, the more likely they are to help, regardless of type of bullying. It was unclear from the previous literature if different situations produced similar levels of empathy.

Hypothesis 3b predicted that empathy and gender would predict type of peer intervention while controlling for bullying, victimization, and social desirability. Again, this hypothesis was supported for both physical and relational bullying, and gender played a much larger role for relational bullying. For physical bullying, girls were three times more likely than boys to use instrumental intervention strategies. Gender did not influence likelihood of the other intervention strategies for physical bullying. This was because not enough children endorsed the other strategies to capture true differences; a much larger sample may be more successful in detecting these differences in the future.

For relational bullying, girls were three times more likely than boys to use verbal interventions, even though verbal interventions were most frequently chosen among boys. This was the smallest effect: girls were six times more likely to use instrumental strategies, nine times more likely to use aggressive strategies, and twelve times more likely to use social strategies. These results may have been partly due to the limited number of boys in the sample who would have intervened in relational bullying.

Empathy increased the likelihood of instrumental strategies for both types of bullying, and also social and verbal strategies for relational bullying. Empathy was not related to aggressive interventions for either type of bullying. This supported previous findings that situational empathy was predictive of prosocial behaviors, but not necessarily aggressive behaviors. Rather, dispositional empathy predicted aggression (Eisenberg & Miller, 1987; Miller & Eisenberg, 1988). This confirmed the appropriateness of the methodology used in this study, where the central focus was prosocial behavior, not aggressive behavior. When reviewing evaluations of bullying prevention programs and empathy training

programs, it is important to remember that the methodology for measuring empathy has an effect on the outcomes, especially prosocial and aggressive behaviors.

Interestingly, in relational bullying, aggressive strategies were actually related to bullying behaviors. In other words, children who bullied others were most likely to “intervene” in bullying by fighting or taking revenge. This finding may be explained by the findings of Crick and Dodge’s (1996) Social Information Processing Theory of aggression. This theory posits that children who demonstrate proactive and reactive aggression interpret social situations differently. Children who are reactively aggressive perceive situations as hostile in intent. They react aggressively in defense of themselves or retaliation. Children who are proactively aggressive perceive aggression as an acceptable means to achieve specific goals. They do not need a stimulus to initiate aggression, and can be deliberately provocative and offensive. This finding could also be explained by Farmer’s research that suggested that aggression, including social manipulation, is common in middle-school children as they strive for positions of power in the social hierarchy. Thus, even when intervening in bullying, strategies to gain social power are used (Farmer et al., 2003; Farmer et al., 2002).

Camodeca and Goossens (2005) found that victims and bullies could be both reactively aggressive. Only bullies, however, were proactively aggressive. Because the aggressive peer interventions strategies were only related to bullying behaviors, perhaps bullies perceived other bullying situations as a chance to assert their social power; they may have also derived pleasure from aggression. Aggressively intervening in bullying may provide an opportunity to achieve these goals. Bullies were also found to be more confident in their verbal persuasiveness abilities; thus, they may be more confident in their ability to

seek revenge through rumors and gossip, than their ability to execute prosocial strategies. Alternatively, a more parsimonious theory is that bullies are simply more inclined to react aggressively in all situations (i.e., they have a limited repertoire of strategies), whether their intention is to help or hurt.

Lastly, Hypothesis 3c predicted that gender would moderate the relation between empathy and peer intervention. This hypothesis was not supported. Thus, while some interesting gender differences were observed in this study, when considered in total the effect of empathy on peer intervention did not vary as a function of gender. Gender differences in empathy were not large enough to have an affect on peer intervention. This finding added an interesting piece of information to the inconsistent findings on whether empathy was truly higher for girls, or if it was a methodological issue. This result was surprising for relational bullying because there were large gender differences in intervention and empathy. The non-significant interaction between gender and empathy may have been due to boys' apprehension in intervening with girls in relational bullying; resultantly, the number of boys in the analysis may have been too small to detect an interaction. This finding was not surprising for physical bullying, as there were little to no gender differences there. Children seemed to consistently respond emotionally and behaviorally to emergencies like physical bullying regardless of gender.

In sum, the major points derived from Research Question 3 were:

- Gender, empathy, bullying, victimization, and social desirability together predicted a significant amount of variance in peer intervention and peer intervention type for both physical and relational bullying.

- These variables were more explanatory of relational bullying than physical bullying.
- The effect of empathy on peer intervention and peer intervention type was the same for both physical and relational bullying.
- Girls were more likely to intervene and use instrumental strategies than boys in both types of bullying.
- To some degree, children chose intervention strategies based upon the type of bullying.

Limitations and Future Research

The current study expanded upon previous research by 1) examining factors that were related to peer intervention in school bullying, and 2) considering different types of peer intervention in bullying. However, future research should take several issues into account. First of all, children's self-report may be different from behavior in real life. A limitation of this study was the use of self-report; children reported that they would respond at a rate much higher than is probable in real life. Because of poor internal consistency, the social desirability measure used may not have been effective in detecting tendencies to make oneself appear in a more positive light. Previous studies that used self-report methodology (Rigby & Johnson, 2006) found much higher percentages of helping than those using observational (Hawkins, Pepler, & Craig, 2001; Tapper & Boulton, 2005) and peer nomination methodologies (Salmivalli, 1996). As suggested by Song and Stoiber (2008), "...different schools reflect diverse ecological and complex qualities, ones that often cannot be captured through the use of 'traditional' laboratory-like procedures and methodologies" (p. 13). Future research should compare self-report

to actual observed/documentated behavior to help reconcile these differences, and use qualitative methods to gain a deeper understanding of student's thought processes and motivations.

Second, written expression skills may have affected some children's ability to answer the open-ended questions in this study. This was another limitation in the study. When developing the protocol, the questions were reviewed by teachers and deemed appropriate for a wide-range of middle-school writing skills, and no problems with written expression were observed during initial administrations. In addition, after the first few small group sessions, children's responses were reviewed and it appeared that children were able to fully express themselves and answer the questions. However, when reviewing the protocols after all the data had been collected, it appeared that several of the children had poor written expression skills; or, it is possible that they were not motivated to provide complete written responses; or, they wrote all they had to say. These responses generally received low cognitive empathy scores, and interventions were put into the "other" category. Thus, because of the format or motivation, some children's ability to convey their full ideas may have been hindered. In the future, more motivating incentives, smaller group or individual administrations, access to computers/keyboards, and/or interviews may be helpful elements in studies.

The third limitation of this study was that 13.2% (for physical bullying) and 17.7% (for relational bullying) of children's peer intervention strategies were classified as "other." Although this category was originally developed for interventions that did not fit into the other categories, it was primarily used for those who reported that they would help, but did not provide strategies; and those who provided very ambiguous and nonspecific

strategies. Because demographic variables did not significantly differentiate between the *other* category and the remaining peer intervention categories, the high frequency of *other* peer interventions may be reflective of a desire to help, but not knowing what to do; or, it may be a product of the methodology. As discussed previously, lack of written expression skills may have contributed to this. In addition, some children may have not given full attention to the verbal and written instructions because the survey was administered in large groups.

Fourth, race was controlled in the video clips used in this study. Only white victims and perpetrators were shown in the clips. This was purposely done to minimize any confounding effects due to the race of the characters in the clips. Further, the children in this sample were largely white. Though not necessary a limitation in the context of this study, it leaves questions open for further inquiry. It would be very interesting to have a more diverse sample and manipulate race of the victim to see how children responded to victims of their same race or a different race. This would have implications for bullying prevention and intervention programs in racially diverse schools.

Lastly, of the total combined populations of the participating middle schools, only 26% responded, and 20% participated. This was a limitation because the results may not reflect the entire school population. In addition, the children who participated may have been naturally more inclined to help or interested in the topic, and thus responded more altruistically on the survey.

There are several factors that may have contributed to the low response rate. First, the reading level of the parent consent forms may have been too high for parents to understand well; or, the consent forms may have been too long for parents to take the

time to read them. Future researchers should work closely with their local IRB to alter the standard consent forms so that they are accessible to all parents. Second, doing research with rural populations has been notoriously difficult because of low response rates. Studies on rural populations have suggested that distrust of people outside of the culture (especially large institutions) and fear of being judged are barriers to seeking mental health treatment and participating in research programs (Owens, Richerson, Murphy, Jagelewski, & Rossi, 2007). Future research will have to take extra measures to gain the trust of parents and obtain informed consent.

Implications for Practice

Bullying is a common occurrence in middle schools. In response to the deleterious social, emotional, and academic effects of school bullying, numerous anti-bullying programs have been developed. Peer support, bystander intervention, and empathy training are usually key components; unfortunately, though some programs show overall success, there is little information on the effectiveness of individual components of the programs. Schools need programs that are simple, easy to implement, and adaptable. Schools do not have time or resources to waste on components that do not add significant value to a program. In addition, the pressure to use empirically-based interventions is continually growing. This study provided insight into the reactions of children who witness bullying, and provided support of a connection between empathy and peer intervention. This study provided some basic information needed for future research to move on and determine if empathy skills training is an essential part of anti-bullying programs.

These data inform current bullying prevention efforts and the promotion of prosocial behaviors in schools. If we follow Latané and Darley's (1969) model for bystander intervention, and Eisenberg's (1986) models of empathy-related responding, we can identify where there may be a breakdown in the decision to intervene in school bullying, thereby providing a specific target for intervention. First, one must notice the incident. This study found that witnessing bullying elicited an automatic empathic-related response. Second, the incident must be recognized as requiring assistance, for example, the need for help must be unambiguous and explicit. This occurred for physical bullying situations; the need for help in the physical bullying vignette was clear, and children overwhelmingly reported that they would intervene instrumentally. Reading the cues and interpreting the need for help in the relational bullying vignette was less certain, however. In addition, the boys in this study were not inclined to intervene in predominantly female situations. Prevention programs and intervention programs may consider emphasizing that rumors, gossip, and exclusion are just as damaging as other forms of bullying. Girls need to be empowered to confront popular female bullies, and boys need not be apprehensive to intervene in problems between girls.

The third step in the theoretical model for helping is that one must assume responsibility for providing help. Because 85% of bullying incidents occur in the presence of other children (Atlas & Pepler, 1998; Craig & Pepler, 1995), the probability of peers being available to intervene is high. Yet, some diffusion of responsibility may occur if there are several children present. This social influence may especially be a concern for boys, who generally play in large groups, rather than females, who usually play in dyads. Diffusion of responsibility will be a difficult hurdle for bullying

intervention programs to overcome because social influence becomes stronger as children enter adolescence.

This and previous studies suggested that children understand the concept that bullying behaviors are wrong and hurtful. Children clearly were willing to help, had positive attitudes toward victims, and had negative attitudes toward bullying (Boulton, 1995). In this study, they were also able to identify effective ways to help those who were being bullied. Unfortunately, based on the observational research available, there was probably a vast discrepancy between their good intentions in this study and their actual peer intervention behaviors. While most children said they would help in both types of bullying, in reality only 10-20% actually do (Atlas & Pepler, 1998; Craig & Pepler, 1995; Salmivalli et al, 1995).

We need to encourage action and self-efficacy in our children so that they follow their initial reaction to help. We can do this through school-wide positive behavior programs that reward and recognize children who help others (Crone, Horner, & Hawken, 2004). If children are likely to follow the lead of the group, the solution is to make prosocial behavior and peer intervention the group norm. In addition, from the current study we see that empathy training has potential to promote prosocial responding to bullying. Feshbach and Feshbach's (1982) Empathy Training Program found that when children witnessed or experienced prosocial behaviors being rewarded, they were likely to perform those behaviors in the future. Thus, these program strategies may not only be effective in preventing bullying and social, emotional, and academic problems in bullies and victims; but will promote a healthier, safer, and more inclusive school environment.

FIGURES

Figure 1. Hypothesized Relations Between Empathy, Gender, and Peer Intervention

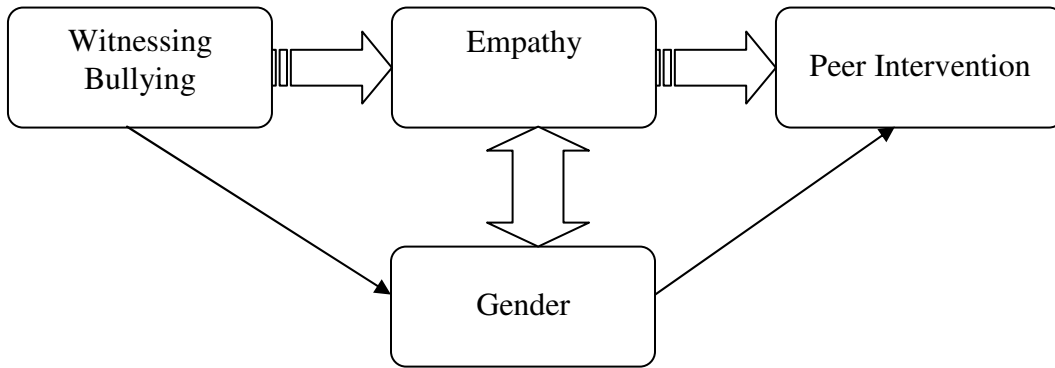


Figure 2. Comparisons of Percentages of Peer Intervention for Physical and Relational Bullying

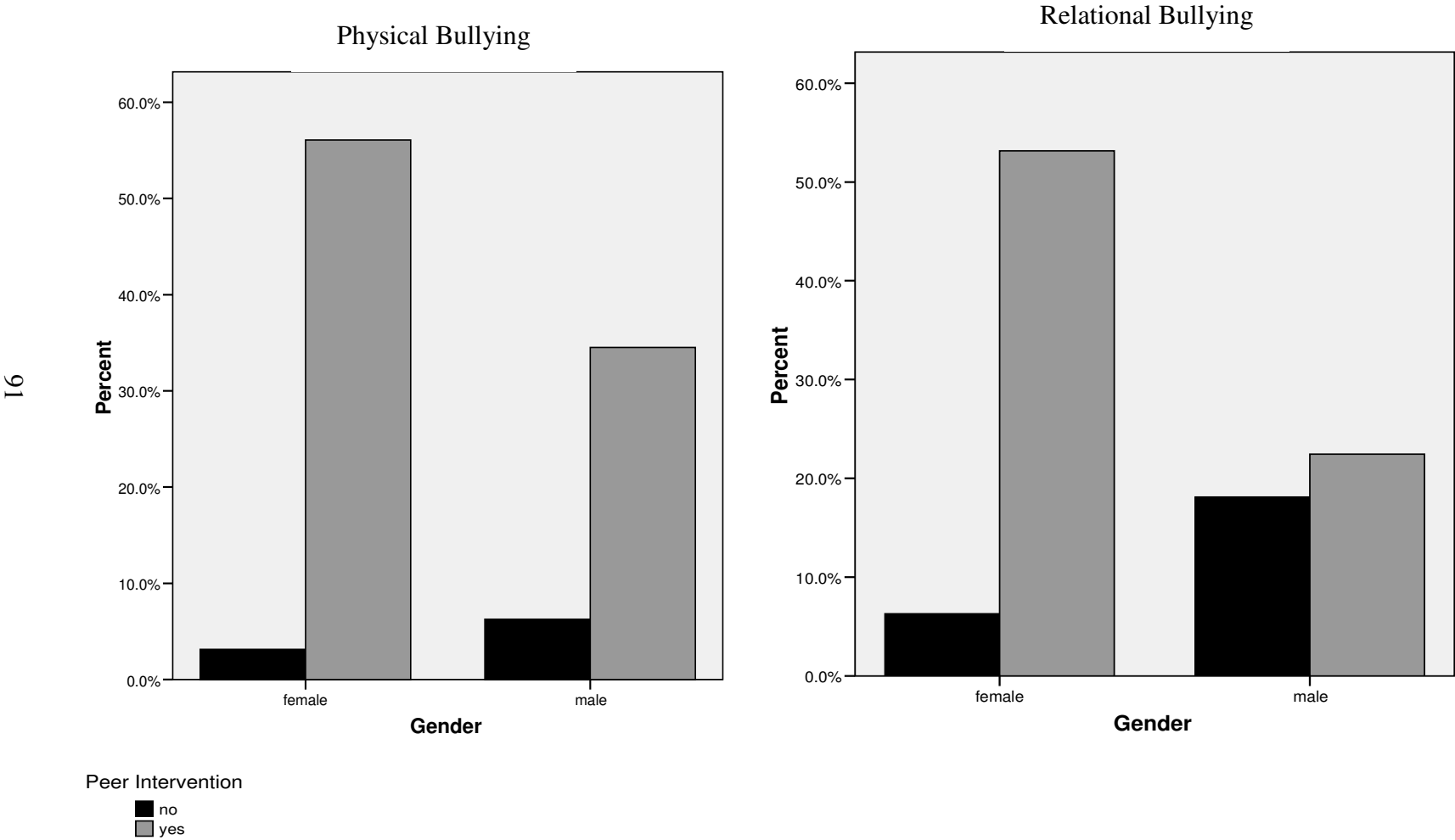


Figure 3. Comparison of Percentages of Peer Intervention Types for Physical and Relational Bullying

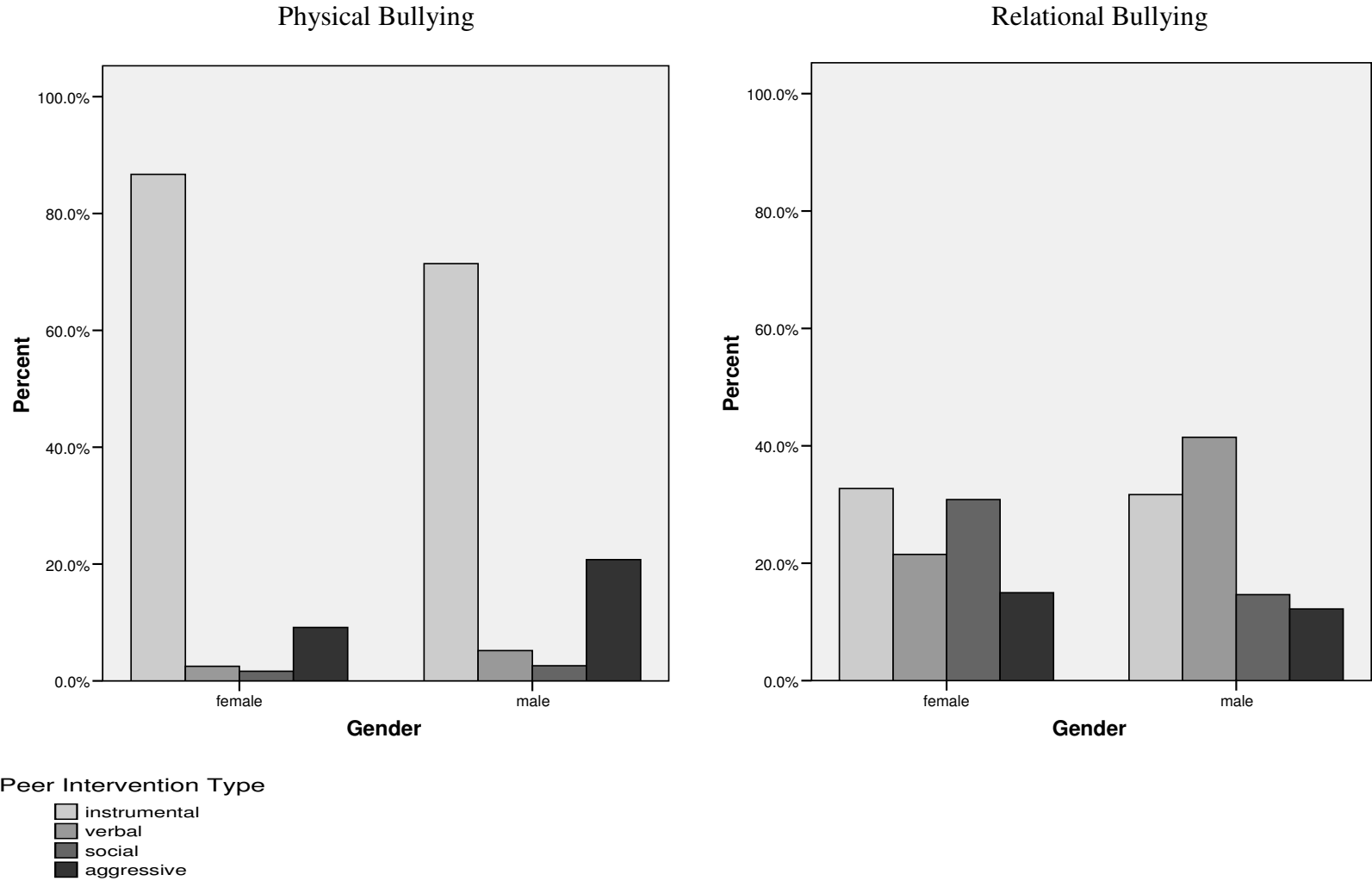
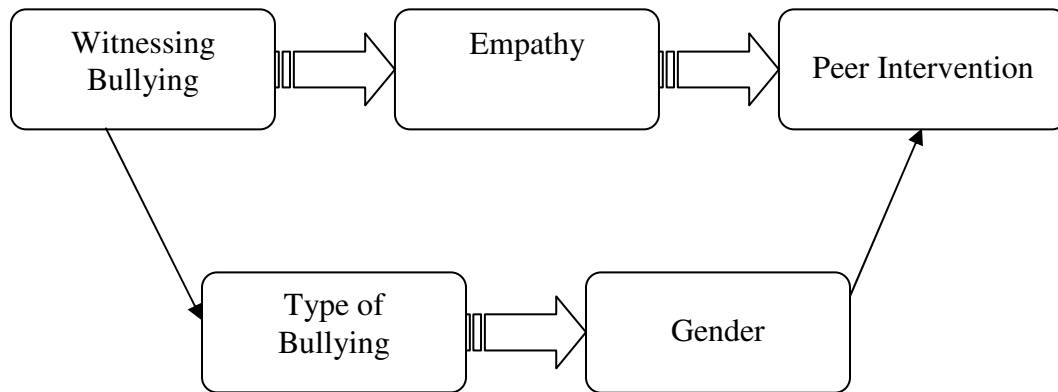


Figure 4. Relations Found Between Empathy, Gender, and Peer Intervention



TABLES

Table 1

Empathy Continuum (EC) Scoring System

Cognitive Empathy	EC Score	Affective Empathy	Description
I.	0	0	No emotion reported for character
	1	1	Accurate emotion reported for character
II. No attribution, or irrelevant reasons are provided for one's emotion: "I don't know"; "I just did."			
	2	1	Similar emotion in self and character
	3	2	Same emotion, different intensity
	4	3	Same emotion, same intensity
III. Attribution based on story events or situation: "Because of the bullying"; "His lunch was stolen"			
	5	1	Similar emotion in self and character
	6	2	Same emotion, different intensity
	7	3	Same emotion, same intensity
IV. Attribution refers to a specific character's situation: "People were spreading rumors about her." "He was being bullied and could not defend himself"			
	8	1	Similar emotion in self and character
	9	2	Same emotion, different intensity
	10	3	Same emotion, same intensity
V. Attribution indicates transposition of self into situation or association to one's own experiences: "I felt upset because that has happened to me before"; "I know what it feels like to be bullied."			
	11	1	Similar emotion in self and character
	12	2	Same emotion, different intensity
	13	3	Same emotion, same intensity
VI. Attribution indicates responsiveness to characters' feelings: "I felt sad because she felt so put down."			
	14	1	Similar emotion in self and character
	15	2	Same emotion, different intensity
	16	3	Same emotion, same intensity
VII. Attribution indicates semantically explicit role taking: "If I were in her place, I'd be angry at them for treating me like that."			
	17	1	Similar emotion in self and character
	18	2	Same emotion, different intensity
	19	3	Same emotion, same intensity

Table 2

Intervention Strategy Coding System

Intervention Strategy	Description	Example
1. Instrumental	Acting as an effective agent in assisting the person with respect to achieving goals, alleviating obstacles, or arbitrating differences	I would stand up for her; I would tell the bullies to stop, I would go get a teacher
2. Verbal	Offering reassurance, taking problems over, reasoning with the person	I'd tell people that the rumor was not true; I would tell him not to let those kids upset him
3. Social	Inviting the person to do something, providing a social contact	I'd be her friend; I'd hang out with him
4. Aggressive	Enacting physically aggressive actions against the perceived cause of the person's distress	I'd punch him, I would get revenge
5. Other	Any strategy that cannot reasonably be assimilated to any of the above, including no strategy provided and strategy too general to categorize	I'd help her

Table 3

Categorical Variable Frequencies

Demographic		N (Total = 265)	%
Gender	Boy	105	39.6
	Girl	151	57
Race	Asian	1	0.4
	Black	35	13.2
	Hispanic	7	2.6
	Multiracial	6	2.3
	White	207	78.1
Grade	6	88	33.2
	7	87	32.8
	8	81	30.6
Type of Bullying	Peer Intervention		
	Physical		
	Yes	237	89.4
	No	25	9.4
	Instrumental	163	61.5
	Verbal	7	2.6
	Social	4	1.5
	Aggressive	28	10.6
	Other	35	13.2
	Relational		
	Yes	198	74.7
	No	64	24.4
	Instrumental	51	19.2
	Verbal	40	15.1
	Social	39	14.7
	Aggressive	21	7.9
	Other	47	17.7

Table 4

Continuous Variable Descriptive Statistics

Variable	Mean	Standard Deviation
Social Desirability	.20	.26
Victimization	.92	.92
Bulling	.69	.71
Empathy – Relational	8.20	4.46
Empathy – Physical	8.01	3.66

Table 5

Percentages of Peer Interventions for Physical Bullying

		Peer Intervention				Total
		Instrumental	Verbal	Social	Aggressive	
Female	N	104	3	2	11	120
	%	86.7%	2.5%	1.7%	9.2%	100.0%
Male	N	55	4	2	16	77
	%	71.4%	5.2%	2.6%	20.8%	100.0%
Total	N	159	7	4	27	197
	%	80.7%	3.6%	2.0%	13.7%	100.0%

Table 6

Chi-Square Values for Physical Bullying

		χ^2	p
Instrumental vs. Verbal	Female	95.34	.000*
	Male	44.09	.000*
Instrumental vs. Social	Female	98.15	.000*
	Male	49.28	.000*
Instrumental vs. Aggressive	Female	75.21	.000*
	Male	21.42	.000*
Social vs. Verbal	Female	.20	.66
	Male	.67	.41
Social vs. Aggressive	Female	4.57	.03*
	Male	7.2	.007*
Verbal vs. Aggressive	Female	6.23	.013*
	Male	10.89	.001*

Table 7

Percentages of Peer Interventions for Relational Bullying

		Peer Intervention				Total
		Instrumental	Verbal	Social	Aggressive	
Female	N	35	23	33	16	107
	%	32.7%	21.5%	30.8%	15.0%	100.0%
Male	N	13	17	6	5	41
	%	31.7%	41.5%	14.6%	12.2%	100.0%
Total	N	48	40	39	21	148
	%	32.4%	27.0%	26.4%	14.2%	100.0%

Table 8

Chi-Square Values for Relational Bullying

		χ^2	p
Instrumental vs. Verbal	Female	2.48	.115
	Male	.533	.465
Instrumental vs. Social	Female	.059	.808
	Male	2.58	.108
Instrumental vs. Aggressive	Female	7.08	.008*
	Male	3.56	.059
Social vs. Verbal	Female	1.79	.181
	Male	5.26	.022*
Verbal vs. Aggressive	Female	1.26	.262
	Male	6.55	.011*
Social vs. Aggressive	Female	5.9	.015*
	Male	.091	.763

Table 9

Binary Logistic Regression for Physical Bullying

Log Odds, Odds Ratios, 95% Confidence Intervals, and Significance			
Variable	<i>B</i>	OR (95% CI)	<i>p</i>
Gender	.924	2.519 (.999-6.355)	.050
Empathy	.130	1.138 (1.008-1.285)	.037
Bullying	-.319	.727 (.411-1.286)	.273
Victimization	.052	1.053 (.652-1.701)	.833
Social Desirability	.236	1.267 (.192-8.369)	.806

Table 10

Binary Logistic Regression for Relational Bullying

Log Odds, Odds Ratios, 95% Confidence Intervals, and Significance			
Variable	<i>B</i>	OR (95% CI)	<i>p</i>
Gender	1.691	5.424 (2.755-10.680)	.000
Empathy	.130	1.139 (1.054-1.231)	.001
Bullying	.337	1.401 (.800-2.454)	.238
Victimization	.238	1.269 (.858-1.876)	.233
Social Desirability	.381	1.464 (.346-6.189)	.604

Table 11

Multinomial Logistic Regression for Physical Bullying

Odds Ratios and 95% Confidence Intervals				
	Instrumental vs. No Help	Verbal vs. No Help	Social vs. No Help	Aggressive vs. No Help
Empathy	1.15* (1.01-1.30)	1.43* (1.05-1.95)	1.30 (.91-1.86)	1.09 (.93-1.28)
Gender – Female	3.01* (1.16-7.77)	.85 (.13-5.70)	1.40 (.15-13.39)	1.17 (.35-3.91)
Bullying	.54 (.29-1.02)	.35 (.03-3.60)	.26 (.01-5.41)	1.42 (.74-2.75)
Victimization	1.14 (.70-1.87)	.51 (.11-2.30)	.78 (.17-3.55)	.86 (.47-1.58)
Social Desirability	.83 (.12-5.93)	6.60 (.20-217.74)	1.97 (.02-163.63)	1.07 (.10-11.92)

Overall model was significant at the $p = .002$ level

* = $p < .05$; ** = $p < .01$; *** = $p < .001$

Table 12

Multinomial Logistic Regression for Relational Bullying

Odds Ratios and 95% Confidence Intervals				
	Instrumental vs. No Help	Verbal vs. No Help	Social vs. No Help	Aggressive vs. No Help
Empathy	1.15** (1.04-1.27)	1.12* (1.02-1.24)	1.23*** (1.10-1.39)	1.13 (.99-1.29)
Gender – Female	6.47*** (2.64-15.89)	3.33** (1.39-8.00)	12.06*** (4.06-35-83)	9.77*** (2.81-33.98)
Bullying	1.37 (.67-2.79)	1.46 (.71-2.99)	.73 (.28-1.94)	2.65* (1.21-5.79)
Victimization	1.55 (.95-2.51)	.98 (.57-1.67)	1.38 (.80-2.37)	1.26 (.69-2.29)
Social Desirability	1.94 (.30-12.53)	2.98 (.47-19.07)	3.24 (.44-23.71)	.65 (.04-9.62)

Overall model was significant at the $p = .000$ level

* = $p < .05$; ** = $p < .01$; *** = $p < .001$

APPENDIX I

Peer Intervention Survey

- We would like your help in finding out how different situations make kids feel and act, so that we can make your school a better and more fun place for you and your classmates.
 - Your answers are private. No one at your school will ever see your answers, including your teachers, classmates, parents, or principals.
 - You don't have to answer any of these questions if you don't want to.
 - PLEASE ANSWER ALL THE QUESTIONS HONESTLY.
 - Go with your first reaction. Tell us how you really feel and what you would really do.
-

Circle how many times you did this activity or how many times these things happened to you in the LAST 30 DAYS.

	Never	1 or 2 times	3 or 4 times	5 or 6 times	7 or more times
1. Other students picked on me	Never	1 or 2 times	3 or 4 times	5 or 6 times	7 or more times
2. Other students made fun of me.	Never	1 or 2 times	3 or 4 times	5 or 6 times	7 or more times
3. Other students called me names.	Never	1 or 2 times	3 or 4 times	5 or 6 times	7 or more times
4. I got hit and pushed by other students.	Never	1 or 2 times	3 or 4 times	5 or 6 times	7 or more times
5. I helped harass other students.	Never	1 or 2 times	3 or 4 times	5 or 6 times	7 or more times
6. I teased other students.	Never	1 or 2 times	3 or 4 times	5 or 6 times	7 or more times
7. I was mean to someone when I was angry.	Never	1 or 2 times	3 or 4 times	5 or 6 times	7 or more times
8. I spread rumors about other students.	Never	1 or 2 times	3 or 4 times	5 or 6 times	7 or more times
9. I started arguments or conflicts.	Never	1 or 2 times	3 or 4 times	5 or 6 times	7 or more times

Read each question carefully. Put a circle around the word YES if you think it is true about you. Put a circle around the word NO if you think it is not true about you.

1. I am always nice to everyone.	YES	NO
2. I am always kind.	YES	NO
3. I never lie.	YES	NO
4. I never get angry.	YES	NO

STOP & WAIT FOR INSTRUCTIONS BEFORE MOVING ONTO THE NEXT PAGE.

Video Clip #1

1. How did this story make you feel? Circle the one word that best describes how you feel the most.

Happy Sad Angry Afraid Surprised Nervous/Anxious
Concerned
Nothing Other: _____

2. How much? (circle one) A Little A Lot
3. What made you feel that way? Why?

4. How did Lisa feel? Circle how you think she felt the most.

Happy Sad Angry Afraid Surprised Nervous/Anxious
Concerned
Nothing Other: _____

5. How much? (circle one) A Little A Lot
6. What made Lisa feel that way? Why?

7. When students see things like this happen, they act in many different ways. Some kids would try to help. Some kids have reasons why they would not help. Both decisions are ok. Imagine you were there and saw this happening. Would you help Lisa?

Circle one: YES NO

8. **If you chose “YES,”** describe what you would do to help.

9. **If you chose “NO,”** describe your reasons for not helping.

APPENDIX II



THE UNIVERSITY
of NORTH CAROLINA
at CHAPEL HILL

OFFICE OF HUMAN RESEARCH ETHICS
Medical School Building 52
Mason Farm Road
CB #7097

TO: Natalie Siegel
School of Education
CB 3500

FROM: Behavioral IRB


Authorized signature on behalf of IRB

APPROVAL DATE: 3/20/2007

EXPIRATION DATE OF APPROVAL: 3/18/2008

RE: Notice of IRB Approval by Expedited Review (under 45 CFR 46.110)

Submission Type: Initial

Expedited Category: 7. Survey/group chars

Study #: 07-0240

Other #: School of Education - SOE 2007-032

Study Title: Kids Helping Kids in Middle School

This submission has been approved by the above IRB for the period indicated. It has been determined the risk involved in this research is no more than minimal.

Federal regulations require that all research be reviewed at least annually. It is the Principal Investigator's responsibility to submit for renewal and obtain approval before the expiration date. You may not continue any research activity beyond the expiration date without IRB approval. Failure to receive approval for continuation before the expiration date will result in automatic termination of the approval for this study the expiration date.

When applicable, enclosed are stamped copies of approved consent documents and other recruitment materials. The expectation is that you will copy these for use with subjects.

You are required to obtain IRB approval for any changes to any aspect of this study before they can be implemented (use the modification form at ohre.unc.edu/forms). Should any adverse event or unanticipated problem involving risks to subjects or others occur it must be reported immediately to the IRB using the adverse event form at the same web site.

Study Description:

Purpose: To look at how and why middle school children help when they witness their peers being bullied. Participants: North Carolinian middle-school students in grades 6-8 will be invited to participate in this study. Approximately 150 children from each grade level, for a total of 450 participants.

Procedures: Middle school students will be given a brief questionnaire to obtain information about their involvement in bullying, peer relations, and social desirability. Next, the researchers will show three short video clips: two will depict students being bullied in school and one will show a neutral encounter with a peer. After each video clip, the students will complete a brief survey asking how the video clip made them feel, why; how the victim in the clip felt and why; and how they would have helped in the situation.

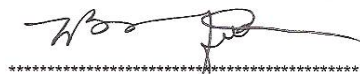
This research, which involves children, meets criteria at 45 CFR 46.404 (research involving no greater than minimal risk). Permission of one parent or guardian is sufficient.

Call the IRB at 919-966-3113 if you have any questions. You can now access IRB status information at <https://my.research.unc.edu/>.

This study was reviewed in accordance with federal regulations governing human subjects research, including those found at 45 CFR 46 (Common Rule), 45 CFR 164 (HIPAA), and 21 CFR 31.204 (FDA), where applicable.

The University of North Carolina at Chapel Hill holds a Federal Wide Assurance approved by the Office for Human Research Protections, Department of Health and Human Services (FWA # 4801).

Good luck with your research!



Lawrence B. Rosenfeld, Ph.D.
Office of Human Research Ethics
Co-Chair, Behavioral Institutional Review Board
CB# 7097, Medical School, Bldg 52
University of North Carolina at Chapel Hill
Chapel Hill, NC 27599-7097
aa-irb-chair@unc.edu
phone 919-962-7760; fax 919-843-5576

CC: Samuel Song, School of Education, CB: 3500, Faculty Advisor
Kesha Tysor, (School of Education), Non-IRB Review Contact

APPENDIX III

Parent Consent Form

University of North Carolina-Chapel Hill
Parental Permission for a Minor Child to Participate in a Research Study
Social Behavioral Form

IRB Study #07-0240

Consent Form Version Date: February 26, 2007

Title of Study: Kids Helping Kids in Middle School

Principal Investigator: Natalie M. Siegel, B.A.

UNC-Chapel Hill Department: School Psychology

UNC-Chapel Hill Phone number: 267-970-3885

Email Address: nsiegel@email.unc.edu

Faculty Advisor: Samuel Y. Song, Ph.D.

Funding Source: This study was awarded the Smith Graduate Research Grant from the Graduate School at the University of North Carolina at Chapel Hill

Study Contact telephone number: 267-970-3885

Study Contact email: nsiegel@email.unc.edu

What are some general things you should know about research studies?

You are being asked to allow your child to take part in a research study. To join the study is voluntary. You may refuse to give permission, or you may withdraw your permission for your child to be in the study, for any reason. Even if you give your permission, your child can decide not to be in the study or to leave the study early.

Research studies are designed to obtain new knowledge. This new information may help people in the future. Your child may not receive any direct benefit from being in the research study. There also may be risks to being in research studies.

Details about this study are discussed below. It is important that you understand this information so that you and your child can make an informed choice about being in this research study. You will be given a copy of this permission form. You and your child should ask the researchers named above, or staff members who may assist them, any questions you have about this study at any time.

What is the purpose of this study?

The primary aim of this study is to learn about peer helping behaviors among middle school children. An important role of schools is to promote the social-emotional development of its students. Promoting positive behaviors like helping others fosters healthy social adjustment and reduces aggression. A school environment where children feel safe from aggressive peer interactions (e.g., bullying) is essential for optimizing learning potential and benefits students, teachers, and classrooms. Empathy, defined as understanding someone else's emotional state, can lead to helping. Although we know children feel empathy for others in a variety of situations

(e.g., distress due to injury, disability, poverty, fights with friends, schoolwork) we do not know if children feel empathy for victims of bullying. Children who see bullying happening have the power to step in and effectively stop bullying. Unfortunately, very few children help when they see bullying. We need to understand factors, like empathy, that may motivate helping. Therefore, the purpose of this study is to learn about how empathy motivates peer helping behaviors among middle school children who see aggressive peer interactions (i.e., teasing and bullying behaviors).

How many people will take part in this study?

If your child is in this study, she or he will be one of approximately 450 people in this research study.

How long will your child's part in this study last?

Your child's part in this study will last 35-45 minutes on one school day.

What will happen if your child takes part in the study?

- If your child participates in this study, the researchers will come to your child's school and tell him or her about the study.
 - Your child will be given the choice to participate or not. If he/she chooses to participate, your child will sign a form saying that they agree to participate in the study. There will be no consequences for choosing not to participate; it is completely optional.
 - Your child may choose not to answer a question for any reason. Your child may stop at any time.
- If your child chooses to participate, she/he will fill out a brief questionnaire about his/her experiences at school. This part will last 5-10 minutes.
- Next, your child will watch three short videos of kids interacting in school. Your child will fill out a brief questionnaire about each video. This part will last about 30 minutes. Your child will then return to class.
- Next, the researchers will collect demographic information about your child from the school records. This information will include age, race, gender, grades, Exceptional Child status, number of absences, and number of discipline referrals. No identifying information will be collected.
- Feel free to contact the researcher listed above if you have any questions about what will happen during the study.

What are the possible benefits from being in this study?

Research is designed to benefit society by gaining new knowledge. Your child may not benefit personally from being in this research study. However, your child's school may benefit by using these data to make school a happier, healthier, and safer place for children to learn and grow.

What are the possible risks or discomforts involved from being in this study?

There are no known risks for being in this study, but there may be uncommon or previously unknown risks. You should report any problems to the researcher.

How will your child's privacy be protected?

- The researchers will take the utmost care to protect your child's privacy.
- Your child will sign a form saying that he/she agrees to participate in the study. This form will be detached from the questionnaires and stored separately in a locked file cabinet with the parent consent forms. Your child will be identified by ID number only.
- The questionnaires will be stored in a locked file cabinet in the researcher's office.
- No one besides the researchers will have access to these data; data will be kept completely

confidential.

Participants *will not* be identified in any report or publication about this study. Although every effort will be made to keep research records private, there may be times when federal or state law requires the disclosure of such records, including personal information. This is very unlikely, but if disclosure is ever required, UNC-Chapel Hill will take steps allowable by law to protect the privacy of personal information. In some cases, your information in this research study could be reviewed by representatives of the University, research sponsors, or government agencies for purposes such as quality control or safety.

Will your child receive anything for being in this study?

Your child will be receiving a small gift to be determined by the school district (e.g., a pencil or piece of candy) for returning the consent form to the teacher. Your child will receive this gift whether or not he/she participates in the study. If your child chooses to participate, she/he will be given another small gift for taking part in this study.

Will it cost you anything for your child to be in this study?

There will be no costs for being in the study.

What if you or your child has questions about this study?

You and your child have the right to ask, and have answered, any questions you may have about this research. If you have questions, or concerns, you should contact Natalie M. Siegel (phone number: 267-970-3885, email address: nsiegel@email.unc.edu) or Samuel Y. Song (phone number: 919-843-9127, email address: samsong@email.unc.edu).

What if you or your child has questions about your child's rights as a research participant?

All research on human volunteers is reviewed by a committee that works to protect your child's rights and welfare. If you or your child has questions or concerns about your child's rights as a research subject you may contact, anonymously if you wish, the Institutional Review Board at 919-966-3113 or by email to IRB_subjects@unc.edu.

Parent's Agreement: Please check one of the boxes below.

____ I voluntarily give permission to allow my child to participate in this research study. I have read the information provided above. I have asked all the questions I have at this time.

____ I do not give permission for my child to participate in this study.

Printed Name of Research Participant (Child)

Signature of Parent

Date

Printed Name of Parent

APPENDIX IV

Child Assent Form

University of North Carolina-Chapel Hill
Assent to Participate in a Research Study
Minor Subjects (7-16 yrs)

IRB Study #07-0240

Consent Form Version Date: February 26, 2007

Title of Study: Kids Helping Kids in Middle School

Person in charge of study: Natalie M. Siegel, B.A.

Where they work at UNC-Chapel Hill: School Psychology Department

Other people who work on the study: Dr. Samuel Y. Song

Study contact phone number: 267-970-3885

Study contact Email Address: nsiegel@email.unc.edu

The people named above are doing a research study.

These are some things we want you to know about research studies:

- Your parent needs to give permission for you to be in this study. You do not have to be in this study if you don't want to, even if your parent has already given permission.
- You may stop being in the study at any time. If you decide to stop, no one will be angry or upset with you.

Why are they doing this research study?

The reason for doing this research is to learn how kids think and feel when they see different things happen, like bullying. We want to learn why kids choose to help or not help.

How many people will take part in this study?

If you decide to be in this study, you will be one of about 450 people in this research study.

What will happen during this study?

- This study will take about 35-45 minutes to complete.
- During this study you will be asked to answer questions about your experiences, thoughts, and feelings.
 - First, you will fill out a form that asks about your experiences at school.
 - Next, you will watch three short videos of kids in schools. After each video, you will fill out a form that asks questions about the video.
 - After that, you are finished. No one will ask you about your answers.

Who will be told the things we learn about you in this study?

Only the people doing the study will see what you write. No one else will see your paper including your parents, teachers, friends, and principal. After today, your name will be taken off your paper so no one will know which is yours.

What are the good things that might happen?

People may have good things happen to them because they are in research studies. These are called “benefits.” You will not personally benefit from being in this research study. Your school will benefit by using this information to make schools a safer and happier place for kids.

What are the bad things that might happen?

Sometimes things happen to people in research studies that may make them feel bad. These are called “risks.” There are no known risks for being in this study. Things may happen that the researchers don’t know about. You should report any problems to the researcher.

Will you get any money or gifts for being in this research study?

You will receive a small gift like a pen, pencil, or eraser for being in this study.

Who should you ask if you have any questions?

If you have questions you should ask:

Natalie M. Siegel, B.A.

Phone number: 267-970-3885

Email address: nsiegel@email.unc.edu

Samuel Y. Song, Ph.D.

Phone number: 919-843-9127

Email address: samsong@email.unc.edu

If you have other questions about your rights while you are in this research study you may contact the Institutional Review Board at 919-966-3113 or by email to IRB_subjects@unc.edu.

If you sign your name below, it means that you agree to take part in this research study.

Sign your name here if you want to be in the study

Date

Print your name here if you want to be in the study

Signature of Person Obtaining Assent

Date

Printed Name of Person Obtaining Assent

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