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STANDING UP OR STANDING BY: EXAMINING THE BYSTANDER EFFECT IN
SCHOOL BULLYING

by

Scott Michael Fluke

A DISSERTATION

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STANDING UP OR STANDING BY: EXAMINING THE BYSTANDER EFFECT IN SCHOOL BULLYING

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University of Nebraska, 2016

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School bullying represents a serious mental health problem for youth in the United States. Bullying is a social phenomenon that is affected by the social context in which it occurs. Bystanders (i.e., individuals who witness bullying), are present in the vast majority of bullying situations. When bystanders choose to intervene on behalf of the victim, they are able to stop the bullying about 50% of the time. Unfortunately, bystanders rarely stand up for victims, instead frequently choosing to help the perpetrator or passively observe the bullying situation. Researchers have identified the bystander effect (i.e., the inhibitory effect of other bystanders on any given bystander's likelihood of helping others) as one of the primary causes of passive bystanding in adults. However, this research has not yet been applied to youth who witness bullying. Using an experimental vignette research design, this study examined if the bystander effect explains active versus passive bystanding behavior among high school youth. Additionally, important moderators of the bystander effect were tested including the number of bystanders present, the relationships between bystanders and the participant, the type of bullying being perpetrated, and the sex of the victim. The results did not provide evidence for the bystander effect in adolescence. However, both individual differences (i.e., participant sex, empathy) and situational factors (i.e., type of bullying being perpetrated) were found to affect hypothetical bystander helping behavior. These

results may serve to inform intervention efforts seeking to encourage adolescents to stand up for their peers.

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Table of Contents

I.	Chapter I: Introduction	1
	A. Theoretical Models of Bullying Behavior	3
	B. Factors Inhibiting Bystander Intervention – The Bystander Effect	4
	C. The Current Study	6
II.	Chapter II: Literature Review	9
	A. Participant Roles and Outcomes	12
	1. Bullying Perpetrators	12
	2. Victims/Targets.....	13
	3. Bully-victims	13
	4. Bystanders	14
	B. Theoretical Models of Bullying Behavior	15
	1. Bronfenbrenner’s Social-Ecological Theory	15
	2. The Social-Ecological Model of Bullying	17
	3. Implications of Bronfenbrenner and the Social-Ecological Model	20
	C. The Impact of Bystander Intervention	20
	D. Why Don’t Bystanders Help?	21
	E. The Bystander Effect	24
	1. The Five Step Model of Helping Behavior	26
	2. Moderators of the Bystander Effect	30
	i. Relationships	30
	ii. Danger of the Event	35
	iii. Number of Bystanders Present	36
	iv. Sex	37
	v. Empathy	38
	F. Applying the Bystander Effect to Bullying	39
	G. Summary	42
	H. Assessment of Constructs	42
	1. Self-report	43
	2. Peer Nomination	43

3. Teacher Nomination	44
4. Naturalistic Observation	45
5. Methods for Assessing the Bystander Effect	46
I. Research Questions and Hypotheses	48
III. Chapter III: Methods	51
A. Participants	51
B. Instrumentation	53
1. Demographics	53
2. Bystander Vignettes	53
3. Hypothetical Helping Behavior	56
4. Empathy	57
C. Procedures	58
D. Analyses	60
1. Preliminary Analyses	60
2. Data Analytic strategy	61
IV. Chapter IV: Results	65
A. Sample Characteristics	65
B. Preliminary Analyses	68
C. Research Question 1	69
D. Research Question 2	70
E. Research Question 3	72
F. Research Question 4	72
G. Research Question 5	73
H. Research Question 6	74
I. Research Question 7	75
V. Chapter V: Discussion	76
A. Research Question 1	77
B. Research Question 2	78
C. Research Question 3	80
D. Research Question 4	81
E. Research Question 5	82

F. Research Question 6	83
G. Research Question 7	84
H. Limitations	85
I. Future Directions	87
J. Implications for Research, Prevention, and Intervention	89
K. Conclusions	91
VI. References	94
VII. Appendices	125
A. Original IRB Approval Letter	125
B. Referral Sources for Therapy	127
C. Demographic Form	130
D. Bystander Vignettes	131
E. Indicators of Helping Behavior	132
F. Interpersonal Reactivity Index	133
G. Flow Chart of Participatory Action Research Study Design	135
H. Site Letter of Interest and Support	136
I. Parental/Guardian Consent	139
J. Youth Assent	142

TABLES

Table 1. Demographic Characteristics for the Total Sample and By School ...	112
Table 2. Demographic Proportion Comparisons between Participants and School Enrollment	113
Table 3. Descriptive Statistics for Participant Sex	114
Table 4. Likelihood of Helping by Number of Bystanders Present	115
Table 5. Effect of Bystander Relationships and Number of Bystanders Present on Helping	116
Table 6. Effect of Type of Bullying, Number of Bystanders Present, and Bystander Relationships on Helping	117
Table 7. Effect of Sex of the Victim on Likelihood of Helping	118
Table 8. Effect of participant Sex Matching or Not Matching Victim Sex on Likelihood of Helping	119
Table 9. Effect of Sex on Likelihood of Helping	120
Table 10. Effect of Type of Bullying on Likelihood of Helping	121
Table 11. Effect of Type of Bullying by Number of Bystanders Present on Likelihood of Helping	122

FIGURES

Figure 1. Nonsignificant Interaction Effect between the Number of Bystanders Present and the Bystander's Relationship with the Participant	123
Figure 2. Nonsignificant Interaction Effect between the Type of Bullying and the Number of Bystanders Present	124

CHAPTER I

INTRODUCTION

As social creatures, who a person is with and how others around them behave has a dramatic impact on that person's own attitudes and behaviors. Providing help in an emergency situation is no different. A person who finds him or herself witnessing an emergency alone will often decide to help the person in need; yet surround that same person with others who witness the same event, and that person becomes far less likely to lend a helping hand (Latané & Nida, 1981). This phenomenon, known as the bystander effect (Darley & Latané, 1968a; Latané & Nida, 1981), is one of the most robust findings in social psychology (Levine, 1999). However, only minimal efforts have been made to apply these findings to youth. Like adults, youth often find themselves witnessing others experience an emergency, but the factors that affect helping behavior among youth are not fully understood. Specifically, research examining the bystander effect in youth is needed (Thornberg, 2007). One of the more common emergency situations that youth witness is school bullying. Unfortunately, most youth who witness bullying choose not to intervene on behalf of the victim (Atlas & Pepler, 1998; Craig, Pepler, & Atlas, 2000). Given the importance of the peer ecology in understanding the bullying dynamic (Pellegrini & Long, 2002), the bystander effect may be inhibiting bystanders from standing up for their peers.

Bullying represents a significant and prevalent mental health problem in the United States (Nansel et al., 2001). Bullying is specific type of peer aggression that involves three key components: bullying is intentional, is repeated over time or is highly likely to be repeated, and represents an imbalance of power between the perpetrator(s)

and the victim(s) (Gladden, Vivolo-Kantor, Hamburger, & Lumpkin, 2014). Bullying can take several forms, including physical bullying (e.g., the use of physical force against the victim, the theft or destruction of objects), verbal bullying (e.g., taunting, teasing, or name-calling), social bullying (e.g., the systematic destruction of another's social relationships, exclusion), and electronic bullying (i.e., the use of an electronic medium to engage in bullying). These forms of bullying often co-occur, such that victims may experience more than one (Swearer, Espelage, & Napolitano, 2009).

Most youth will be involved in bullying at some point during their school careers. While precise prevalence rates are difficult to establish due to differing definitions and methodologies across studies, estimates suggest that approximately 8.3% to 18% of students perpetrate bullying against their peers (Swearer, Collins, Fluke, & Strawhun, 2012). Students who perpetrate bullying are at risk for several negative outcomes, including externalizing problems such as Conduct Disorder, Attention-Deficit/Hyperactivity Disorder (ADHD), general aggressive behavior, and future criminal convictions (Menesini, Modena, & Tani, 2009; Ttofi, Farrington, Losel, & Loeber, 2011). A further 10% to 20.7% of students are victimized by their peers (Swearer et al., 2012). These victimized youth are at risk for many internalizing problems such as elevated levels of anxiety and depression (Swearer, Song, Cary, Eagle, & Mickelson, 2001). Individuals who are involved as both perpetrators and victims are at risk for both the externalizing problems associated with perpetration as well as the internalizing problems associated victimization (Marini, Dane, Bosacki, & YLC-CURA, 2006). About two-thirds of youth observe bullying during their school careers; thus, most youth who are involved in bullying are bystanders (Trach, Hymel, Waterhouse, & Neale, 2010).

Bystanders are not passive, unaffected observers. Rather, they both affect and are affected by the bullying that they observe. For instance, witnessing bullying often is linked to substance use, depression, and anxiety (Rivers, Poteat, Noret, & Ashurst, 2009).

Theoretical Models of Bullying Behavior

Bullying does not arise from any single factor. Rather, bullying is a complex, social process. To explain the factors that cause bullying, researchers have turned to Bronfenbrenner's social-ecological theory (Bronfenbrenner, 1979). Social-ecological theory posits that children exist within a series of interconnected, nested environmental structures. Development and behavior arise both from interactions between the child and these structures as well as interactions between the structures themselves. Changes in one system may affect other systems as well as the child him or herself. Bronfenbrenner (1979) identified the lowest-level structure as the individual level, consisting of within-child traits (e.g., executive functioning). The individual level exists within larger systems. Microsystems are systems in which the child interacts with others, such as the family or the peer group. Mesosystems represent interactions between microsystems, such as family-school partnerships. Exosystems are interactions between a microsystem and a system in which they child does not interact with others, such as a parent's friendship circle. Finally, the macrosystem represents larger cultural values such as societal norms. An important implication of the social-ecological model is that examining both within-child variables and the broader ecological context is important in understanding the bullying dynamic.

Building on this idea, the social-ecological model of bullying has been developed to explain and understand bullying behavior (Swearer & Doll, 2001). The social-

ecological model posits that, like other behaviors, bullying behavior is the result of multiple causes at multiple environmental levels (Swearer & Espelage, 2011). These levels include the individual (e.g., within-child factors), the family, the peer group, the school, the community, and the broader social culture. Thus, like other behaviors, bullying is best understood through an ecological lens by addressing predictive factors at each of these levels. The current dissertation focuses on one key level of the social-ecological model: the effect of the peer group, specifically bystanders, on bullying.

Bystanders are present in the vast majority of bullying situations (Atlas & Pepler, 1998; Craig et al., 2000). Indeed, bullying is a social behavior often performed specifically to gain social power or peer attention (Pellegrini & Long, 2002; Ross & Horner, 2009). When bystanders choose to intervene on behalf of the victim, they are often successful in stopping the bullying, preventing it from occurring again, or reducing its impact on the victim (Hawkins, Pepler, & Craig, 2001; Pozzoli, Ang, & Gini, 2012). However, bystanders rarely choose to help the victim – instead, they are more likely to passively observe or even join in on the side of the perpetrator (Craig et al., 2000; Salmivalli, 2010). Thus, bystander behavior represents a critically important research vein for preventing school bullying. Bystander intervention is an effective strategy that is rarely used; if researchers can ascertain the factors that inhibit bystander intervention, practical strategies for promoting it can be developed.

Factors Inhibiting Bystander Intervention – The Bystander Effect

The bystander effect describes the general tendency for an individual bystander to become less likely to help in emergency situations in the presence of other bystanders compared to if they witnessed the emergency alone (Latané & Nida, 1981). This is a

powerful example of how the social context affects behavior. For example, participants in these early studies were shown to be slow and unlikely to respond to staged epileptic seizures or come to the aid of a woman who fell and cried out in pain when in small groups (Darley & Latané, 1968a; Latané & Rodin, 1969). Conversely, when alone, individuals were much quicker and more likely to lend a helping hand.

From this research, a five step helping model was developed outlining the specific sequence of cognitive steps that an individual must go through when he or she witnesses someone in need of help. If these steps are navigated successfully, the bystander is predicted to provide active intervention. However, if the bystander somehow fails to complete each step, he or she becomes a passive observer (Latané & Nida, 1981). First, the bystander must notice the event. Next, he or she must interpret it as an emergency. Then, he or she must take responsibility as the individual who needs to provide assistance. Following this, he or she must know how to help (e.g., if first aid is required, the bystander must know first aid). Finally, the bystander must actually decide to carry out the helping behavior. The bystander effect can interrupt this process in several ways. Through pluralistic ignorance, individuals fail to interpret the event as an emergency because they observe others choosing not to intervene (Latané & Nida, 1981). Through diffusion of responsibility, individuals fail to take responsibility themselves, instead passing it on to the larger group (Latané & Darley, 1968). Further, through social inhibition, even responsible individuals who know what to do may choose not to help for fear of failing or embarrassing themselves (Latané & Nida, 1981).

Other contextual factors may attenuate the bystander effect. Of particular importance are the relationships between individuals in an emergency situation.

Bystanders who are in the presence of strangers are less likely to intervene as the size of the group increases, but bystanders who are in the presence of friends are actually more likely to intervene as the size of the group increases (Levine & Crowther, 2008). Thus, the bystander effect does not seem to apply when bystanders are among friends. Further, the bystander effect is attenuated in dangerous situations. That is, the presence of other bystanders does not inhibit helping behavior when the emergency situation is dangerous (Fischer, Greitemer, Pollozek, & Frey, 2006). Sex plays a role as well. Bystanders are more likely to help female victims (Levine & Crowther, 2008) and are more likely to help victims who are the same sex as they are (Fischer et al., 2011). Empathetic individuals may also be more likely to intervene (Eisenberg, Eggum, & Di Giunta, 2010). Thus, the bystander effect is not as simple as once thought. Instead, to accurately predict bystander behavior, one must know how many others are present, who those individuals are, as well as various aspects of the emergency itself.

The Current Study

Researchers have called for examining the bystander effect in bullying situations (Espelage, Green, & Polanin, 2011). However, this application has not yet occurred. In fact, very little research has been conducted examining the bystander effect in children at all (Thornberg, 2007). It is likely that similar cognitive processes and social influences affect youth who witness bullying as adults in emergency situations. Indeed, the five step model of helping behavior has been applied specifically to predict the behavior of youth who witness bullying (Pozzoli & Gini, 2012). One study found evidence that the bystander effect does occur within a peer victimization context, as well as evidence that the social relationships between bystanders affect bystander behavior (Bellmore, Ma,

You, and Huges, 2012). However, the degree to which the bystander effect occurs in bullying contexts remains unknown.

This is a critical gap in the literature because of the powerful role bystanders play in reducing school bullying – if they decide to intervene. The purpose of this dissertation study is to examine if the most well-known factor inhibiting adult helping behavior also applies to youth who witness bullying. The guiding research question is “Does the bystander effect occur in bullying situations in adolescence, and what factors moderate the bystander effect?” Specifically, this dissertation study examined how the number of bystanders present, the relationships between those bystanders, the danger of the situation (i.e., physical bullying compared to other types of bullying), sex, and empathy affected the likelihood of bystander intervention.

To address these questions, data were collected during a larger, on-going participatory action research study examining factors associated with school bullying. Previous research on the bystander effect has typically used live-action experiments using paid actors to stage emergency situations. Due to ethical concerns with placing youth in manufactured bullying situations, and in line with recent research in the area (e.g., Bellmore et al., 2012), this study used an experimental vignette research design. This allowed for the experimental variation of the number of bystanders present, who those bystanders are, the sex of the victim, and the type of bullying being witnessed in a carefully controlled manner.

A total of 239 youth between the ages of 14 and 19 served as participants for the study. Participants were drawn from three Midwestern high schools as a part of a larger participatory action research study. Participants were randomly assigned to view and

answer questions based on four vignettes depicting bullying situations and were asked to complete a brief questionnaire assessing empathy and demographic variables.

The following chapter describes the extant literature on bullying and the theoretical models used to explain why bullying happens. Then, the literature on bystander behavior in bullying situations is discussed. Next, the social psychological literature on the bystander effect and adult bystander responses to emergency situations is reviewed, including the seminal research published in the late 1960s through the early 1980s as well as the recent revival in the 2000s. The limited material on the application of the adult literature to youth in bullying contexts will then be reviewed. Finally, the chapter concludes by presenting specific research questions and hypotheses for the current dissertation.

Bystanders do not stand idly by in bullying situations. Instead, they directly impact the bullying they witness. Clearly, those who join in with the perpetrators are adding to the harm done to the victim; however, even those who passively observe are perceived by victims as allies of the perpetrator, and thus magnify the harmful effects of bullying (Gini, Pozzoli, Borghi, & Franzoni, 2008). Meanwhile, active defending of the victims mitigates these same harmful effects (Sainio, Veenstra, Huitsing, & Salmivalli, 2010). Therefore, understanding the factors that prevent bystanders from actively helping victims must be understood. It is anticipated that the results of this study will begin answering whether the bystander effect is one such factor. If so, then efforts to create interventions aimed at encouraging bystander intervention can include components specifically designed to counteract the inhibitory influence of the bystander effect.

CHAPTER II

LITERATURE REVIEW

Bullying has arisen as a popular and controversial topic in the past 15 years (Swearer, Espelage, Vaillancourt, & Hymel, 2010). While it is unlikely that rates of bullying have changed over time, media attention and public perception of the problem has dramatically increased. This may be due to the media-led connection between bullying and well-reported tragedies such as school shootings and youth suicides (Vossekuil, Fein, Reddy, Borum, & Modzeleski, 2002). While the connection between bullying and these tragic outcomes is not fully understood, there is no doubt that bullying has a tremendous negative effect on many children every year.

Although originally termed as “*mobbing*” (the Swedish word for “mobbing,” Olweus, 1986), a word that conjures an image of a large group of children ganging up on a single youth, researchers currently debate precisely what behaviors define bullying and how to differentiate it from other forms of aggression (Hanish et al., 2013). The current consensus is that bullying is a particular form of peer aggression that is characterized by 1) intention to harm; 2) repetition over time or being highly likely to be repeated over time; and 3) an imbalance of power between the perpetrator and the victim (Gladden et al., 2014). When an aggressive act does not meet all three of these criteria, then it should not be considered bullying. By way of example, educators should intervene when two students get into a physical fight at school, but this behavior would not constitute bullying if it was a one-time event and if the participants were relatively equal in power. It would constitute bullying if one party had a systematic advantage over the other and used it repeatedly to cause harm. In another example, friends may jokingly tease one

another without the behavior constituting bullying, but if multiple friends gang up on a smaller group of friends and make fun of them repeatedly, then the behavior may be regarded as bullying. Bullying must be addressed differently than other aggressive behaviors because research has consistently demonstrated that the imbalance of power and the repetitive nature of bullying create a sense of hopelessness and helplessness that might not exist after one, isolated aggressive act (Bonanno & Hymel, 2010; Radliff, Wang, & Swearer, 2015).

Intention to harm refers to the fact that bullying is typically proactive, rather than reactive, aggression (Ragatz, Anderson, Fremouw, & Schwartz, 2011). Bullying is also instrumental aggression, meaning that it serves as a means to an end for the perpetrator (Prinstein & Cillessen, 2003). Thus, bullying is purposeful aggression through which the perpetrator means to do harm to the victim, distinguishing it from accidental behavior or playful teasing. Repetition can occur in a variety of ways, including the frequency of the bullying behavior or how many individuals are involved. For example, if a single mean message is posted on the Internet for hundreds of peers to read, repetition has occurred (Slongje, Smith, & Frisen, 2012). No formal standard for a minimal number of incidents is in place for a pattern of behavior to meet the criteria for repetition and be considered bullying (Vaillancourt et al., 2008). Finally, power imbalance can refer to far more than just physical strength; any manner in which a perpetrator can be said to be powerful can be used to meet this criterion, such as the number of people doing the bullying, intellectual advantage, higher social status, or better access to or expertise in using social media (Smith & Brain, 2000). Conversely, victims can be considered weaker than perpetrators for varied reasons such as having a physical disability, being considered

socially awkward, being unpopular, or any number of personal traits that may make one person different from another or that leads to the victim having a difficult time defending him or herself.

Bullying can occur in a variety of ways, and thus a multitude of behaviors may fall under the umbrella of bullying. Bullying experiences often involve multiple types of bullying, rather than falling neatly into one form of bullying (Ryoo, Wang, & Swearer, 2015; Swearer et al., 2009). Additionally, any type of bullying can lead to the negative short- and long-term outcomes for all those involved. Physical bullying occurs when the perpetrator physically harms the victim or his or her belongings. This may include pushing, shoving, kicking, stealing items, or destroying items. Verbal bullying occurs when the perpetrator attacks the victim verbally, including teasing, name-calling, or threats of future aggression. Social bullying is a covert behavior in which the perpetrator seeks to damage the relationships of the victim. Social bullying includes gossiping, spreading malicious rumors, systematic exclusion, or convincing others to dislike or treat the victim badly.

Bullying can also be perpetrated online. Electronic bullying is any aggression carried out electronically that includes the three criteria for bullying discussed previously (Kowalski, Giumetti, Schroeder, & Lattanner, 2014). Electronic bullying can occur on social media, online gaming, cell phones, personal messaging, text messaging, or any other electronic medium (Hinduja & Patchin, 2008). Electronic bullying may be particularly harmful because of the ability to spread harmful, bullying content to large groups of people easily. Furthermore, victims of electronic bullying often do not know

who is perpetrating the bullying, and may be less able to defend themselves (Barlett, Gentile, & Chew, 2014).

Participant Roles and Outcomes

Bullying has been traditionally identified as a problem between two individuals: the bully and his or her victim. However, research on bullying conducted in the last few decades has demonstrated that this notion is flawed (Espelage & Swearer, 2003; Swearer et al., 2010). Bullying is now known to be a social relationship problem (Craig & Pepler, 2007) – a much broader and more complex issue that frequently involves multiple people playing multiple roles (Ryoo et al., 2015; Salmivalli, Lagerspetz, Björkqvist, Österman, & Kaukiainen, 1996). Thus, bullying should be thought of and addressed as a group phenomenon rather than a problem between two individuals. Understanding how these roles interact and how broader social forces affect bullying is a critical part of understanding the bullying dynamic.

The roles that individuals play in bullying are not static, but rather should be expected to change over time (Ryoo et al., 2015). That is, a student who perpetrates bullying in one context may choose to remain uninvolved in another context, while a student who was victimized as a child may begin engaging in bullying as he or she enters high school. Students in all roles are at risk for significant negative academic, social, and mental health outcomes.

Bullying perpetrators. Bullying perpetrators are individuals who are actively bullying other students. Students who bully others are at risk for developing additional externalizing problems such as aggressive behavior, Attention-Deficit/Hyperactivity Disorder (ADHD), and Conduct Disorder (Menesini et al., 2009). Perpetrators are also at

risk for involvement in the juvenile justice system, and when they reach adulthood, even being convicted in adult courts (Olweus, 1986; Ttofi et al., 2011).

Victims/Targets. Individuals who are being bullied by others are referred to as victims or targets. Victims are more likely to develop internalizing problems compared to perpetrators or uninvolved youth (Menesini et al., 2009). These internalizing problems often include elevated levels of anxiety and depression (Swearer et al., 2001). Individuals who are frequent targets of bullying are also at risk for having low self-esteem (Espelage & Holt, 2001). Academically, victimization can lead to lower grades and decreased performance on standardized tests (Wei & Williams, 2004; Woods & Wolke, 2004). Students who are victimized may also choose to avoid school, leading to attendance problems (Kochenderfer & Ladd, 1996), and often have negative attitudes towards school (Rueger & Jenkins, 2014).

Bully-victims. Bully-victims include individuals who perpetrate bullying and who are victimized. As an example, a bully-victim may be bullied by siblings at home and bully other students at school, or they may be picked on by one peer group while bullying others in another peer group. Bully-victims are unfortunately at risk for both the externalizing problems characteristic of perpetrators and the internalizing problems associated with victimization (Marini et al., 2006). They may be at particular risk for developing Conduct Disorder, anxiety disorders, and mood disorders, and may be more likely to suffer from low self-esteem and suicidal ideation (Leanne, Cross, Shaw, & Dooley, 2012; Marini et al., 2006) than students who are “only” bullies or victims. The plight of bully-victims demonstrates that individuals can play multiple roles in bullying,

and that as involvement in bullying increases across roles, the risk for negative outcomes increases as well.

Bystanders. Individuals who witness bullying happen, but who are not directly involved as perpetrators or victims, are known as bystanders (Salmivalli, 2010).

Bystanders should be distinguished from individuals who have not witnessed bullying occurring and who are not directly involved as perpetrators or victims (often known as “uninvolved” individuals; Rivers et al., 2009; Rivers & Noret, 2010). Underscoring the notion that bullying is a group phenomenon, the vast majority of bullying occurs in the presence of bystanders (Atlas & Pepler, 1998; Craig et al., 2000; Craig & Pepler, 1997; Polanin, Espelage, & Pigott, 2012). Bystanders also represent the most common role that students play – an estimated two in three students will observe bullying happen during their lifetimes (Smith & Shu, 2000, Trach et al., 2010).

Given the high probability of being a bystander, it is surprising that, compared to research on perpetrators and victims, less research has been conducted examining how witnessing bullying affects students (Rivers & Noret, 2010). One large study using a middle school sample in the United Kingdom found that witnessing peer victimization was associated with a variety of negative mental health outcomes (Rivers et al., 2009). Individuals in this study who witnessed bullying tended to report higher substance use, depression, anxiety, and feelings of inferiority. These results suggested that students who had not been victimized themselves and only observed bullying may experience greater negative mental health outcomes. Other research has found that individuals who are involved in multiple roles, including bystanders, are at elevated risk for serious mental health concerns including suicidal ideation (Rivers & Noret, 2010).

Thus, negative outcomes occur for all persons involved in bullying incidents. Even bystanders, who many do not think of as being directly affected by the situation, report negative short-term and long-term outcomes (Rivers & Noret, 2010). The number of students affected by bullying, as well as the severely negative outcomes, means that it is critical for the field to work towards preventing involvement in bullying, regardless of the roles. However, the fact that students move in and out of bullying roles over time underscores the notion that bullying is a complex breakdown of positive social relationships (Craig & Pepler, 2007). Theories designed to explain why bullying happens and its underlying causes must take this complexity into account.

Theoretical Models of Bullying Behavior

Bronfenbrenner's social-ecological theory. The most successful theories of child development and school bullying take into account the importance of variables external to the child that predict behavior. In his seminal work, Urie Bronfenbrenner (1979) acknowledged the complexity of the developmental process and human behavior. That is, behavior cannot be fully explained by analyzing internal factors alone. Instead, a full understanding of any behavior requires a careful examination and understanding of the environment (Bronfenbrenner, 1979).

Bronfenbrenner's social-ecological theory (1979) posits that children exist within an environment that can be "conceived as a set of nested structures, each inside the next, like a set of Russian dolls" (pg. 3). While each level within this structure represents increasingly broad and complex interactions, it should be understood that changes in one system can have cascading effects that lead to changes in other systems (Bronfenbrenner, 1979). Bronfenbrenner suggested that researchers should think of children as the center

of these nested, interacting structures, and that children act and form relationships within their social environment.

The first level represents internal, individual factors and traits. While they cannot be relied upon exclusively to explain behavior, individual factors are an important piece of the developmental puzzle. The second level is the microsystem. The microsystem includes any system in which the child is interacting with others, including the family, relationships with teachers or other adults, relationships with peers, and the school. Thus, the behavior of an individual child is affected by many different microsystems.

Beyond the microsystem are levels of the social environment that represent interactions between lower-level systems. Bronfenbrenner (1979) posited that these interactions play an important role in development and behavior. Mesosystems include interactions between microsystems. For example, the relationship between a student and his or her parent (a microsystem) and the relationship between a student and his or her teacher (another microsystem) may be affected by the relationship between the parent and the teacher (a mesosystem). Further, Bronfenbrenner's model suggests that exosystems exist wherever a system that the child does participate in (e.g., a relationship with a peer) interacts with a system that the child does not participate in (e.g., that peer's relationship with his or her family). Finally, large-scale cultural similarities, such as ideology, norms, or belief systems, are referred to as the macrosystem.

Bronfenbrenner's work calls for researchers to take into account each of these levels when attempting to understand human development and behavior. Further, intervention efforts must take into account the broader social context of the child in order to have the best chance at changing behavior. Researchers in school bullying have taken

this idea and applied it to create the social-ecological model of bullying (Swearer & Doll, 2001).

The social-ecological model of bullying. Researchers in the last few decades have concluded that, in accordance with Bronfenbrenner's model, bullying behaviors cannot be attributed to a single, simple cause (Swearer & Doll, 2001; Swearer & Espelage, 2011). Instead, bullying behavior follows the principle of equifinality: a wide variety of different factors can ultimately lead to involvement in the bullying continuum (Espelage & Swearer, 2010). A full understanding of bullying must therefore take into account a wide variety of causal factors.

Building off of Bronfenbrenner's work, the social-ecological model of bullying was developed to help explain how these varied factors can help predict involvement in bullying. Like Bronfenbrenner's model, the social-ecological model of bullying describes bullying behavior as being "multiply-determined and multiply-influenced" (Orpinas & Horne, 2006; Swearer & Espelage, 2011; pg. 4). The social-ecological model provides a framework from which to understand how multiple variables at different levels of Bronfenbrenner's systems affect involvement in bullying.

The individual. Factors within the individual make one more or less likely to be involved in bullying, and may also affect the role in bullying that one may play (e.g., perpetrator, bystander). Some of these factors may be amenable to change given the proper intervention, such as mental health status (e.g., pre-existing levels of anxiety or depression), impulsivity, empathy, and attitudes towards bullying and aggression (Lee, 2011). Other individual factors are less able to be changed but still play a role in the bullying dynamic, such as age, appearance, height and weight, or sex.

The family. Children typically spend a tremendous amount of time with their family; as such, factors within the family affect the likelihood of involvement in bullying. For example, parental attitudes towards bullying, parenting style (e.g., permissive, authoritative, authoritarian), the presence or absence of domestic abuse, and sibling relationships have been identified as potential predictors of bullying involvement (Lee, 2011; Swearer et al., 2012).

The peer group. The friends and peers a child interacts with, as well as how those interactions play out, have a tremendous effect on bullying. As a social relationship problem (Pepler, Craig, & O'Connell, 2011), bullying exists within a child's social world. A wide variety of variables related to the peer group have been identified as affecting involvement in bullying, including the use of bullying as a means of climbing the social ladder; homophily (e.g., the tendency for individuals to seek out and spend time with similar others; Espelage, Holt, & Henkel, 2003); and the presence, attitudes, and behaviors of bystanders (Salmivalli, 2010).

The school. Given that children spend many hours each week in school, it serves as no surprise that school factors affect bullying behavior. Teacher attitudes towards bullying, reactions towards bullying, and overall classroom management styles play a role in bullying (Lee, 2011). Broader issues such as school-wide behavior management systems, anti-bullying policies, the school culture, and academic standards play a role as well (Lee, 2011; Swearer & Espelage, 2011).

The community and culture. Representing the macrosystem in the social-ecological model of bullying, community factors and cultural factors underscore behaviors and interactions between each level of the social ecology. Community factors

may include the presence or absence of community resources, such as youth camps; parks, playgrounds, and other fun activities; or inexpensive, easily-accessed mental health services. Other community factors include the socioeconomic status of the community, the influence of the media (e.g., prevalence of violence in media), and the relationships that have developed between community agencies. At the cultural level, bullying behaviors may be affected by local and broader norms towards punishment, aggression, and bullying as well as wide-spread religious or philosophical ideology.

Several studies have been conducted providing evidence for the importance of understanding the social-ecology in addition to within-child factors. A study of over 10,000 middle and high school students in Israel found evidence that individual factors (i.e., gender, age), school factors (i.e., classroom size, school climate), and cultural factors (i.e., religion) predict school violence (Khoury-Kassabri, Benbenishty, Astor, & Zeria, 2004). Lee (2010; 2011) found evidence that variables at the individual, microsystem, mesosystem, exosystem, and macrosystem levels each predicted bullying behavior in South Korean (2010) and American (2011) samples. Similarly, data from another American sample demonstrated the variety of variables that contribute to bullying and victimization by finding evidence that individual factors (e.g., gender, age), family factors (e.g., having a family member in jail, parenting styles), community factors (e.g., gangs), and many more all predict bullying perpetration and being victimized by others (Espelage & Swearer, 2010).

Implications of Bronfenbrenner and the social-ecological model of bullying.

The ideas and data supporting the social-ecological framework clearly identify the importance of understanding the variety of systems in which children grow and develop,

and how these systems interact to produce behavior - including behaviors related to bullying. While it may seem daunting to account for so many factors, an optimistic view suggests that as the number of important variables increases, the number of potential avenues for intervention increases as well. In other words, bullying prevention and intervention efforts can be implemented at the individual, family, peer group, school, community, cultural, or ideally multiple levels and have the possibility of effecting important change.

Further, understanding the importance of multiple systems in the child's environment presents avenues for future research. This is because some systems have received less empirical attention than others. The purpose of this dissertation study is to expand the literature in one such area that has only recently been examined by researchers: the effect of the peer group on bullying – specifically, how the presence of other bystanders affects bystander behavior within the bullying context.

The Impact of Bystander Intervention

The manner in which bystanders react to the bullying they witness dramatically affects the outcome of the bullying for perpetrators, victims, and other bystanders. When bystanders join in on the side of the person doing the bullying (e.g., by laughing at the victim or cheering the perpetrator on), the bullying tends to get worse (Ross & Horner, 2009). When victims are not defended, their peers become more likely to blame the victim for their predicament and perceive them negatively (Gini et al., 2008). The lack of defending behavior is also associated with students' reports of feeling less safe at school (Gini et al., 2008). However, when bystanders join in on the side of the victim, the victim feels safer, reports higher self-esteem, and is at less risk for developing anxiety and

depression (Sainio et al., 2010). Further, other witnesses are more prone to have positive attitudes towards the victim if he or she is helped, which makes them more likely to befriend the victim in the future (Gini et al., 2008). Interventions designed to encourage bystanders to assist victims have generally been shown to be effective in reducing bullying (Polanin et al., 2012). Overall, when bystanders choose to help the victim, they are successful in stopping the bullying about 50% of the time (Hawkins et al., 2001).

Bullying is a group phenomenon. Individuals who bully often do so in order to obtain social status or approval from the peer group (Pellegrini & Long, 2002; Rodkin & Hodges, 2003; Ross & Horner, 2009). Accordingly, the vast majority of bullying takes place in the presence of one or more bystanders (Atlas & Pepler, 1998; Hawkins et al., 2001). Unfortunately, bystanders rarely intervene; instead, they tend to passively watch the bullying happen, and when they do intervene, they are far more likely to support the bully than they are to help the victim (Salmivalli, 2010).

Bystander behavior represents tremendous untapped potential in bullying prevention and intervention. Bystanders are often successful when they choose to help; however, most bystanders do not help. Therefore, if bystanders can be motivated to more frequently intervene on behalf of the victim and taught precisely how to intervene successfully, a substantial portion of bullying can be stopped. The first step in this process must be developing an understanding of the social processes that inhibit bystanders from helping.

Why Don't Bystanders Help?

A variety of factors have been discussed in the bullying literature as important components in understanding bystander behavior. Salmivalli and colleagues (1996)

described several roles that individuals may play in bullying situations. Beyond the classic bully and victim roles, individuals may engage in reinforcing behavior (i.e., smiling, laughing, or otherwise encouraging the bullying without joining in), assisting behavior (i.e., joining in the bullying), outsider behavior (i.e., passively observing the bullying or not being present), or defending behavior (i.e., supporting or consoling the victim). Defending behavior is defined as any prosocial behavior aimed at stopping bullying, and can include behavior intended to stop the bullying while it is occurring, behaviors that mitigate the effects of bullying (e.g., befriending or comforting the victim), or behaviors that seek to stop future bullying, such as telling an adult (Pozzoli et al., 2012). Bullying occurs less frequently in classrooms where defending behavior is common, and more frequently in classrooms where bystanders reinforce bullying behavior (Salmivalli, Voeten, & Poskiparta, 2011).

Due to the low rate of defending behavior, researchers have sought to identify factors that may encourage students to more frequently stand up for one another. This emerging literature has found that social factors play an important role in encouraging or discouraging defending behavior (Salmivalli, 2010). One such factor is perceived peer pressure to intervene. Perceived peer pressure to intervene describes how an individual perceives that his or her peers expect him or her to behave when witnessing bullying (Pozzoli et al., 2012). An individual may perceive that his or her peers expect him or her to intervene in bullying (a positive perceived peer pressure) or that peers expect him or her to not intervene in bullying (a negative perceived peer pressure), making him or her likely to behave accordingly.

Rigby and Johnson (2006) showed students videos of bullying situations and asked them how they would respond. They found that students with a positive perceived peer pressure were more likely intervene on behalf of the victim in this hypothetical bullying scenario. These findings have been replicated in questionnaire studies of bullying, with results consistently indicating that positive perceived peer pressure predicts defending behavior (Pozzoli, et al., 2012; Pozzoli & Gini, 2010), even in students who feel little personal responsibility to intervene (Pozzoli & Gini, 2012). Thus, students who believe that their peers want them to intervene tend to do so, while students who believe that their peers do not want them to intervene tend not to.

Another important factor is an individual's attitudes towards bullying. Attitudes towards bullying describe individual judgment of the acceptability of bullying behavior (Salmivalli & Voeten, 2004). Students with pro-bullying attitudes see it as acceptable, while students with anti-bullying attitudes see it as unacceptable. These attitudes may predict defending behavior; students with pro-bullying attitudes may not interpret the bullying they witness as something they should seek to stop, and thus may be less likely to exhibit defending behavior (Latané & Darley, 1968).

Indeed, researchers have found that students with strong anti-bullying attitudes are more likely to engage in defending behavior (Salmivalli & Voeten, 2004), and students who are nominated by others as bullies, assistants, or reinforcers tend to have more pro-bullying attitudes (Boulton, Bucci, & Hawker, 1999). Further, classrooms that display higher average pro-bullying attitudes have been found to have more frequent bullying perpetration (Scholte, Sentse, & Granic, 2010). Attitudes towards bullying are also affected by the behavior of others – when students perceive that others have pro-

bullying attitudes, they themselves tend to report more pro-bullying attitudes (Gini et al., 2008).

The Bystander Effect

The bystander effect has long been hypothesized to play a major role in bystander intervention. In March of 1964, an infamous murder occurred in New York City. A woman named Kitty Genovese was attacked and killed in an alley on her way home from work (Manning, Levine, & Collins, 2007). Media reports indicated that her attacker stabbed her, left the scene, and then returned to stab her again. The media also reported that the attack occurred in view of 38 eyewitnesses peering down from their apartments who apparently did nothing to assist Kitty. The city and the country were outraged: how could so many people witness an emergency and do nothing to come to the aid of the victim?

While later evidence emerged suggesting that at least some witnesses attempted to help Kitty, the “parable of the 38 witnesses” has resonated with American society (Manning et al., 2007). The apparently apathetic witnesses were painted in the popular press as callous, uncaring individuals. Some suggested that their behavior, as well as the passive behavior of bystanders in other high profile incidents, was indicative of the growing dehumanization in large modern cities. In other words, internal, personal characteristics of the bystanders were blamed for their decision to passively observe their neighbor being murdered.

Soon after, two social psychologists, Bibb Latané and John Darley, became interested in the Kitty Genovese attack. They theorized that it may not have been simply moral callousness that led to the inaction of the witnesses. Instead, they suggested that

aspects of the situation itself (i.e., external, environmental factors) may have strongly influenced the witnesses' behavior. Together, they developed a program of research to test this hypothesis.

The first empirical study placed participants in a quiet room, and after a time, made them believe they heard someone having an apparent epileptic seizure (Darley & Latané, 1968a). Participants were placed in three groups: some were made to believe that they alone heard the seizure, some were made to believe that one other person was present and heard the seizure, and the rest were made to believe that four other people were present and heard the seizure. The researchers found that 85% of bystanders who thought they were alone attempted to help the victim, while 62% of bystanders who thought one other person was present helped, and just 31% of bystanders in an apparent group of four attempted to help. Additionally, those that did help were much quicker to take action when alone than were those in a group. This finding was the first to demonstrate that not only are bystanders less likely to intervene in an emergency situation when others are present, but that the presence of others slows down the help that they may eventually give. The presence of other bystanders seemed to be inhibiting bystander intervention.

A second early study showed similar results, this time with bystanders actually physically present in the room (Latané & Darley, 1968). Participants were asked to complete questionnaires in a room either alone, with two passive confederates, or in groups of three (all participants were naïve in this condition). While completing the questionnaire, smoke began to fill the room. When alone, 75% of participants reported the smoke to an authority figure. When with two passive confederates who acted

disinterested in the smoke, only one participant in ten reported the smoke. The researchers reported that the other nine participants in this condition “doggedly work[ed] on their questionnaire and wav[ed] the fumes away from their faces” (Latané & Darley, 1968, p. 218). When in groups of three naïve participants, less than 20% of groups had even one individual report the smoke to an authority figure. These results demonstrate the power of the presence of inactive others to inhibit bystanders’ responses to emergency situations. While individuals who are alone reacted to the smoke in a reasonable manner, individuals in small groups were typically content to let the room fill with smoke while they obediently completed their assigned task.

Latané and Darley dubbed this phenomenon the bystander effect. The bystander effect is the tendency for bystanders in an emergency situation to become less likely to help or intervene in the presence of other bystanders than they would be if they witnessed the emergency alone (Latané & Nida, 1981). When participants heard an apparent seizure, those who were alone typically sought to help, while those who were made to think that others were present typically chose to do nothing. When participants observed smoke filling their room, those who were alone reacted reasonably, while those who were in the presence of others typically chose to do nothing. This early research on the bystander effect has served as a cornerstone of social cognitive explanations for why bystanders may choose not to intervene when others are in need.

The five step model of helping behavior. The bystander effect has been encompassed into a broader five step model of helping behavior. This theory attempts to outline why the presence of others inhibits bystander responses in emergencies, as well as other factors that prevent an individual from helping others. Taking a social cognitive

approach, Latané and Darley (1968) identified several cognitive steps that a witness in an emergency must go through before he or she can intervene. The bystander must notice the event, interpret the event as an emergency, decide to take responsibility as the person who should act, know what to do or how to help, and finally decide to take action. At each step, personal or environmental factors may be present that prevent a prosocial helping response from occurring.

Noticing the event. The first step in engaging in helping behavior is simply to notice the event. An emergency that takes place far away from an individual or an emergency that an individual is not aware of is not likely to be noticed, and therefore no help can be given. However, even more proximal events are sometimes not noticed. In some cases, bystanders are too distracted to notice an emergency. Darley and Batson (1973) surprised seminary students by asking them to walk to another building to give an impromptu speech (ironically on the Good Samaritan parable). One group of participants was told that they were running late, and thus needed to hurry, while another group of participants was told to take their time getting to the speech. During the walk, the students passed by an actor lying on the ground who appeared to need help. The participants who were in a hurry were less likely to assist the person who needed help than were the participants who were not in a hurry. The authors interpreted this as an indication that those who were in a hurry were too busy thinking about and planning their impromptu speech to notice the person in need. In other words, they were under a heavy cognitive load that prevented them from attending to the emergency situation at all, which ultimately prevented helping behavior from occurring.

Interpreting the event as an emergency. After noticing an event, the bystander must acknowledge that the event is an emergency in need of intervention. In some cases, this is an obvious conclusion; in others, the situation is more ambiguous. Bystanders are likely to intervene in a situation that is deemed an emergency (Shotland & Huston, 1979). However, when a situation is ambiguous and multiple bystanders are present, intervention is less likely to occur (Solomon, Solomon, & Stone, 1978), and if it does occur, help is given more slowly (Clark & Word, 1972, 1974). Similarly, the bystander effect has been found to be more likely to occur in less dangerous situations, which are more ambiguous, than in clearly high danger situations (Fischer et al., 2006).

When applied in this step of the helping model, the bystander effect takes the form of pluralistic ignorance (Latané & Nida, 1981). Pluralistic ignorance occurs when bystanders see an event, are unsure what should be done, and look to other bystanders to try to identify how they are interpreting the event. Unfortunately, if all bystanders are looking to others for clues on how to act, then the collective inaction results in nobody interpreting the event as an emergency and no help being given.

Taking responsibility. If an event is noticed and interpreted as an emergency, the bystander must next take responsibility as the person who needs to intervene. When no other bystanders are present, it is clear that the onus to intervene is on the sole bystander. However, when others are present, there are many more people who could assume the role of helper. This process is called the diffusion of responsibility – as the number of potential helpers increases, the less any individual helper feels compelled to be the one who actually intervenes (Latané & Darley, 1968; Latané & Nida, 1981). Diffusion of

responsibility has been posited as the mechanism underlying the bystander effect at this step of the helping model.

Knowing how to help. After accepting responsibility to help, a bystander must know what to do in order to help a person in need. For example, despite wanting to help, a person who witnesses bullying may be unlikely to intervene if he or she does not know effective strategies to stop the bullying. Indeed, individuals who feel more competent in how to help are more likely to do so while giving more effective help overall (Clark & Word, 1974).

Deciding to help. Finally, the bystander must decide to ultimately engage in helping behavior. However, even if a bystander takes responsibility as a helper and knows what he or she should do to help, he or she may choose not to help if he or she perceives social pressure from others not to intervene (Latané & Nida, 1981). Similarly, a bystander may feel inhibited in a crowd for fear of attempting to help and failing, making him or herself look foolish (Latané & Nida, 1981). This effect may be magnified in adolescence, when social influence plays a particularly powerful role in motivating adolescent behavior. In this way, the presence of other bystanders may serve as a cue for the social costs of intervention, which may ultimately prevent even responsible, competent bystanders from helping others in need.

Early work on the bystander effect and the 5 step model of helping behavior brought researchers closer to answering the question posed above – why don't bystanders help? Following this early line of research, social psychologists felt confident they could explain this phenomenon rather simply: bystanders do not help because aspects of the social environment, particularly the presence of other bystanders, inhibit the helping

response. The model has been applied to multiple kinds of helping behavior, including domestic violence and sexual assault prevention (Pozzoli & Gini, 2012). By 1981, work in this area largely disappeared, as the problem was considered solved (Levine, 1999).

Moderators of the Bystander Effect. Researchers in social and school psychology have recently “re-opened” the case of the bystander effect. New questions have been asked investigating whether or not the bystander effect may be more complicated than originally thought. That is, under what circumstances does the bystander effect not apply? The findings demonstrate that bystander behavior is more complex than previously thought.

Relationships. An important component that was missing from the early literature is the relationships between bystanders, other witnesses, and the victims (Levine, 1999). Individuals who are in the presence of a group of friends may react to an emergency situation differently than an individual in the presence of a group of strangers. Indeed, some early studies found that groups of friend were more likely to intervene than were groups of strangers, suggesting that relationships between bystanders may play a moderating role (Darley & Latané, 1968b). Unfortunately, almost all research conducted on the bystander effect prior to the new millennium relied on placing bystanders in groups with strangers, making this theory difficult to test.

To address this concern, and drawing from self-categorization theory, Levine, Cassidy, Brazier, and Reicher (2002) proposed that the way a bystander categorizes him or herself in a particular context changes his or her perceptions of social norms as well as subsequent intervention behavior. Self-categorization theory suggests that social identity is dynamic. That is, the way a person sees and defines him or herself changes depending

on the group he or she is with and what other individuals are currently present (Turner, Oakes, Haslam, & McGarty, 1994). Thus, a person's self-concept can be expected to change depending on what social identity (e.g., male, student, or African-American) is most salient at that time, with behavior conforming to match the social norms related to that particular group.

This is relevant to bystander behavior because bystanders in emergency situations may find themselves witnessing events in a wide variety of contexts and with a wide variety of others present. If the group norms of others present are supportive of intervention, and identification with that group is made salient, then the presence of others may actually encourage, rather than inhibit, intervention (Levine & Thompson, 2004). This effect would be the precise opposite of that predicted by the classic bystander effect, representing a powerful moderation effect that can help researchers to better understand bystander behavior.

Ample evidence has been found supporting the important impact relationships between all parties involved can have on bystander behavior (Fischer et al., 2011). For example, Levine and colleagues (2002) demonstrated that bystanders are affected more by the norms of other bystanders who are in-group members (i.e., friends) than the norms of other bystanders who are out-group members (i.e., strangers). They found that if other bystanders were imagined to be friends who display pro-intervention attitudes, then the presence of other bystanders actually increased the likelihood that the bystander will help. On the contrary, if other bystanders were imagined to be friends who display anti-intervention attitudes, then the presence of other bystanders decreased the likelihood that the bystander will help. Meanwhile, if the other bystanders were strangers, then the

presence of more bystanders decreased the likelihood of helping, regardless of the other bystanders' attitudes towards intervention. In other words, if a bystander is with in-group members, he or she conforms to the norms of the group (whether they are pro- or anti-intervention), but if a bystander is with out-group members, then he or she does not. This effect can have a positive or negative influence on bystander intervention, depending on the norms of the social group. This finding is mirrored by evidence from the bullying literature that student norms and attitudes towards bullying affect bystander intervention (Pozzoli, et al., 2012; Pozzoli & Gini, 2010; Salmivalli, 2010).

Later work found similar results. In a series of studies, participants were asked to imagine witnessing a violent altercation and how they would respond (Levine & Crowther, 2008). They were asked to imagine that one or five other witnesses were present, and that those witnesses were either strangers (out-group members) or friends (in-group members). Of those asked to imagine themselves with strangers, participants who imagined themselves with five other witnesses present were less likely to intervene than those who imagined only one other witness present (i.e., the classic bystander effect was demonstrated). However, of those asked to imagine themselves with friends, participants who imagined themselves with five other witnesses present were instead more likely to intervene than those who imagined only one other witness present. Thus, when bystanders are in the presence of other in-group members, helping behavior is encouraged. When bystanders are in the presence of other bystanders who are out-group members, helping behavior is inhibited.

The relationship between a bystander and the victim is important as well. Previous research has established an in-group bias in helping behavior, in that all else

being equal, individuals will provide more help to in-group members than out-group members (Dovidio et al., 1997). This finding appears to hold true for emergency situations as well (Levine et al., 2002), with bystanders being more likely to help victims who are in-group members. However, this finding is complicated by the malleability of self-concept as suggested by self-categorization theory. Indeed, priming different in-group memberships appears to affect the likelihood of helping in an emergency situation. European individuals who were primed with their European identity became more likely to provide financial support to Europeans suffering from the after-effects of a natural disaster compared to South Americans suffering from a similar disaster (Levine & Thompson, 2004).

To demonstrate this, Levine, Prosser, Evans, and Reicher (2005) recruited English soccer fans of a particular team to participate in a study in which they were asked to walk from one building to another. In transit, a confederate, wearing either a jersey from that team (i.e., an in-group member), a jersey from a hated rival team (i.e., an out-group member), or an unbranded, nondescript jersey, tripped and fell near the participant. When fan-hood of their favorite team was made salient at the beginning of the study, participants were far more likely to help the confederate when he was wearing a friendly jersey compared to one wearing the neutral jersey or one of a hated rival. However, when fan-hood of soccer in general was made salient (i.e., when all soccer fans could be considered a part of the in-group), participants became far more likely to help the confederate wearing a soccer jersey – even one wearing that of a bitter rival. Participants were still unlikely to help the confederate wearing the unbranded jersey. These results support the notion that while the in-group bias in helping behavior does appear to apply

to emergency situations, an in-group should be considered a flexible construct subject to change across situations and over time.

Collectively, this body of literature has expanded and changed how researchers think about the bystander effect. It is no longer safe to assume that the presence of additional bystanders always reduces the likelihood that a given bystander will intervene. The relationships between all parties, as well as how bystanders think of themselves in relation to others who are present, play a critical role in intervention behavior (Fischer et al., 2011). For bystanders in emergency situations, who you are with and who is being victimized represent critical environmental variables. Being in the presence of in-group members encourages helping behavior, while being in the presence of strangers discourages helping behavior. This is further affected by group norms: friendship groups who exhibit anti-intervention norms, attitudes, or behaviors inhibit one another from helping in emergencies, while friends with pro-intervention norms encourage helping behavior. In sum, no examination of the bystander effect can be considered complete without taking steps to account for the relationships between bystanders, the victim, and other bystanders.

Danger of the event. Events that are more dangerous surprisingly seem to inhibit the bystander effect (Fischer et al., 2006). That is, bystanders witnessing situations that are clearly dangerous for the victim or for themselves seem to be more likely to intervene than are bystanders in less dangerous circumstances. Recent meta-analytic evidence supports this rationale in a variety of ways (Fischer et al., 2011). The authors found converging evidence across numerous studies that bystanders in clear-cut emergency situations (e.g., the victim is in physical danger) are less affected by the presence of other

bystanders than are those in less dangerous situations (e.g., the victim dropped a pencil). Results also indicated that the bystander effect is more pronounced in situations where no victim is present (e.g., smoke filling a room; someone needs to answer a door or telephone). Further, the bystander effect is reduced when the perpetrator is present (versus absent), and thus posing an increased threat to the victim (Fischer et al., 2006; 2011).

Why might dangerous situations reduce the bystander effect? Several explanations have been offered. The arousal: cost-reward model of helping behavior (Dovidio, Piliavin, Gaertner, Schroeder, & Clark, 1991) posits that bystanders intervene in part in order to reduce their own physiological or psychological arousal. That is, in a situation where more arousal occurs, a bystander should be more inclined to intervene in order to reduce the arousal. Emergency situations that are particularly dangerous may increase bystander arousal (Fischer et al., 2006). Therefore, bystanders witnessing particularly dangerous emergency situations may be less prone to undergoing the bystander effect. Additionally, the rewards of helping (e.g., the reduction of guilt; any social, personal, or material reward) are weighed against the costs of helping (e.g., time, money, effort), and the bystander selects the option that provides the greatest benefit. According to this model, bystanders are most likely to help when costs are low and and/or benefits are high. Further, when both choosing to help or not to help come at a high cost, the bystander may then choose to engage in indirect helping, such as calling for authorities or diffusing responsibility, in order to reduce guilt (Fritzsche, Finkelstein, & Penner, 2000).

Moreover, clearly dangerous emergencies are far less ambiguous than are non-emergency situations. Given that ambiguity reduces helping behavior (Clark & Word 1972; 1974), bystanders may be more likely to intervene because it is obvious that something must be done. This may prevent the pluralistic ignorance (Latané & Nida, 1981) that has been hypothesized to play a role in the bystander effect. Finally, it has been suggested that in dangerous emergencies, particularly when a perpetrator is present, cooperation may be necessary for help to be provided, and thus bystanders can draw on one another for strength in numbers (Fischer et al., 2011). Based on these findings, the bystander effect may be reduced in physical bullying situations, compared to other types of bullying, because physical bullying represents a less ambiguously dangerous situation.

Number of bystanders present. Many studies examining the bystander effect have only looked at the effect of other bystanders as a binary variable: either they are present or they are absent. However, it is likely that the number of other bystanders present may change the size of the bystander effect. As the number of other bystanders increase, it is possible that diffusion of responsibility (Latané & Nida, 1981) increases linearly, leading to any particular bystander being less likely to intervene. It may also be the case that once some number of bystanders are present, additional bystanders provide only diminishing returns (e.g., likelihood of intervention may be different between 1 and 2 bystanders, but may be identical between 20 and 21 bystanders). Meta-analytic findings support the importance of the number of bystanders present (Fischer et al., 2011). When lone bystanders are compared to those in the presence of only one additional bystander, the bystander effect is small, but when lone bystanders are compared to larger groups, it is larger. Differences were also found between one additional bystander and four or more

additional bystanders, but differences were not found between one and two additional bystanders. Overall, the bystander effect is larger when more bystanders are present. Thus, it is important when testing the bystander effect to include groups of participants who are alone, in a small group (e.g., 1-2 other bystanders), and in a larger group (e.g., 4 or more other bystanders).

Sex. As a particularly salient individual difference, sex affects behavior in bullying situations. Boys and girls both engage in bullying behavior, but often do so in different ways. Boys, being more physically aggressive on average, are more likely to engage in direct physical or verbal bullying, and are more likely to be victimized as well (Underwood & Rosen, 2011). While some girls are physically aggressive, girls are often seen as more likely to engage in social or relational aggression, such as rumor spreading or social exclusion. However, a recent meta-analysis of gender differences in indirect aggression found that girls and boys engage in this behavior equally (Card, Stucky, Sawalani, & Little, 2008). This suggests that, while boys are more likely to be bullying perpetrators or victims than girls, it is inaccurate to assume that boys will bully one another physically while girls will bully one another socially.

Sex also affects bystander behavior. Girls, more than boys, tend to intervene on behalf of victims (Hawkins et al., 2001; Oh & Hazler, 2009; Trach et al., 2010). Further, Salmivalli and colleagues (1996) found that girls were more likely to play the role of defender or outsider, while boys were more likely to play the role of reinforcer or assistant. When they do intervene, boys and girls appear to be equally effective in stopping the bullying (Hawkins et al., 2001). These sex differences may represent boys'

and girls' differing strategies to assert themselves within the social hierarchy (Pellegrini & Van Ryzin, 2011).

For adult bystanders, males are more likely to help in “heroic” situations, such as those requiring rescuing a person from physical danger, while females are more likely to help in situations that require compassion or understanding (Eagly & Crowley, 1986). These distinctions appear to reflect traditional gender norms. Other researchers have argued for an “altruistic personality” that is more prone to engage in altruistic or other helping behavior (Batson, Batson, Slingsby, Harrell, Peekna, & Todd, 1991). The sex of the victim may play a role as well. Some evidence suggests that bystanders help same sex victims more because they are in-group members (Levine & Crowther, 2008), while other studies have found that female victims are helped more than male victims (e.g., Austin, 1979). Collectively, no clear pattern has emerged suggesting that males or females are helped more (Fischer et al., 2011). Differing results across studies may be explained by differing group norms (Levine & Crowther, 2008). The degree to which these adult predictors generalize to youth in bullying situations has not been fully explored, and more research in the area is required (Underwood & Rosen, 2011).

Empathy. Empathy has been defined as the ability to understand and feel others' perspectives and emotions (Eisenberg et al., 2010). Empathy includes both cognitive and affective components: a person must both feel the predicted emotion of another him or herself as well as understand that this emotion is a response to the other person's situation (Eisenberg et al., 2010). Empathy has been shown to predict prosocial behavior, including in children (Thornberg, 2007). In bullying situations, high levels of empathy has been found to be associated with defending behavior, and low levels of empathy has

been found to be predictive of bullying behavior (Barchia & Bussey, 2011; Bellmore et al., 2012; Pozzoli & Gini, 2012). In some cases, empathy has been found only to be predictive of defending behavior in girls (Barchia & Bussey, 2011). Interestingly, passive bystanders often display high levels of empathy as well, suggesting that other factors are preventing the transition from feeling an empathetic response to actually engaging in helping behavior (Pozzoli & Gini, 2012). This suggests that, while an important factor to take into account when studying bystander behavior, empathy alone is likely not enough to explain why some students engage in active defending behavior, while others remain passive.

Applying the Bystander Effect to Bullying

Bullying is clearly a social phenomenon that typically happens in the presence of peers who play a tremendous role in its outcome (Craig & Pepler, 2007; Salmivalli, 2010). While bullying situations can elicit helping behavior (as demonstrated by the minority of bystanders who do choose to intervene), several aspects of the bullying dynamic may make intervention particularly difficult. First, compared to adults, youth who witness bullying may not have the skills to intervene successfully. Additionally, power imbalance and repetition make bullying distinctly different from the surprise emergency situations that are typically studied in the adult helping literature (Pozzoli & Gini, 2012). Further, bystanders who are concerned with their own position on the social ladder may face extra costs of helping, and thus be less likely to intervene. Still, bullying situations are similar to other emergencies in that they involve a victim that needs help, and there is a potential risk to bystanders who intervene (Pozzoli & Gini, 2012). Thus, it

can be hypothesized that similar models of helping behavior and the bystander effects itself will apply to youth involved in bullying.

Applying models of helping behavior to school bullying appears to be a natural step in the progression of the literature, yet work in this area has only just begun. Few studies have examined the bystander effect in school-aged youth at all, and those that have used children as participants show mixed results (Fischer et al., 2011; Staub, 1970; Thornberg, 2007). While researchers have directly called for the application of the social psychological literature on helping behavior to bullying (e.g., Espelage et al., 2011), these studies remain very rare.

To begin addressing this need, Pozzoli and Gini (2012) applied the classic five-step model of helping behavior to youth who witness bullying (Latané & Darley, 1968). They used proxy variables for what they felt were the most important steps in the model. They used attitudes towards the victim, personal responsibility to intervene, and approach versus avoidant coping strategies to represent identifying the situation as an emergency, taking responsibility for intervention, and knowing how to intervene, respectively. Their results supported the 5 step model, with a positive attitude towards the victim, a personal sense of responsibility to intervene, and an approach coping strategy being positively associated with defending behavior. Having a negative attitude towards the victim, lacking a sense of responsibility to intervene, and having an avoidant coping strategy were positively associated with passive bystanding behavior (i.e., choosing not to intervene). Further, individuals who perceived that their peers and parents wanted them to intervene were more likely to exhibit defending behavior. Being supportive of the 5 step

model of helping behavior, these results indicate that youth may be prone to similar cognitive processes in helping situations as adults.

Results from other recent studies have also paralleled the adult bystander literature. Using an experimental vignette design, Bellmore and colleagues (2012) found that adolescent bystanders witnessing peer victimization were more likely to help victims who were friends of theirs than they were to help strangers. They also found some evidence for increased helping when other bystanders were friends compared to strangers. Sierksma, Thijs, and Verkuyten (2014) also found that young children (ages 8-12) were more likely to help in the presence of friends. Additionally, early evidence suggests that bystanders are more likely to support the victim when the perpetrator uses direct physical aggression rather than other forms of aggression (Tapper & Boulton, 2005). Bystanders also appear to shape their own behavior based on the behavior of other bystanders; for example, being less likely to exclude others in a virtual game after witnessing bystanders come to the aid of a victim (Howard, Landau, & Pryor, 2014).

Yet a significant gap in the current literature is that no studies have directly tested the bystander effect (i.e., the inhibitory effect of other bystanders on one's own intention to intervene) in bullying situations. Studies have not been conducted that systematically manipulate the number of bystanders present (e.g., no other bystanders present, one other bystander present, and a small group of bystanders present) and its effect on bullying intervention. Given the rich history of this research in the adult literature and the dramatic disparity between the impressive effectiveness of bystander intervention and how few bystanders actually choose to intervene (Hawkins et al., 2001), it is imperative for studies in this area to be conducted. If researchers understand the contextual factors that predict

bystander intervention, they can create, evaluate, and disseminate programs for schools to use to teach and encourage bystanders to intervene, with the ultimate goal of reducing the power and pervasiveness of school bullying.

Summary

Bystanders are present in almost all bullying situations, yet rarely intervene on behalf of the victim. When bystanders do engage in defending behavior, they are very often successful in stopping the bullying. Research from the field of social psychology has demonstrated the importance of several contextual factors that dramatically shift the likelihood that adult bystanders will intervene in emergency situations, including the number of other bystanders present, who those bystanders are, who the victim is, and how dangerous the situation is. However, it is an open question whether this work generalizes to adolescent youth who witness bullying. This study sought to address this gap in the literature by using an experimental vignette design to test whether and when the bystander effect explains passive versus defending bystander behavior in bullying situations. The following sections will describe issues regarding the assessment of bullying and bystander behavior before presenting the research questions and hypotheses for the study.

Assessment of Constructs

The current study sits at the intersection between social psychological research on adults in emergency situations and bystander behavior of youth who witness bullying. It is therefore important to examine the various methodologies used to assess bystander behavior in the bullying literature. The most common methodologies include self-report, peer nomination, teacher nomination, and naturalistic observation.

Self-report. Self-report survey methods are the single most frequently used method in the bullying literature (Cornell & Bandyopadhyay, 2010). Self-report methods are inexpensive and relatively easy and quick to implement (Felix, Sharkey, Greif Green, Furlong, & Tanigawa, 2011). However, self-report measures are prone to certain drawbacks, such as the concern that participants do not accurately report their own behavior. This may be particularly true for negative behaviors such as bullying perpetration or negative bystander behaviors (Pellegrini & Bartini, 2000). Indeed, studies using self-report techniques tend to find less bullying perpetration than studies using other methods (Pellegrini & Bartini, 2000). However, unlike methods that rely on others to report behavior, such as peer nomination and teacher nomination, self-report methods can assess subtle behaviors, attitudes, and perceptions that are unobservable to others (Crothers & Levinson, 2004). Self-report methods have been used in the bystander literature to good effect in retrospective study designs that ask participants to look back and describe a particular bullying episode and how they respond to it (e.g., Bellmore et al., 2012; Oh & Hazler, 2009).

Peer nomination. One of the more common methods of assessing bullying and bystander behavior is through peer nominations (e.g., Salmivalli et al., 1996). Studies using peer nomination procedures ask students to identify peers who they have witnessed performing certain behaviors, whether through matching those behaviors with pictures of peers or by choosing names off a list of their classmates. Students who receive multiple nominations for a behavior can then be identified as likely to engage in a particular behavior (Bellmore, Jiang, & Juvonen, 2010). Peer nomination is often thought to be particularly helpful for assessing bullying situations because of how often peers observe

bullying (Phillips & Cornell, 2012). This method has the advantage of gathering information from multiple sources (i.e., several peers) rather than a single source (i.e., teacher reports, self-reports), which potentially increases its accuracy (Cornell & Mehta, 2011).

Despite these advantages, peer nomination methods present several problems. While generating a list of peers from which students can nominate one another is simple with elementary school children who share a single classroom, older students are involved in much larger and more complex peer networks. This makes it difficult to present a list that is not too large for students to complete in a reasonable amount of time yet still presents enough students to obtain valid data (Bellmore et al., 2010). Peer nomination methods are also prone to response bias, with individuals listed towards the top of the list being selected more frequently than individuals listed later in the list, necessitating careful randomization procedures (Poulin & Dishion, 2008). Others have pointed out that students are also prone to same-ethnicity bias which may obfuscate actual behavior (Bellmore, Nishina, Witkow, Graham, & Juvonen, 2007). In procedures that do not use a generated list, participants tend to suffer from fatigue effects that prevent them from listing more than a few names (Poulin & Dishion, 2008). These negative effects may be particularly prominent in research on bystander behavior because of the high number of bystanders, as well as the difficulty remembering the specific behavior of each individual bystander.

Teacher Nomination. In teacher nomination paradigms, teachers or other adults are asked to nominate students who exhibit a target behavior (Crothers & Levinson, 2004). Teacher nominations are not considered a strong method for assessing bystander

behavior (Pellegrini and Bartini, 2000). While they are valuable for examining other research questions, teachers are often not present when bullying happens, and thus are not able to accurately assess typical bystander behavior (Pellegrini & Bartini, 2000). They may also underestimate the amount of bullying that occurs (Crothers & Levinson, 2004).

Naturalistic Observation. In studies using naturalistic observation, trained observers carefully observe and record student reactions to bullying situations. Observational data has provided important foundations for the field's understanding of bystander behavior (e.g., Atlas & Pepler, 1998; Craig et al., 2000; Hawkins et al., 2001; O'Connell, Pepler, & Craig, 1999). Carefully collected observational data are an excellent way to measure bystander behavior in a way that eliminates self-presentational biases and biases towards others that may be present in nomination data. Additionally, observation has the advantage of not relying on participant recall or predictions of future behavior (Bellmore et al., 2012). However, naturalistic observational studies are not appropriate for experimental data, and have difficulty assessing covert or subtle behaviors (Crothers & Levinson, 2004). Further, they may miss behaviors that systematically occur outside of the observational period, such as bullying that occurs in the restroom, locker room, or away from school (Crothers & Levinson, 2004).

These techniques for measuring bystander behavior that have been frequently used in the bullying literature are all valid means of addressing particular research questions. However, given that the current study is heavily influenced by previous research on the bystander effect, it is important to understand previous methodology used in this domain. The current study integrated methodology for measuring bullying with methodology for measuring the bystander effect.

Methods for assessing the bystander effect. Research on the bystander effect has been applauded for the use of innovative and creative strategies to obtain live experimental data. According to Fischer and colleagues (2011), classic studies on the bystander effect are designed as follows. First, participants are placed in a situation, either alone or in the presence of one or more peers who are confederates in the study, and asked to complete an allegedly important task (e.g., deliver a talk, complete questionnaires). Then, a sudden, staged emergency occurs. Responses to the emergency are recorded, including whether or not a helping response occurs and how long it takes for a helping response to occur. Comparisons are then made to determine if participants helped less frequently and/or took longer to help when other bystanders were present compared to when alone.

These live experimental studies provide some important advantages. First, by placing participants in situations that appear to be real emergencies, actual behavioral data can be collected. These data may provide a better estimate of “real” behavior than asking participants to rate what they would do in a theoretical situation (Latané & Nida, 1981). That is, these experiments have a high amount of external validity. However, a disadvantage is that these studies often require a substantial amount of resources to create. Many rely on hiring and training actors using various props that must be set up for each participant. More importantly, it is difficult to demonstrate that these complicated situations have been set up and performed the exact same way each time. This decreases internal validity, as complete control of all variables in the experiment and replication across participants and across research groups is made very difficult (Fischer et al., 2011; Latané & Nida, 1981).

Several researchers have turned to experimental vignette designs to increase internal validity in studies of the bystander effect. In a vignette research paradigm, participants are asked to imagine themselves experiencing an emergency situation. Next, they are asked to rate how they believe they would respond to that situation (Bellmore et al., 2012). Vignettes can be kept short and modified between experimental conditions in precise ways. This minimizes the uncontrolled variance between what each participant experiences, and thus increases the internal validity in the study. Furthermore, vignettes allow researchers to analyze participant responses in situations that a given participant may not actually experience (Bellmore et al., 2012). This permits the study of behavior in response to rare situations that could not be analyzed via self-report or observational methodologies. Additionally, researchers can avoid the ethical implications that may arise from placing individuals in situations that may actually be dangerous or that may cause unnecessary stress or anxiety (i.e., exposing participants to witnessing a staged aggressive attack). This is particularly important in youth samples.

Still, vignette designs do have drawbacks that are important to take into account. Vignette designs are prone to response biases when participants respond how they feel they should behave rather than how they would actually behave. Thus, vignettes may lead to social desirability effects (Uziel, 2010). Participants may also fail to accurately predict what they would do in a given situation, and thus even if they do not intend to obfuscate their own behavior, they may provide an inaccurate assessment of themselves. Collectively, these concerns decrease the external validity of vignette designs, suggesting that they be corroborated with other methodologies when possible. Despite these issues, the bystander effect has been demonstrated to occur in vignette research paradigms

(Garcia, Weaver, Moskowitz, & Darley, 2002; Levine & Crowther, 2008), including in the context of peer victimization (Bellmore et al., 2012). Still, given that the bystander effect has been adequately demonstrated to occur using methodologies with high external validity, as well as the ethical concerns in placing youth in staged bullying situations, vignette designs may be particularly appropriate for the examining the bystander effect in bullying among school children.

Research Questions and Hypotheses

Based on a review of theory and empirical research, the present study addressed the following research questions and hypotheses:

1. Does the bystander effect occur in bullying situations? That is, does the number of other bystanders present affect the likelihood that an individual will help a fellow student who is being bullied?

Hypothesis 1: Participants will indicate that they are more likely to intervene when alone compared to participants who are in the presence of one or five other bystanders.

Hypothesis 2: Participants will indicate that they are more likely to intervene when in the presence of one other bystander compared to participants who are in the presence of five other bystanders.

2. Does the relationship between bystanders moderate the impact of the bystander effect in bullying situations?

Hypothesis 3: Participants will indicate that they are more likely to intervene when alone compared to participants who are in the presence of one or five other bystanders if the other bystanders are strangers.

Hypothesis 4: Participants will indicate that they are less likely to intervene when alone compared to participants who are in the presence of one or five other bystanders if the other bystanders are friends.

3. Does the sex of the victim affect the likelihood that an individual will help a fellow student who is being bullied?

Hypothesis 5: Participants will indicate that they are more likely to intervene if the victim is female.

4. Are bystanders more likely to intervene when the victim is their own sex?

Hypothesis 6: Participants will indicate that they are more likely to intervene if the victim is their same sex than if the victim is the opposite sex.

5. Are there sex differences in the likelihood of intervening in bullying situations?

Hypothesis 7: Female participants will indicate that they are more likely to intervene than male participants.

6. Does the type of bullying being perpetrated affect the likelihood that an individual will intervene in a bullying situation?

Hypothesis 8: Participants will indicate that they are more likely to intervene in physical bullying situations than in verbal, social/relational, or electronic bullying situations.

Hypothesis 9: Participants will indicate that they are more likely to intervene when alone compared to participants who are in the presence of one or five other bystanders only in the verbal, social/relational, and electronic conditions. Participants will indicate that they are equally likely

to intervene when alone compared to in the presence of one or five other bystanders in the physical bullying condition.

7. Does empathy predict the likelihood that an individual will intervene in a bullying situation?

Hypothesis 10: Empathy will be positively associated with the likelihood of intervention in a bullying situation.

CHAPTER III

METHODS

Participants

Participants for the current study were participants from a larger research study utilizing a participatory action research strategy to collect data in schools across the United States. In the participatory action research framework, researchers work together with community partners to collect data on research questions of interest to all parties (Smith, Davis, & Bhowmik, 2010). Individuals from the community identify areas of need, and researchers work with them to accurately and comprehensively assess these areas. The research study from which participants were drawn has been approved by the University of Nebraska-Lincoln Institutional Review Board for ethical research (IRB# 11297, see Appendix A).

Participants were recruited from high schools in Lincoln, Nebraska. As a part of the participatory action research process, local schools contact the research team for consultation with collecting data on bullying prevention and intervention. Using the participatory action research framework, the school works with the research team to select constructs related to bullying that they are interested in examining. The measures identified in the instrumentation section below were agreed upon with the schools and ultimately included in this dissertation research.

The rationale for the selected sample is as follows. Research on the bystander effect has been primarily relegated to adult populations (Thornberg, 2007), but it is predicted that similar cognitive processes may underlie helping behavior in children (Pozzoli & Gini, 2012). However, few studies have been conducted in this area with

youth as participants, and those that have been conducted are dated and have used pre-school (Caplan & Hay, 1989) or elementary school youth (Staub, 1970). Thus, more research on the bystander effect is needed with the adolescent population. Further, studies on bullying and youth victimization have noted that bullying peaks in adolescence, particularly following the transition to a new school setting (Pellegrini & Long, 2002). Additionally, as youth enter adolescence, peer groups become more salient (Pellegrini & Long, 2002). This may increase the effect that peer bystanders have on helping behavior in bullying situations with this age group, making research during this time period particularly valuable for informing bullying prevention and intervention.

Participants in the current study received no direct benefits. Neither payment nor incentives were given for participation. However, indirect benefits were possible. Through consultation with the students' schools, overall levels of bullying behavior may have decreased, thereby lessening the likelihood that participants experienced bullying first-hand. In addition, participants may have learned about their own coping strategies and reactions to bullying situations or other school issues as presented in the vignettes. Thus, the act of answering questions and thinking about these scenarios might have helped participants think through their own experiences with bullying.

Risks for the current study were anticipated to be minimal. Participants may have experienced mild discomfort when completing the measures. They may have recalled a time in which they have felt bullied, harassed, or teased, or witnessed another student being bullied, harassed, or teased. They may have thought about a bullying situation in which they feel they should have helped the victim but chose not to. To address this risk, a list of available counselors and psychologists in the Lincoln community was provided

to all participants as well as their parents or guardians (see Appendix B). This list was provided during the parent consent process as well as the debriefing process.

Instrumentation

Demographics. Demographics were collected through a brief, self-report questionnaire. Selected items from the Bully Survey – Student Version (Swearer, 2001) were used to collect demographic information. Participants reported their sex, age, grade, and ethnicity. The demographics form is available in Appendix C.

Bystander Vignettes. Each participant read four different vignettes depicting bullying behavior directed at a single victim. Vignettes were adapted from previous research on the bystander effect (Levine & Crowther, 2008) and bystander behavior in bullying situations (Bellmore et al., 2012). Each vignette described a setting, what behavior is being performed by the perpetrator, and what others, if any, are also present.

Levine and Crowther (2008) used vignettes to address the impact of relationships between bystanders on helping behavior in adults. In their vignettes, participants imagined walking in the street in the presence of either one or five friends or strangers. Then, participants imagined witnessing a male perpetrator violently attack a female victim and participants rated how they would respond using Likert-type scales. This vignette design allowed the researchers to experimentally manipulate the number of bystanders present and what their relationship was with the participant.

Bellmore and colleagues (2012) used similar vignettes in their study on reactions to bullying behavior in children. Like Levine and Crowther (2008), these researchers asked participants to imagine themselves in a particular setting and witnessing an aggressive situation. Unlike Levine and Crowther (2008), their vignettes depicted a more

developmentally appropriate incident (i.e., the perpetrator “threatens” the victim rather than violently attacking her). The full text of a sample vignette from this study is:

Imagine that you arrive to class early and notice that 3 other girls are already there in the classroom. When you sit down at your desk, you notice that one girl is threatening another girl who is your friend. Another friend of yours also sees what’s happening. (Bellmore et al., 2012, p. 1275)

The vignettes for the current study were based on these previously used vignettes, but were adapted in several important ways to better address the present research questions. First, previous vignettes used aggressive behavior that does not meet the definition of bullying. They do not include any reference to a power differential between the perpetrator and the victim, and there is no indication of repetition. The vignettes in the current study included a reference to power imbalance by having two perpetrators rather than one aggressing against a single victim. They also included a statement that “[the perpetrators] have done this to this person before in the past” suggestive of repetition. Second, the current vignettes used one of four behaviors representative of each of the four types of bullying (i.e., physical, verbal, social, electronic). Third, the relationship between the participant and the victim was not identified, as this is not a research question being addressed in the current study. Instead, the sex of the victim was manipulated across vignettes. Finally, the sex of the perpetrator was not specified, as this is again not a research question being specifically addressed in the current study.

Sample vignettes for the current study are available in Appendix D. Vignettes were systematically varied from one another in four ways, which provide the four

primary independent variables for the current study. First, the type of bullying being perpetrated was varied. In the physical condition, participants imagined the perpetrators pushing the victim. In the verbal condition, the participants imagined the perpetrators making fun of the victim. In the social condition, participants imagined the perpetrators spreading a rumor about the victim. The electronic condition was phrased slightly differently due to the different means by which electronic bullying is perpetrated. In this condition, participants imagined themselves in a computer lab setting rather than a typical classroom, and pictured the perpetrators using Instagram (a popular social media platform among high school youth) to aggress against the victim.

Second, the sex of the victim was systematically varied as being either male or female. Third, the number of other bystanders present was varied between zero, one, and five. While previous vignette studies have often used two conditions for this variable (e.g., zero and one other bystander(s), Bellmore et al., 2012; one and five other bystander(s), Levine & Crowther, 2008), the primary researcher felt that including three groups was important because of the evidence of different magnitudes of the bystander effect between zero others, a small group of one or two others, and a larger group of four or five others (Fischer et al., 2011). Finally, the relationship between the participant and the other bystanders was varied, with one condition indicating that they are in-group members (i.e., “friends”) and one condition indicating that they are out-group members (i.e., “student(s) you do not know”). This differs from previous research that typically includes a third group of others that are in-group members but not friends (e.g., classmates). This condition was excluded in the current study due to findings that helping

behavior does not significantly differ between imagining classmates and imagining groups of friends (Bellmore et al., 2012).

Each participant read and responded to one physical, one verbal, one social, and one electronic bullying vignette, in random order. Each of these vignettes varied the sex of the victim, the number of bystanders present, and the relationship between the bystanders and the participant at random. Thus, the type of bullying was a within-subject variable. Sex of the victim, number of bystanders present, and the relationship between the participant and bystanders was a between-subject variable.

Hypothetical helping behavior. As has been done in previous research using vignette methodology (Bellmore et al., 2012; Levine & Crowther, 2008), hypothetical helping behavior was primarily assessed using a single item dependent variable. Responses to each vignette were analyzed separately. Upon reading each vignette, participants were asked to rate on a 9 point Likert type scale (with 1 being “*not likely at all*” and 9 being “*very likely*”) “*How likely would you be to help the person [being pushed/being made fun of/having a rumor spread about him or her/having messages being left about him/her on Instagram]?*” Higher scores on this item indicated greater hypothetical helping behavior. The first vignette completed by participants was repeated as a fifth and final vignette to allow for the assessment of test-retest reliability. Test-retest reliability for the physical bullying vignette in the current study was .568. Test-retest reliability for the verbal bullying vignette was .814. Test-retest reliability for the social bullying vignette was .526. Finally, test-retest reliability for the electronic bullying vignette was .452. Data from the repeated vignette was not included in other analyses.

Additionally, and again in accordance with previous literature (Bellmore et al., 2012; Levine & Crowther, 2008), participants were asked to rate their own likelihood of performing a variety of common bystander behaviors. These behaviors include ignoring or staying out of the situation, keep watching but do nothing, leave the area, tell an adult or authority figure, tell the perpetrators to stop, and trying to comfort or befriend the person being victimized later on. These behaviors were rated on a 9 point Likert type scale (with 1 being “*not likely at all*” and 9 being “*very likely*”). These behaviors were selected as options due to being identified as common bystander behaviors (Trach et al., 2010). Items included are available in Appendix E.

Empathy. Empathy was measured using the 28-item Interpersonal Reactivity Index (IRI, Davis, 1983, Appendix F). Participants read each item of the IRI and respond using a 9 point Likert type scale (with 1 being “*Strongly Disagree*” and 9 being “*Strongly Agree*”). Higher scores indicated higher levels of empathy.

The IRI is a very common and psychometrically sound measure of empathy (Hawk et al., 2013). The IRI consists of four subscales. The perspective taking subscale (i.e., considering the viewpoints of others) and the fantasy proneness subscale (i.e., the ability to identify with fictional characters in books and films) address the cognitive component of empathy. The empathetic concern subscale (i.e., sympathy for others who are in need) and the personal distress subscale (i.e., the self-oriented negative arousal felt in response to others’ distress) address the affective component of empathy. The four subscales can be added together to create a single, higher-order measure of empathy.

The IRI has been shown to have strong construct validity in adolescents, with correlations in the expected direction and magnitude for sex, helping behavior,

aggression, and other constructs (Hawk et al., 2013). Confirmatory factor analysis has demonstrated that the four factor solution originally proposed for the IRI continues to hold for adolescents (Hawk et al., 2013). Cronbach's α for each subscale have been found to range from .67 to .87 in adolescent samples (Hawk et al., 2013). In the current study, Cronbach's α for the full scale version was found to be .839.

Procedures

Data collection for the current study was subsumed within a larger, ongoing study. A flowchart describing the data collection procedures of this larger study is presented in Appendix G. All graduate-level researchers involved in the data collection process had received training by the Collaborative Institutional Training Initiative (CITI). A signed letter of interest and support from the selected high schools was obtained and given to the IRB for approval prior to data collection at the participating schools (see Appendix H for a sample letter).

Each participant was under the age of 19, and thus required parental consent to participate. Two weeks prior to data collection, electronic consent forms were sent to parents of each student in the school. Parents received an e-mail message from the school's principal with a web link to the electronic consent form. Included in the consent form was information that described the study, its purpose, its length, as well as any potential risks and benefits (see Appendix I). Information about referral sources for counseling or therapy was also provided in the e-mail (see Appendix B). One week after the initial electronic consent form was sent, a follow-up message was sent to remind parents to complete the consent form.

Following the completion of the consent process, a roster of individuals was created with the names of each student who received parental consent to participate in the study. The roster was kept in a password protected electronic file and shared only with the administrators at the schools. The exclusive purpose of the roster was to identify students who had the opportunity to participate; names were not linked to survey responses in any way.

Students with consent to participate were brought during an assigned time to a computer lab to complete the study measures electronically. Students without consent to participate completed an alternative activity delivered by their classroom teachers. Questionnaires were delivered using Qualtrics Survey Software. Students each had their own computer terminal on which to complete the study, and were asked not to look at the responses of students who were near them.

First, students completed the electronic assent process. Students were given the opportunity to read an assent form (Appendix J) and decide whether they wished to participate. Students who chose not to participate were excused. Students who chose to continue completed the vignettes and questionnaires.

Participants next read brief instructions on how to complete the vignettes. Then, participants were presented with the first vignette and questions regarding how they would respond. Participants were then given a chance to read and respond to the remainder of the vignettes. Therefore, participants completed a total of four vignettes, one for each type of bullying (physical, verbal, social, electronic). Type of bullying was counterbalanced to avoid order effects. The remaining variables on the vignettes (sex of the victim, number of other bystanders present, relationship between the participant and

other bystanders) was randomized. Participants then completed the remainder of the questionnaires (counterbalanced). Finally, participants were debriefed by being provided with a brief summary before being thanked for their time and debriefed.

Analyses

Preliminary analyses. All statistical analyses were conducted using the Statistical Package for the Social Sciences (SPSS) Version 21 software. Empathy and demographic variables, including sex, were analyzed first. Variables that had a significant relationship or effect on hypothetical helping behavior were entered as covariates when appropriate for further analyses. Cronbach's alpha was calculated for all continuous variables. Means, standard deviation, and skewness were calculated for each dependent variable.

As Analysis of Variance (ANOVA) was used to examine the majority of research questions, it is important to discuss and test the assumptions of this analytic method. An ANOVA has several assumptions that must be met prior to interpretation (Leech, Barrett, & Morgan, 2011). The first is that all observations are independent; that is, that each participant's responses are not systematically related to other participants' responses. This assumption is typically met when random sampling is used. The second is homogeneity of variance; that is, that the variances of each group are approximately equal. To test for this, Levene's statistic was calculated. If Levene's statistic is significant, then the variances are significantly different from one another and the assumption of homogeneity of variances is violated. If Levene's statistic is non-significant, then the variances do not significantly differ from one another and the assumption is tenable. The final assumption is that the dependent variable is normally

distributed, which can be determined by analyzing its' skewness (Leech et al., 2011).

These assumptions were tested prior to conducting other statistical analyses.

Data Analytic Strategy. Various forms of ANOVAs were the primary data analysis strategy. This is because ANOVAs are useful for testing for significant differences between categorical predictors (such as those included in a vignette design) on continuous outcome variables. When appropriate, Analyses of Covariance (ANCOVA), repeated measures ANOVAs, mixed ANOVAs, or regression analysis were used. The specific data analytic strategy for each research question is outlined below. “Hypothetical helping behavior” will refer to responses to the likelihood of helping item following each vignette, with higher scores indicating that participants were more likely to provide help.

Research Question 1. To determine if group size affects hypothetical helping behavior overall, a one-way ANOVA was conducted with the categorical number of other bystanders present (zero, one, or five) entered as the predictor variable and the continuous likelihood of helping item entered as the dependent variable. If empathy or any demographic variables was found to be predictive of hypothetical helping behavior, they were entered as covariates (thus, an ANCOVA was used). If there was a significant difference between the number of bystanders present, mean differences were used to determine the direction of the effect. If hypothetical helping behavior was significantly higher in the zero bystander condition, then Hypothesis 1 would be supported. If hypothetical helping behavior was significantly higher in the one bystander condition than the five bystander condition, then Hypothesis 2 would be supported.

Research Question 2. To determine if the relationship between the participant and other bystanders moderates the effect of group size on hypothetical helping behavior, a 2 (other bystanders are friends, other bystanders are strangers) x 3 (zero, one, or five other bystanders are present) factorial ANOVA with hypothetical helping behavior as the dependent variable was conducted. If empathy or any demographic variables were found to be predictive of hypothetical helping behavior, an ANCOVA was conducted instead with the significant variables entered as covariates. If a significant interaction was found between the predictor variables, post-hoc analyses were used to probe for significant effects. Hypotheses 3 and 4 predict a specific interaction effect; namely, that the effect of the number of bystanders present on hypothetical helping behavior would differ based on the relationship between the participant and the other bystanders (i.e., they are friends versus strangers). Hypothesis 3 would be supported if, when other bystanders are strangers, participants were significantly more likely to help when alone compared to with one or five other bystanders. Hypothesis 4 would be supported if, when other bystanders are friends, participants were significantly *less* likely to help when alone compared to with one or more bystanders.

Research Question 3. To determine if the sex of the victim affects hypothetical helping behavior, a one-way ANOVA was conducted with sex of the victim entered as the predictor variable and likelihood of helping entered as the dependent variable. If empathy or any demographic variables were found to be predictive of hypothetical helping behavior, an ANCOVA was conducted instead with the significant variables entered as covariates. Hypothesis 5 would be supported if participants were significantly more likely to help female victims compared to male victims.

Research Question 4. To determine if participants are more likely to help victims of their own sex, a one-way ANOVA was conducted. Participants who were the same sex as the victim (i.e., male-male, female-female) were compared to participants who are the opposite sex as the victim (i.e., female-male, male-female). If empathy or any demographic variable was found to be predictive of hypothetical helping behavior, an ANCOVA was conducted instead with the significant variables entered as covariates. Hypothesis 6 would be supported if participants were significantly more likely to help victims of their own sex than victims of the opposite sex.

Research Question 5. To determine if there are overall sex differences in hypothetical helping behavior, a one-way ANOVA was conducted with sex as the predictor variable and hypothetical helping behavior as the dependent variable. If empathy or any demographic variable be found to be predictive of hypothetical helping behavior, an ANCOVA would be conducted instead with the significant variables entered as covariates. Hypothesis 7 would be supported if female participants were significantly more likely to help than were male participants.

Research Question 6. To determine if the type of bullying being perpetrated affects hypothetical helping behavior, a repeated-measures ANOVA was conducted. A repeated-measures ANOVA is appropriate for this research question, and more specifically Hypothesis 8, because the type of bullying variable is a within-subjects variable. If empathy or any demographic variable was found to be predictive of hypothetical helping behavior, a repeated measures ANCOVA would be conducted instead with the significant variables entered as covariates. Hypothesis 8 would be

supported if participants were significantly more likely to help in physical bullying situations than in verbal, social, or electronic bullying situations.

Hypothesis 9 was addressed using one-way ANOVAs for each type of bullying, with the number of bystanders present entered as the predictor variable and hypothetical helping behavior entered as the dependent variable. If empathy or any demographic variable was significant, they were entered as covariates in the design. Hypothesis 9 would be supported if participants were significantly more likely to help in the zero other bystanders condition compared to the one and five other bystanders conditions *only* in the verbal, social, and electronic bullying conditions. Additionally, for Hypothesis 9 to be supported, participants must be equally likely to help in the zero, one, and five other bystander conditions only in the physical bullying condition. In other words, Hypothesis 9 predicts that the bystander effect does not occur in the physical bullying condition.

Research Question 7. To determine if empathy predicts the likelihood of helping, a simple linear regression was conducted with total scores for the IRI entered as the predictor variable and hypothetical helping behavior entered as the outcome variable. Hypothesis 10 would be supported if higher scores on the IRI are positively associated with higher likelihood of helping.

CHAPTER IV

RESULTS

Sample Characteristics

A total of 239 participants from three Midwestern high schools received consent and assented to participate in this study. Demographic information was available from 228 participants (95.4%). The majority of participants ($n = 140$, 61.4%) attended School A, while 83 attended School B (36.4%) and 5 attended School C (2.2%). In the total sample, the sex distribution was 50.9% male ($n = 116$), 46.9% female ($n = 107$), and 2.2% other ($n = 5$). A total of 11 participants did not report their sex (4.6%). Participants ranged in age from 14 to 18 years old, with a mean age of 15.94 ($SD = 1.24$). The majority of participants were White ($n = 195$, 85.53%). Sex [$\chi^2(4, N = 228) = .265, p = .992$], grade [$\chi^2(6, N = 228) = 10.45, p = .11$], and ethnicity [$\chi^2(22, N = 228) = 8.77, p = .994$] did not differ by school. Age also did not differ by school, $F(2, 225) = 1.1, p = .334$. Detailed frequencies and demographic characteristics for the participants from each school and the total sample are provided in Table 1.

The sample was compared to whole-school enrollment data for each high school in order to examine if the participants for the current study were demographically similar to students enrolled in their respective schools. Information about student sex, grade, and ethnicity for the year the study was conducted was obtained via publically available data on the school district's website for the school year 2014-2015 (Lincoln Public Schools, 2015). Two-sample Z-tests for proportions were conducted comparing the proportion of participants in the sample for each demographic characteristic to their specific schools (e.g., the proportion of female participants from School A was compared to the

proportion of female students enrolled in School A). Due to the small number of participants from School C ($n = 5$), these comparisons were made only for School A and School B.

For School A, the proportion of female participants from School A was not significantly different than the proportion of female students enrolled in School A, $z = .40$, $p = .69$. The proportion of participants from School A in each grade was also not significantly different than the proportion of students in each grade enrolled in School A, z 's < 1.67 , p 's $> .095$. For ethnicity, the proportion of participants from School A who identified as White, African American, Asian, Hispanic, and Biracial was not significantly different than students enrolled in School A, z 's < 1.32 , p 's $> .18$. However, the proportion of participants from School A who identified as Native American was significantly higher than the proportion of Native American students enrolled in School A, $z = 2.36$, $p = .02$. Thus, the sample of students from School A was demographically similar to students enrolled in School A for sex and grade, but participants were more likely to be Native American.

For School B, the proportion of female participants from School B was not significantly different than the proportion of female students enrolled in School B, $z = .09$, $p = .93$. The proportion of participants from School B in each grade was also not significantly different than the proportion of students in each grade enrolled in School B, z 's < 1.63 , p 's $> .10$. For ethnicity, the proportion of participants from School B who identified as Native American, African American, and Asian was not significantly different than the proportion of students enrolled in School B, z 's < 1.14 , p 's $> .25$. However, the proportion of participants from School B who identified as White was

significantly higher than the proportion of White students in School B, $z = 2.12$, $p = .04$. Additionally, the proportion of participants from School B who identified as Hispanic was significantly lower than the proportion of Hispanic students in School B, $z = 2.36$, $p = .01$, and the proportion of participants from School B who identified as Biracial was significantly lower than the proportion of Biracial students enrolled in School B, $z = 2.52$, $p = .01$. Thus, the sample of students from School B was demographically similar to the enrollment at School B for sex and grade. However, the proportion of White students was significantly higher than would be expected, and the proportion of Hispanic and Biracial students was significantly lower than would be expected. Expected proportions and z statistics for each comparison are presented in Table 2.

Participants each completed five vignettes. First, they completed a vignette for each type of bullying (physical, verbal, social, and electronic), leading to a potential total of 956 vignettes available for analysis. Of these, responses to 34 vignettes were missing, leaving 922 total vignettes for analysis (230 describing physical bullying, 231 describing verbal bullying, 231 describing social bullying, and 230 describing electronic bullying). Additionally, the first vignette completed by participants was repeated as their fifth and final vignette to allow for the assessment of test-retest reliability. Data from this final vignette were not included in other analyses. Participant responses to the primary dependent variable (e.g., “How likely would you be to help the person being punched?”) ranged from one to seven with a mean score of 5.28 ($SD = 1.54$). The distribution was negatively skewed (Skewness = $-.87$). Notably, 54.01% of responses were a six or seven on the seven point scale.

Preliminary Analyses

Examination of the test-retest reliability for the primary dependent variable (hypothetical helping behavior) was conducted by calculating the correlation between responses to the first and fifth (i.e., the repetition of the first) vignettes completed. Reliability was calculated separately for each type of bullying. The test-retest reliability for the verbal bullying vignette was found to be highest ($r = .814, p < .001$). The test-retest reliabilities for the physical ($r = .568, p < .001$), social ($r = .526, p = .002$), and electronic ($r = .452, p = .004$) bullying vignettes were found to be lower.

Empathy. Internal consistency for the Interpersonal Reactivity Index (IRI) was strong, Cronbach's $\alpha = .839$. To determine if empathy had a significant relationship with hypothetical helping behavior, correlations were calculated between the full scale IRI and responses to each type of vignette. Significant correlations were found between the IRI and all four vignette types, $r's > .17, p's < .05$. Accordingly, the full scale IRI was used as a covariate when conducting analyses that used the vignettes as dependent variables.

Demographic variables. Demographic variables were analyzed in order to determine if they had a significant relationship with hypothetical helping behavior. Four one-way analyses of variance (ANOVAs) were conducted to evaluate the effect of school attended on hypothetical helping behavior for each type of vignette (i.e., physical, verbal, social, electronic). The ANOVAs were each not significant, $F's (2,225) < 1, p's > .4$, indicating that school did not predict hypothetical helping behavior. To determine if age had a significant relationship with hypothetical helping behavior, correlations were calculated between age (as a continuous variable ranging from 14-18) and hypothetical helping behavior for each type of vignette. The correlations were each not significant, $r's$

$< .15$, p 's $> .1$, indicating that age was not associated with hypothetical helping behavior. Similarly, grade [F 's (3, 224) < 2.2 , p 's $> .05$] and race [F 's (7,220) < 1.4 , p 's $> .25$] were not found to significantly predict helping behavior.

However, sex was found to predict hypothetical helping behavior. Participants who indicated that their sex was "other" were excluded from this analysis due to a small sample size ($n = 5$). Female participants were significantly more likely to say they would help than males on the verbal [F (1,226) = 7.25, $p < .01$], social [F (1,226) = 6.82, $p < .01$], and electronic [F (1, 226) = 6.77, $p < .01$] bullying vignettes. Sex was not found to significantly predict hypothetical helping behavior on the physical bullying vignette, F (1,226) = 1.5, $p > .1$. Accordingly, sex was used as a covariate when conducting analyses that used the vignettes as dependent variables. Means and standard deviations are presented in Table 3.

Research Question 1

The goal of the first research question was to assess whether or not group size (i.e., the number of bystanders present) had an overall effect on hypothetical helping behavior. Hypothesis 1 predicted that hypothetical helping behavior would be significantly higher in the zero bystander condition than in the one or five bystander condition. Meanwhile, hypothesis 2 predicted that hypothetical helping behavior would be significantly higher in the one bystander condition than in the five bystander condition. To address these hypotheses, a one-way ANCOVA was conducted with the number of other bystanders present (zero, one, or five) entered as the predictor variable, hypothetical helping behavior entered as the dependent variable, with empathy and sex entered as covariates. The Levene test of homogeneity of variances was not significant,

indicating that variances were not significantly different across conditions. The ANCOVA was not significant, $F(2, 891) = .587, p = .556$. Thus, hypothesis 1 and hypothesis 2 were not supported. Means and standard deviations are presented in Table 4.

Research Question 2

The goal of the second research question was to assess whether or not the relationship between the participant and the other bystanders moderated the relationship between group size and hypothetical helping behavior. Hypothesis 3 predicted a significant interaction effect where hypothetical helping behavior would be higher in the zero bystander condition than the one or five other bystanders conditions when other bystanders were strangers. Hypothesis 4 predicted that hypothetical helping behavior would be lower in the zero bystander condition than the one or five other bystanders conditions when other bystanders were friends. To address these hypotheses, a 2 (friends, strangers) x 3 (zero, one, or five other bystanders) factorial ANCOVA was conducted with hypothetical helping behavior as the dependent variable and empathy and sex entered as covariates. The Levene test of homogeneity of variances was not significant, indicating that variances were not significantly different across conditions. The main effect for number of bystanders present was not significant, $F(1, 889) = .11, p = .74$. The main effect for the relationship between the participant and the other bystanders was also not significant, $F(1, 889) = .08, p = .98$. While the interaction term was in the predicted direction (see Figure 1), it was not significant, $F(1, 889) = .53, p = .47$. Thus, hypothesis 3 and hypothesis 4 were not supported. Means and standard deviations are presented in Table 5.

To further explore this research question, post hoc analyses were conducted to determine if a potential bystander effect was observed for specific types of bullying. A series of 2 (friends, strangers) x 3 (zero, one, or five other bystanders) factorial ANCOVAs were conducted with hypothetical helping behavior as the dependent variable and empathy and sex as covariates, each including results from only one type of bullying. For physical bullying, the main effect for the number of bystanders present was nonsignificant, $F(1, 215) = .36, p = .55$. The main effect for the relationship between the participant and the other bystanders was also not significant, $F(1, 215) = 2.12, p = .15$. The interaction term was not significant, $F(1, 215) = .08, p = .78$. For verbal bullying, the main effect for the number of bystanders present was nonsignificant, $F(1, 218) = .20, p = .89$. The main effect for the relationship between the participant and the other bystanders was not significant, $F(1, 218) = .002, p = .96$, and the interaction term was not significant, $F(1, 218) = 1.37, p = .24$. Electronic bullying showed similar results, with the main effect for the number of bystanders present being nonsignificant, $F(1, 218) = .65, p = .42$, the main effect for the relationship between the participant and other bystanders being nonsignificant, $F(1, 218) = .24, p = .62$, and the interaction term being nonsignificant, $F(1, 218) = .37, p = .54$.

For social bullying, the main effect of the number of bystanders present [$F(1, 218) = .06, p = .81$] and the relationship between the participant and other bystanders [$F(1, 218) = .22, p = .64$] were nonsignificant. However, the interaction term was marginally significant, $F(1, 218) = 2.95, p = .09$. The mean differences were in the predicted direction, with additional bystanders inhibiting hypothetical helping behavior when they were strangers, but increasing hypothetical helping behavior when they were

friends (see Table 6 for means and standard deviations). Thus, marginally significant evidence for the predicted bystander effect was observed in social bullying only.

Research Question 3

The goal of the third research question was to assess whether or not the sex of the victim impacted hypothetical helping behavior. Hypothesis 5 predicted that participants would be significantly more likely to help female victims compared to male victims. To address this hypothesis, a one-way ANCOVA was conducted with sex of the victim as the predictor, hypothetical helping behavior as the dependent variable, and empathy and participant sex entered as covariates. The Levene test of homogeneity of variances was not significant, indicating that variances were not significantly different across conditions. The ANCOVA was not significant, $F(1, 892) = 2.08, p = .150$ (see Table 7 for means and standard deviations). Thus, hypothesis 5 was not supported.

Research Question 4

The goal of the fourth research question was to assess whether or not participants were more likely to help victims of their own sex. Hypothesis 6 predicted that participants would be more likely to help victims of their own sex than victims of the opposite sex. To address this hypothesis, a one-way ANCOVA was conducted examining whether or not the sex of the participant matched the sex of the victim as the predictor, with helping behavior as the dependent variable and empathy and participant sex entered as covariates. The Levene test of homogeneity of variances was not significant, indicating that variances were not significantly different across conditions. The ANCOVA was not significant, $F(1, 872) = .68, p = .41$ (see Table 8 for means and standard deviations). Thus, Hypothesis 6 was not supported.

Research Question 5

The goal of the fifth research question was to assess whether or not participant sex (i.e., male, female; participants indicating “other” for sex were excluded from the analysis) predicted hypothetical helping behavior. Hypothesis 7 predicted that female participants would be more likely to help than male victims. The Levene test of homogeneity of variances was significant, $F(1, 874) = 9.5, p = .002$, indicating the assumption of homogeneity of variances was violated. Additionally, the Shapiro-Wilk test was significant (.882), $p < .001$, indicating that the assumption of normality was also violated. Therefore, the nonparametric Kruskal-Wallis H test was utilized to test Hypothesis 7. Female participants were found to be significantly more likely to help than were male participants, $\chi^2(1) = 33.28, p < .001$ (see Table 9 for means and standard deviations). Thus, hypothesis 7 was supported.

To further explore this hypothesis, post hoc analyses were conducted to examine if females were more likely than males to provide help for each type of bullying. A series of ANCOVAs were conducted with participant sex entered as the predictor, hypothetical helping behavior entered as the dependent variable, and empathy entered as a covariate. The Levene test of homogeneity of variance was nonsignificant for each type of bullying, indicating that the assumption of homogeneity of variances was tenable. The results indicated no significant difference between males and females for physical bullying, $F(1, 217) = .01, p = .905$, or verbal bullying, $F(1, 217) = 2.24, p = .14$. Marginal differences were found for social bullying, with females being more likely to help than males, $F(1, 217) = 3.74, p = .054$. A significant difference was found for electronic bullying, again with females being more likely to help than males, $F(1, 217) = 6.73, p = .01$. Thus, sex

differences were found only for indirect forms of bullying (social, electronic), but not for direct forms (physical, verbal). Means and standard deviations are presented in Table 9

Research Question 6

The goal of the sixth research question was to assess whether or not the type of bullying being perpetrated had an overall effect on hypothetical helping behavior. Hypothesis 8 predicted that participants would be more likely to help in the physical bullying condition than in the verbal, social, or electronic bullying conditions. To address this hypothesis, a repeated measures ANCOVA was conducted with type of bullying entered as the predictor variable, hypothetical helping behavior entered as the dependent variable, and empathy and participant sex entered as covariates. The assumption of sphericity was violated; thus, the Greenhouse-Geisser correction was used. Results indicated that hypothetical helping behavior was significantly different across types of bullying, $F(2.84, 629.76) = 6.55, p < .001, \eta^2 = .029$ (see Table 10 for means and standard deviations). Pairwise comparisons were conducted to examine the pattern of mean differences; the results indicated that participants in the physical bullying condition were significantly more likely to help than were participants in the verbal condition ($p < .001$), social condition ($p < .001$), and electronic condition ($p < .001$). Additionally, participants in the verbal condition were significantly more likely to help than were participants in the social ($p < .001$) and electronic ($p < .001$) conditions. Hypothetical helping behavior did not significantly differ between the social and the electronic conditions ($p = .068$). Thus, Hypothesis 8 was supported.

Hypothesis 9 predicted that participants would be significantly more likely to help when no bystanders were present (compared to one or five other bystanders present) only

in the verbal, social, and electronic bullying conditions, but not in the physical bullying condition. To address this hypothesis, a one-way ANCOVA was conducted for each type of bullying with number of bystanders present entered as the predictor variable, hypothetical helping behavior entered as the dependent variable, and empathy and participant sex entered as covariates. While the results trended in the predicted direction (see Figure 2), the differences were nonsignificant, F 's < 1.23 , p 's $> .28$ (see Table 11 for means and standard deviations). Thus, the number of bystanders present did not predict hypothetical helping behavior for any type of bullying, and hypothesis 9 was therefore not supported.

Research Question 7

The goal of the seventh research question was to assess whether or not empathy predicted hypothetical helping behavior. Hypothesis 10 predicted that empathy would be positively associated with a higher likelihood of helping. To address this hypothesis, a simple linear regression was conducted with total scores for empathy entered as the predictor variable and hypothetical helping behavior entered as the outcome variable. The results indicated a significant positive relationship between empathy and hypothetical helping behavior, $F(1, 894) = 50.72$, $p < .001$. Thus, hypothesis 10 was supported.

CHAPTER V

DISCUSSION

The purpose of this study was to examine if the classic bystander effect (i.e., the inhibitory effect of the presence of other bystanders on any individual bystander's likelihood of helping) might be a factor in bullying situations in adolescence.

Importantly, this study also examined critical moderators of a potential bystander effect that have been previously identified in the broader literature on helping behavior (Fischer et al., 2011), but have not yet been applied to bullying or peer victimization. These moderators included important aspects of the bullying situation (i.e., the relationship between bystanders, the sex of the victim, the type of bullying being perpetrated) and individual characteristics (i.e., participant sex, empathy) that are likely to influence helping behavior. While previous research on the bystander effect has typically exposed participants to staged emergencies, ethical considerations prohibit the use of these methodologies with youth. Thus, the current study utilized a vignette research design.

Ultimately, the results of the current study did not find evidence of the bystander effect among adolescents in these hypothetical vignettes. However, in line with and building upon previous research in adult populations, several variables were found to have a significant influence on hypothetical helping behavior. These results extend the broader literature on helping behavior in adults to adolescent youth who witness bullying, which may have implications for designing and implementing programs that encourage bystanders to intervene in bullying. In this chapter, the results of each hypothesis and their implications for research are discussed. Additionally, study limitations, directions for future research, and clinical implications are identified.

Research Question 1

The purpose of the first research question was to assess if group size (i.e., the number of bystanders present) had an overall effect on hypothetical helping behavior. Two specific hypotheses were made. The first hypothesis predicted that hypothetical helping behavior would be significantly higher in the zero bystander condition than in the one or five bystander conditions. This hypothesis was generated based on previous research using adult samples (Latané & Nida, 1981) and adolescent samples (Bellmore et al., 2012) indicating that bystanders are less likely to help in emergency situations when other bystanders are present. The second hypothesis was that hypothetical helping behavior would be significantly higher in the one bystander condition than the five bystander condition. This hypothesis was generated based on meta-analytic research indicating that the bystander effect is generally more pronounced in large groups than in small groups (Fischer et al., 2011). Neither hypothesis was supported, as significant differences were not found in hypothetical helping behavior between groups with zero, one, or five other bystanders present. Thus, the classic bystander effect was not observed in this study.

These results stand in contrast to previous research in the area. Previous studies have consistently found the classic bystander effect using both staged emergency methodologies (e.g., Darley & Latané, 1968a) and vignette methodologies (e.g., Bellmore et al., 2012, Levine et al., 2005). Specifically, as the number of other bystanders increased, the likelihood of an individual bystander helping decreased (Latané & Nida, 1981). These results were not observed in the current study, as group size did not affect helping estimates.

A number of differences in the current study compared to previous research may account for these results. First, asking participants to imagine different numbers of bystanders present may not have been a powerful enough manipulation to affect their responses to the vignettes, particularly in comparison to other vignette differences (e.g., type of bullying being perpetrated). That is, the difference between imagining zero, one, or five other bystanders may not have been salient enough to test the bystander effect. Additionally, completing multiple similar vignettes may have decreased the saliency of the more subtle differences between those vignettes (e.g., number of bystanders present). Alternatively, previous research has clearly demonstrated the importance of a particularly critical moderating variable: the relationship between bystanders. The analyses for these hypotheses did not account for whether the imagined bystanders were friends of the participant or strangers. The second research question took this moderator into account.

Research Question 2

The purpose of the second research question was to examine if the relationship between the vignette participant and other bystanders moderated the effect of group size on hypothetical helping behavior. Two specific hypotheses (Hypothesis 3 and Hypothesis 4) were made. Hypothesis 3 predicted that, when other bystanders in the vignettes were strangers, the classic bystander effect would be observed as participants who were with zero other bystanders would be more likely to help than participants with one or five other bystanders present. This hypothesis most closely reflects classic research on the bystander effect: until the turn of the century, nearly all research on the bystander effect used participants who did not know one another (Levine, 1999). Hypothesis 4 predicted the opposite: when other bystanders were friends, the classic bystander effect would be

reversed, such that participants who were with one or five other bystanders would be more likely to help than participants with zero other bystanders. This hypothesis was made based on modern research on the bystander effect that has strongly emphasized the importance of these relationships. Specifically, being with friends (as opposed to strangers) has been found to actually encourage intervention rather than inhibit it (Fischer et al., 2011; Levine et al., 2002; Levine & Crowther, 2008).

Neither Hypothesis 3 nor 4 were supported in the current study, as the main effect for both the number of bystanders present in the vignette and who those bystanders were was nonsignificant. Additionally, no significant interaction effect was found between these variables. Notably, the mean differences were in the predicted direction (see Figure 1). That is, as predicted by previous research, hypothetical helping behavior was inhibited when bystanders were strangers but was encouraged when bystanders were friends. However, the effect size of the differences was small, and the differences were nonsignificant.

Post hoc analyses were conducted to determine if this pattern of results differed by the type of bullying being conducted (e.g., verbal bullying) in the vignette events. The results of the post hoc analyses indicated that the interaction between the number of bystanders present and who those bystanders were was marginally significant in the social bullying condition, and nonsignificant for physical, verbal, and electronic bullying (again, the mean differences for the marginally significant as well as the nonsignificant findings were in the direction predicted by Hypothesis 3 and 4).

The overall results for this research question were not in line with previous research. Overall, participants in the current study did not alter their responses based on

whether bystanders in their vignettes were identified as friends or strangers. It is possible that, similar to Research Question 1, these differences were not salient enough to affect responses. It is also possible that potential differences were decreased by the largely homogenous responses to the dependent variable; that is, most participants indicated that they were generally likely to help, which may have created a ceiling effect. Indeed, the median response to the dependent variable was a 6 (on a 7-point scale), and 72.45% of participants responded with a 5, 6, or 7. This restricted range may have attenuated the difference between means, and ultimately reduced the power to detect significant differences (i.e., a Type II error may have been committed).

However, the marginally significant results for the social bullying condition are worthy of additional consideration. As social bullying is based on damaging the social relationships of others, imagining witnessing a social bullying event may make bystanders more likely to notice their social situation (e.g., the number of bystanders present). That is, the threat of damaging a social relationship may be particularly salient for adolescent youth, which may lead them to be more impacted by the presence of others. This may help explain why participants in the current study only exhibited the bystander effect in the social bullying condition.

Research Question 3

The purpose of the third research question was to examine if another situational variable, the sex of the victim, impacted hypothetical helping behavior. Previous research in the adult literature has found that females are generally more likely to be helped than males (Austin, 1979). The fifth hypothesis predicted that participants would be more likely to help female victims than male victims. However, both male and female victims

were equally likely to be helped, and thus the fifth hypothesis was not supported. These results did not correspond with previous research. The youth in this sample did not generally change their hypothetical helping behavior based on the sex of the victim.

Research Question 4

The purpose of the fourth research question was to examine if participants were more likely to help victims of their own sex. Based on previous research indicating that bystanders are more likely to provide help to in-group members (Levine et al., 2002), Hypothesis 6 predicted that participants would be more likely to help victims of their own sex. The current study found no significant difference in helping when the victim was the same sex as the participant compared to when the victim was the opposite sex.

It is possible that these results reflect that identifying the individual in the vignette as a particular sex does not make in-group or out-group status salient enough to produce an effect in a vignette design. Either priming sex as a salient feature of an individual's identity or selecting a more salient in-group and out-group (e.g., a student from the same school versus a student from a rival school) may have produced a stronger effect. Indeed, previous research using adult participants has found this pattern of results. For example, Levine and Thompson (2004) found that when in-group pro-intervention norms were made salient, the bystander effect was attenuated. Additionally, adults have been found to be more likely to provide help to in-group members when that in-group identity is made salient (Levine et al., 2005). These results indicate that, when not primed to view sex as an important in-group marker, adolescent youth are equally likely to help victims of their own sex and victims of the opposite sex.

Research Question 5

The purpose of the fifth research question was to examine if sex differences for helping behavior found in the adult literature were present in adolescent bullying situations. Specifically, previous research has found that female bystanders are overall more likely to intervene in emergency situations than male bystanders (Hawkins et al., 2001; Oh & Hazler, 2009). In some studies, male bystanders have been found to be more likely to provide help in “heroic” situations, such as dangerous emergencies (Eagly & Crowley, 1986). Hypothesis 7 predicted that female participants would be more likely to help than male participants. In line with previous research, the results of the current study supported this hypothesis.

Post hoc analyses were conducted to examine if this pattern was different in physical bullying situations (i.e., a more clearly dangerous and perhaps more “heroic” situation). The results indicated that males and females said they would be equally likely to help in physical bullying situations and verbal bullying situations, females were marginally more likely to help in social bullying situations, and females were more likely to help in electronic bullying situations. Thus, while females were overall more likely to help, situational factors moderated this effect. Specifically, similar to adult males witnessing dangerous emergencies, adolescent males who witnessed physical bullying were equally as likely to help as their female counterparts.

This finding is directly in line with previous research with adults. It appears that male bystanders may be particularly likely to provide assistance in situations that are more supported by traditional gender norms. That is, whatever factor inhibits males from intervening in bullying could be less influential in direct bullying situations. Additional

research is needed to identify what this factor may be. It is possible that traditional gender norms (i.e., the belief that males should intervene in “heroic” fashion, while females should intervene in compassionate ways) accounts for this difference. However, other variables, such as attitudes towards different types of bullying may also be an explanation. It is possible that males, on average, view direct bullying as more “serious” or more in need of intervention than indirect forms, such as social or electronic bullying. In either case, intervention programming should make explicit efforts to provide psychoeducation to male students that all types of bullying are harmful and can be stopped by bystander intervention.

Research Question 6

The purpose of the sixth research question was to examine if the type of bullying had an overall effect on helping behavior. Previous research has indicated that adults are more likely to help in less ambiguous emergency situations (i.e., situations in which a victim is more clearly in need of help; Clark & Word, 1972). This includes more physically dangerous situations, which have been found to actually increase helping behavior (Fischer et al., 2006; 2011). Two hypotheses were made based on these findings. First, Hypothesis 8 predicted that participants in the current study would be most likely to help in physical bullying situations. Second, Hypothesis 9 predicted that the potential bystander effect would be found only in the verbal, social, and electronic conditions, but would be absent in the physical bullying condition. Consistent with previous research, participants were found to be more likely to help in physical bullying than in verbal, social, or electronic bullying. However, while the mean scores trended in

the predicted direction, the bystander effect was not observed in any of the four types of bullying, meaning that Hypothesis 9 was not supported.

The finding that physical bullying elicits more hypothetical helping behavior supported the arousal: cost-reward model of helping behavior (Dovidio et al., 1991). In this model, observing bullying increases psychological arousal and action must be taken in order to reduce the arousal. Particularly dangerous or unambiguous bullying situations (i.e., physical bullying) would be most likely to increase arousal, therefore increasing the likelihood of help being provided. The current study expands on this literature by demonstrating this effect in a vignette design with an adolescent sample: a brief description of a physical bullying act was salient enough to encourage intervention relative to other types of bullying.

Research Question 7

The purpose of the seventh research question was to examine if empathy was associated with hypothetical helping behavior. Hypothesis 10 predicted a positive association between empathy and hypothetical helping. Consistent with previous literature (Barchia & Bussey, 2011; Thornberg, 2007), this positive association was found. These results have important implications for future research on bystander behavior in bullying situations. Due to its consistent predictive power in this and other studies, future research would benefit from continuing to assess and control for empathy. Additionally, intervention programs would benefit from including modules designed to promote empathy in students.

Limitations

This study had several important limitations, and the results should be interpreted with these limitations in mind. Previous research on the bystander effect in adults has frequently utilized elaborate staged emergencies that provide excellent external validity. However, it is ethically questionable to expose youth to similar staged emergencies. Therefore, the current study used vignette methodology. While this methodology provides higher internal validity, the external validity is likely weaker. The current design could only estimate likely behavior and did not measure actual helping behavior or the frequency of actual bystander effects. This is particularly important in research on a controversial subject such as school bullying. Due to social desirability, participants were likely inclined to rate themselves as being more likely to stand up for their peers than they would be in a real scenario. Indeed, a ceiling effect was observed, indicating that participants were inclined to rate themselves, on average, as being highly likely to intervene, which is contrary to research that has demonstrated that bystanders are in fact fairly unlikely to intervene (Atlas & Pepler, 1998; Craig et al., 2000). This ceiling effect may have reduced the power of the study to find significant effects for helping behavior.

Further, the sample was somewhat homogenous. Participants were drawn from three separate high schools, but each school was in the same general geographic region (i.e., all were from the same mid-sized Midwestern city) and from the same school district. The social-ecological model of bullying (Swearer & Doll, 2001) would predict that attitudes towards bullying, and ultimately the likelihood of intervention, are heavily influenced by the local culture and the culture of an individual school. Thus, it is very possible that a different sample of youth from another part of the country would respond

differently. Additionally, participants were mostly White, which limits the ability to generalize to other populations. Additional research is necessary with more diverse samples in order to account for the important effects of cultural differences related to ethnicity, religiosity, and geography.

Bystander behavior is likely influenced by age and development. While older adolescents are important to study, they have likely been exposed to more socialization against bullying, which may affect their responses to theoretical bullying situations. Younger adolescents (i.e., middle school youth), who are powerfully influenced by their peers, may be particularly prone to the bystander effect, and thus would be an excellent population to study.

Additionally, the current study included participants who self-identified as bullying perpetrators, victims, bully-victims, bystanders, and uninvolved youth. While it was beyond the scope of this research to explore these effects, it is likely that previous experience with bullying may have impacted participant responses. Future research is encouraged to take current and previous participant roles into account.

Participants for the current study may also have been prone to a selection bias. That is, participants were only included if a parent or guardian chose to sign a consent form administered via email. It is likely that the population of students whose parents both had access to email and were willing to respond in the affirmative is different in important ways from their classmates. For example, students included in the study may have been more likely to come from families who value educational research and are interested in the subject of bullying, which may have influenced the results. Moreover,

the schools from which the sample was drawn may differ in important ways from other schools that chose not to have their students participate.

Additionally, as with previous research in the area, the current study used a single item as the dependent variable (i.e., “How likely would you be to help the person being punched?”). Internal consistency could therefore not be calculated. The test-retest reliability for the individual vignettes was found to be low to moderate, ranging from .452 to .814. These lower reliabilities may limit the ability to draw valid conclusions from the results and may suggest that vignette methodology is not as reliable as in vivo experiences.

Finally, participants were asked to respond to multiple vignettes that were very similar to one another, yet had important differences. It is possible that these differences were not salient enough to affect responses. For example, participants may have been less likely to notice the difference between one and five other bystanders in a written vignette than they would have been if a picture or a video had been used. This may help explain why the classic bystander effect was not observed in this study. Additionally, exposing participants to multiple vignettes may have produced an exhaustion effect, where their responses on later vignettes were impacted by their responses to previous vignettes. Future research with access to larger samples may benefit from having each participant complete only a single vignette.

Future Directions

Further research in the area of bystander intervention is warranted to help inform interventions designed to promote prosocial bystander behavior. Additional work is needed that addresses the social cognitive processes that underlie bystander behavior.

Future research on the bystander effect should seek to use multiple research methods.

Vignette designs may benefit from using pictures of the situation to accompany written information as a means of increasing the saliency of the number of bystanders present.

Alternatively, video vignettes may be useful in accomplishing a similar task.

Observational methods, similar to Craig and colleagues (2000), may also be useful for examining the bystander effect. However, studies using these methodologies should attempt to include information about the relationships between bystanders because of the critical role these relationships have on the bystander effect.

Future research should also consider the developmental trajectory of bystander intervention. Little is known about how the social cognitions underlying bystander intervention may change as youth progress through school. Longitudinal or well-designed cross-sectional studies are needed to begin addressing this gap in the literature. Moreover, it is possible that bystanders of all ages react differently to bullying situations than more general peer victimization scenarios. The power dynamics inherent to bullying may further inhibit bystanders from intervening, and this difference may or may not be stable over time.

Additionally, classic research on the bystander effect has examined two variables: the likelihood of intervention and the latency at which help is provided. Current research in bullying tends to only examine the likelihood of intervention. Future research on the bystander effect should continue to examine the latency of intervention, as help provided too slowly may increase the negative effects of bullying for the victim.

Overall, given that bystander intervention has been found to be effective in reducing bullying (Hawkins et al., 2001), researchers and practitioners are increasingly

calling for increased efforts to encourage bystanders to intervene. However, little is known about the positive or negative effects of intervening on the bystander. If bystanders are negatively affected when they stand up for their peers, it calls into question the morality of encouraging them to intervene. Future research is strongly warranted in this area. Similarly, future research should examine both direct and indirect methods of helping. That is, what is the difference in outcomes for victims and bystanders when bystanders intervene directly (i.e., intervening as the bullying is happening) versus indirectly (i.e., intervening after the bullying episode is over, such as by befriending the victim or telling an adult)? Fewer negative effects may be associated with indirect intervention, which may make it more appropriate for teachers and administrators to encourage.

Implications for Research, Prevention, and Intervention

The current study sought to continue bridging the gap between social psychological research on group processes underlying prosocial behavior and applied research on bullying prevention and intervention. It has expanded the literature in a number of important ways. The overall findings indicate that similar social cognitions appear to underlie helping behavior for adolescents witnessing bullying situations as adults witnessing emergencies. The results support the importance of the five step model of helping behavior (Latané & Nida, 1981; Pozzoli & Gini, 2012). Specifically, the second step of the model (recognizing an event as an emergency) appeared to play an important role in this study. Situational ambiguity has previously been found in adults to inhibit helping behavior (Clark & Word 1972; 1974). Participants witnessing less ambiguous bullying, such as physical bullying, were more likely to intervene than were

participants witnessing more ambiguous bullying, such as electronic bullying. Similarly, the results can be interpreted as extending the arousal: cost-reward model to adolescent bullying situations. More dangerous situations, such as physical bullying, likely induce increased arousal compared to less dangerous situations. This arousal may then explain the increased prosocial response of bystanders in these situations.

Moreover, the current study supported previous research on personal characteristics that are important predictors of bystander intervention. Empathy was found to be a strong predictor of helping behavior, which has important implications for intervention efforts. These results indicate that programs that seek to encourage bystander intervention would benefit from including components that build empathy in students. Sex was also an important predictor, as females were generally more willing than males to stand up for their peers. However, this relationship was not present in direct bullying situations (i.e., physical and verbal bullying). Intervention programming should seek to adjust social norms for males to help encourage them to intervene in indirect bullying situations as well. It may be useful to prime the “heroic” gender norm for males, as this has been a hypothesized mediator of similar results in previous research (Eagly & Crowley, 1986). Moreover, the current results suggest that without priming sex as an important in-group, helping behavior does not increase for in-group members. This emphasizes the importance of priming in-group, prosocial norms to encourage bystander intervention. Based on these results, intervention programming should attempt to make school-wide in-groups salient, such as school identity, to promote prosocial behavior.

The five step model of helping behavior (Latané & Nida, 1981; Pozzoli & Gini, 2012) may be particularly useful for intervention programming. It also has the benefit of

fitting with current thinking about the importance of school-wide, prevention efforts. At Step 1 (Noticing the event), prevention programs can provide psychoeducation about what bullying is, particularly with regards to less direct forms of bullying like social and electronic bullying. At Step 2 (Interpreting the event as an emergency), prevention programs can provide psychoeducation about the negative physical and mental health impact of all types of bullying. As awareness of bullying and its harmful effects increases, students may become less likely to passively observe it happening. At Step 3 (Accepting responsibility to help), students can be provided direct instruction about the bystander effect as well as leadership and assertiveness training. At Step 4 (Knowing how to help), prevention programs can provide direct instruction about several intervention strategies. These strategies should include direct intervention (e.g., helping the victim to leave the situation, telling the perpetrator to stop) as well as indirect intervention (e.g., befriending the victim, telling an adult). Finally, at Step 5 (Deciding to help), leadership and assertiveness training, as well as psychoeducation about peers' pro-intervention or anti-bullying attitudes can help students to actually stand up for their peers. Extensive evidence in the adult literature underscores the importance of proceeding through each step in this model before help can be provided; the current study and other early evidence suggests youth witnessing bullying must proceed through similar steps before they will stand up for their peers (Pozzoli & Gini, 2012).

Conclusions

Bystanders can have a powerful effect on school bullying because they are present in the vast majority of bullying situations. When they choose to help the victim, they are very often effective at ending the bullying (Hawkins et al., 2001). However, they rarely

choose to intervene, instead often passively observing the situation. The purpose of this study was to assist in expanding the literature connecting group process research to understanding hypothetical bystander behavior in bullying situations. Researchers have increasingly called for additional research in understanding how group processes, such as the bystander effect, might inhibit or encourage bystander intervention (Hymel, McClure, Miller, Shumka, & Trach, 2015).

The current study used a vignette experimental design to analyze the bystander effect in a high school sample. Overall, the bystander effect was not observed, nor was the predicted effect of relationships between bystanders. However, while the results were nonsignificant, they trended in the predicted directions. Evidence for several other important factors was found. Participants were more likely to help in physical bullying situations compared to verbal, social, and electronic bullying situations. Additionally, sex and empathy were both found to predict bystander intervention, with females being overall more likely to help, and more empathetic individuals being more likely to help. Of note, males were equally likely to help as their females peers in direct bullying situations (i.e., physical and verbal bullying).

The current study is one of the first to attempt to observe the bystander effect in adolescent school bullying. Additionally, it is the first to experimentally manipulate key environmental variables (i.e., the number of bystanders present, their relationship with the participant, the type of bullying being perpetrated, and the sex of the victim) in school bullying. While the primary hypotheses were not supported, similar methodology including the use of video vignettes could be used by future researchers to continue to examine bystander helping behavior.

Furthermore, the results of the current study have several important implications for bullying prevention efforts seeking to increase bystander intervention. These programs should seek to build empathy in all students, as this has been consistently found to be a strong predictor of helping behavior. Additionally, particularly in male students, additional awareness training is called for regarding the negative effects of more subtle forms of bullying (i.e., social bullying, electronic bullying). Finally, the results of the current study underscore the importance of understanding helping behavior through the lens of the Latané and Nida's (1981) five step helping model. In this model, intervention efforts directed at bystanders should seek to build awareness, build bravery and assertiveness, encourage prosocial and anti-bullying norms, and provide explicit instruction of how bystanders are expected to intervene. By applying research on social processes like the bystander effect, bullying intervention programs may be able to increase the likelihood that bystanders will intervene on behalf of victims, and ultimately decrease school bullying.

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Table 1

Demographic Characteristics for the Total Sample and by School

Variable	School A (<i>n</i> = 140, 61.4%)	School B (<i>n</i> = 83, 36.4%)	School C (<i>n</i> = 5, 2.2%)	Total Sample (<i>n</i> = 228)
	<i>M (SD) or n</i> (%)	<i>M (SD) or n</i> (%)	<i>M (SD) or n</i> (%)	<i>M (SD) or n</i> (%)
Sex				
Male	71 (50.7%)	42 (50.6%)	3 (60.0%)	116 (50.9%)
Female	66 (47.1%)	39 (47.0%)	2 (40.0%)	107 (46.9%)
Other	3 (2.1%)	2 (2.4%)	0 (0.00%)	5 (2.2%)
Age	15.98 (1.30)	15.83 (1.09)	16.60 (1.67)	15.94 (1.24)
Grade				
9th	49 (35.0%)	22 (26.5%)	1 (20.0%)	72 (31.6%)
10th	30 (21.4%)	30 (36.1%)	0 (0.0%)	60 (26.3%)
11th	35 (25.0%)	14 (16.9%)	2 (40.0%)	51 (22.4%)
12th	26 (18.6%)	17 (20.5%)	2 (40.0%)	45 (19.7%)
Ethnicity				
Caucasian	119 (85.0%)	72 (86.7%)	4 (80.0%)	195 (85.5%)
African American	3 (2.1%)	4 (4.8%)	0 (0.0%)	7 (3.1%)
Latino/Hispanic	4 (2.9%)	1 (1.2%)	0 (0.0%)	5 (2.2%)
Native American	3 (2.1%)	0 (0.0%)	1 (20.0%)	4 (1.6%)
Asian American	2 (1.4%)	3 (3.6%)	0 (0.0%)	5 (2.2%)
Biracial	7 (5.0%)	3 (3.6%)	0 (0.0%)	10 (4.4%)
Other	2 (1.4%)	0 (0.0%)	0 (0.0%)	2 (0.9%)

Table 2

Demographic Proportion Comparisons between Participants and School Enrollment

Variable	School A	Comparison to Sample	School B	Comparison to Sample
		<i>z (p)</i>		<i>z (p)</i>
Sex				
Male	49.94%	.40 (.69)	48.65%	.09 (.93)
Female	50.06%	.40 (.69)	51.35%	.09 (.93)
Grade				
9th	28.32%	1.67 (.09)	26.08%	.09 (.93)
10th	25.28%	1.01 (.31)	27.89%	1.64 (.10)
11th	24.10%	.24 (.81)	22.95%	1.3 (.19)
12th	22.30%	1.02 (.31)	23.09%	.55 (.58)
Ethnicity				
Caucasian	83.85%	.36 (.72)	76.82%	2.12 (.03)*
African American	2.30%	.12 (.90)	4.66%	.07 (.94)
Latino/Hispanic	5.03%	1.15 (.25)	8.44%	2.36 (.02)*
Native American	.50%	2.36 (.02)*	.93%	.88 (.38)
Asian American	3.54%	1.33 (.18)	1.87%	1.14 (.25)
Biracial	4.66%	.18 (.86)	7.14%	2.52 (.01)*

*Indicates a significant difference between the proportion of participants from each school to the proportion of students enrolled at that school.

Table 3

Descriptive Statistics for Participant Sex

Vignette	Sex	<i>n</i>	<i>M</i>	<i>SD</i>
Physical	Male	116	5.93	1.24
	Female	107	6.09	1.20
Verbal*	Male	116	5.09	1.45
	Female	107	5.71	1.27
Social*	Male	116	4.56	1.61
	Female	107	5.31	1.37
Electronic*	Male	116	4.35	1.65
	Female	107	5.15	1.53

Note. Higher mean scores indicate a greater likelihood of intervention.

* Indicates a significant difference between males and females.

Table 4

Likelihood of Helping by Number of Bystanders Present

Number of Bystanders Present	<i>n</i>	<i>M</i>	<i>SD</i>
Zero	172	5.37	1.44
One	361	5.25	1.61
Five	363	5.23	1.55
Total	896	5.27	1.56

Note: Higher mean scores indicate a greater likelihood of helping.

Table 5

Effect of Bystander Relationships and Number of Bystanders Present on Helping

Condition	<i>n</i>	<i>M</i>	<i>SD</i>
No Bystanders	172	5.37	1.44
One Friend	179	5.18	1.71
One Stranger	182	5.33	1.51
Five Friends	178	5.27	1.58
Five Strangers	185	5.19	1.53

Note: Higher mean scores indicate a greater likelihood of helping.

Table 6

Effect of Type of Bullying, Number of Bystanders Present, and Bystander Relationships on Helping

Type of bullying	Condition	<i>n</i>	<i>M</i>	<i>SD</i>
Physical	No bystanders	42	5.81	1.29
	One friend	43	5.98	1.32
	Five friends	50	5.78	1.45
	One Stranger	47	6.26	1.09
	Five Strangers	43	6.12	1.03
Verbal	No bystanders	39	5.67	1.11
	One friend	46	5.50	1.55
	Five friends	45	5.18	1.59
	One Stranger	42	5.29	1.27
	Five Strangers	53	5.45	1.39
Social	No bystanders	52	5.04	1.40
	One friend	46	4.70	1.88
	Five friends	41	5.07	1.52
	One Stranger	41	5.12	1.42
	Five Strangers	45	4.67	1.55
Electronic	No bystanders	39	5.05	1.78
	One friend	46	4.61	1.65
	Five friends	44	4.89	1.65
	One Stranger	52	4.67	1.69
	Five Strangers	44	4.52	1.58

Note: Higher mean scores indicate a greater likelihood of helping.

Table 7

Effect of Sex of the Victim on Likelihood of Helping

Sex of Victim	<i>n</i>	<i>M</i>	<i>SD</i>
Male	429	5.21	1.53
Female	467	5.32	1.58

Note: Higher mean scores indicate a greater likelihood of helping.

Table 8

Effect of Participant Sex Matching or Not Matching Victim Sex on Likelihood of Helping

Condition	<i>N</i>	<i>M</i>	<i>SD</i>
Same Sex	422	5.33	1.53
Opposite Sex	454	5.20	1.56

Note: Higher mean scores indicate a greater likelihood of helping.

Table 9

Effect of Sex on Likelihood of Helping

Sex of Participant	<i>n</i>	<i>M</i>	<i>SD</i>
Physical			
Male	114	5.93	1.25
Female	106	6.08	1.20
Verbal			
Male	114	5.10	1.46
Female	106	5.71	1.28
Social			
Male	114	4.55*	1.62
Female	106	5.29*	1.37
Electronic			
Male	114	4.36**	1.67
Female	106	5.14**	1.54
Total			
Male	452	4.98**	1.63
Female	424	5.56**	1.40

Note: Higher mean scores indicate a greater likelihood of helping.

** indicates a marginally significant difference at the .10 level.*

*** indicates a significant difference at the .05 level.*

Table 10

Effect of Type of Bullying on Likelihood of Helping

Condition	<i>n</i>	<i>M</i>	<i>SD</i>
Physical	225	5.99	1.25
Verbal	225	5.41	1.40
Social	225	4.92	1.56
Electronic	225	4.74	1.66

Note: Higher mean scores indicate a greater likelihood of helping.

Table 11

Effect of Type of Bullying by Number of Bystanders on Likelihood of Helping

Condition	<i>n</i>	<i>M</i>	<i>SD</i>
Physical			
Zero Bystanders	42	5.81	1.29
One Bystander	90	6.12	1.21
Five Bystanders	93	5.94	1.28
Verbal			
Zero Bystanders	39	5.67	1.11
One Bystander	88	5.40	1.42
Five Bystanders	98	5.33	1.48
Social			
Zero Bystanders	52	5.04	1.40
One Bystander	87	4.90	1.68
Five Bystanders	86	4.86	1.54
Electronic			
Zero Bystanders	39	5.05	1.78
One Bystander	98	4.64	1.66
Five Bystanders	88	4.70	1.61

Note: Higher mean scores indicate a greater likelihood of helping.

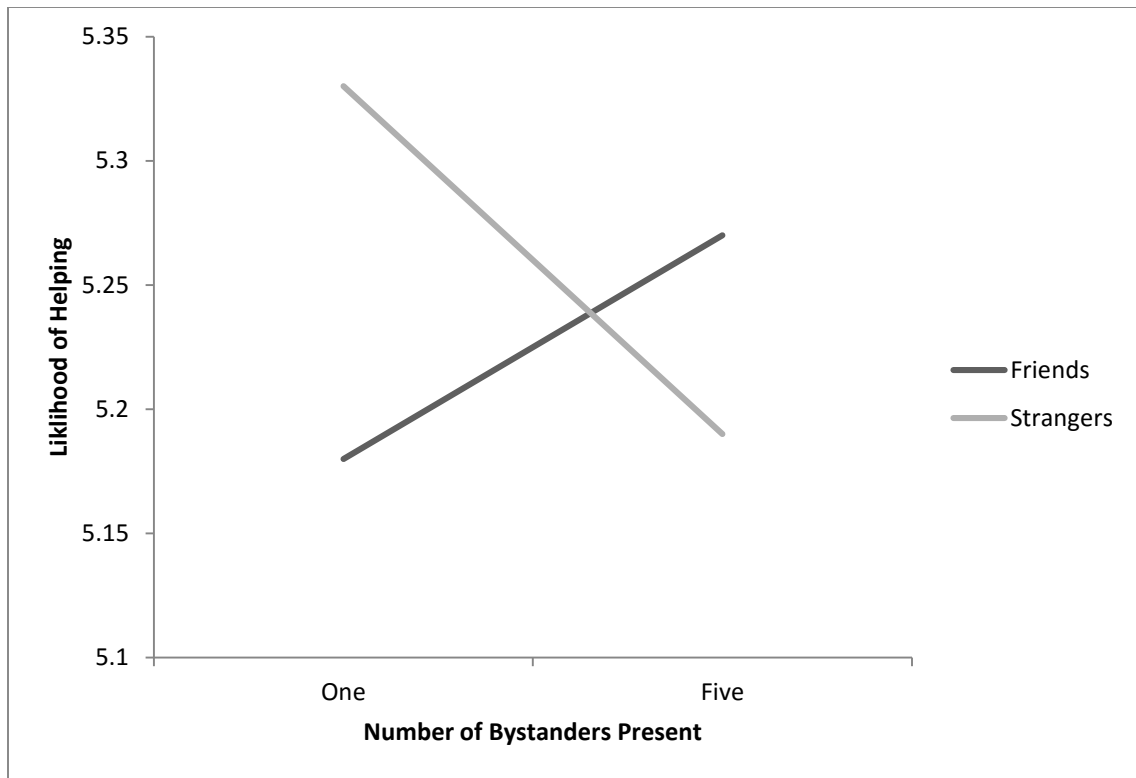


Figure 1. Nonsignificant interaction effect between the number of bystanders present and the bystanders' relationship with the participant.

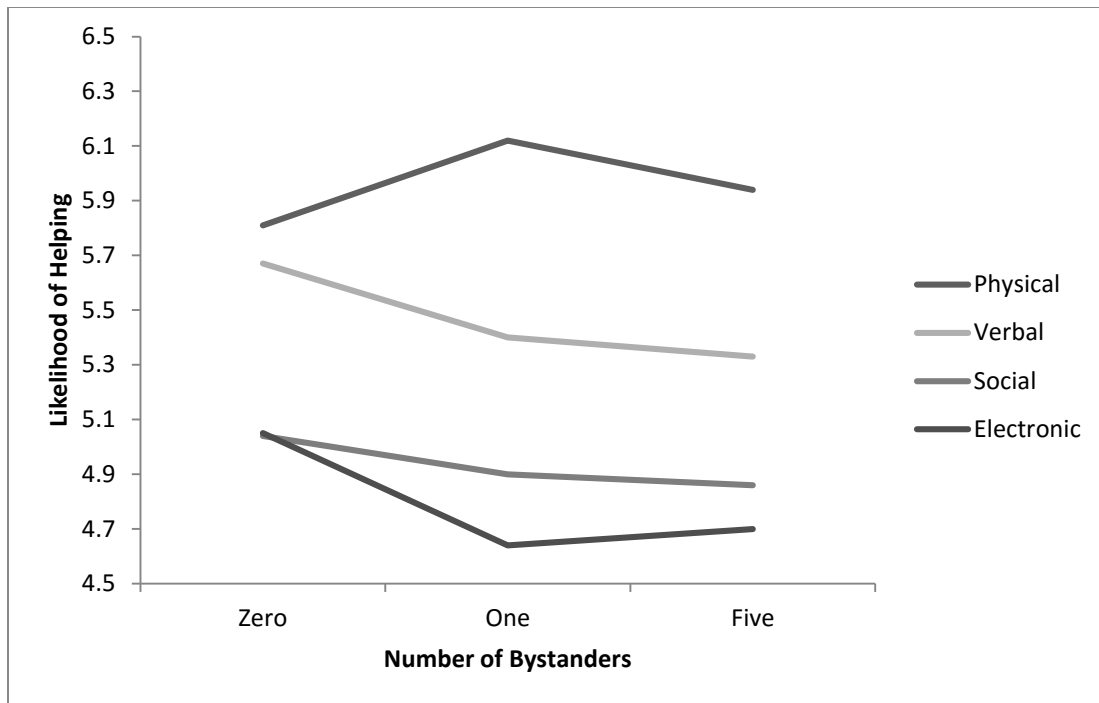


Figure 2. Nonsignificant interaction effect between the type of bullying and the number of bystanders present.

Appendix A

Original IRB Approval Letter

August 20, 2011

Susan Swearer Napolitano
Department of Educational Psychology
40 TEAC, UNL, 68588-0345

Paige Lembeck
Department of Educational Psychology
3522 McLaughlin Dr Lincoln, NE 68516-7744

IRB Number: 20110811297FB

Project ID: 11297

Project Title: Bullying and Victimization among School-aged Youth: A Participatory Action Research Study

Dear Susan:

This letter is to officially notify you of the approval of your project by the Institutional Review Board (IRB) for the Protection of Human Subjects. It is the Board's opinion that you have provided adequate safeguards for the rights and welfare of the participants in this study based on the information provided. Your proposal is in compliance with this institution's Federal Wide Assurance 00002258 and the DHHS Regulations for the Protection of Human Subjects (45 CFR 46).

Date of Full Board review: July 21, 2011

You are authorized to implement this study as of the Date of Final Approval: 08/20/2011. This approval is Valid Until: 07/20/2012.

We wish to remind you that the principal investigator is responsible for reporting to this Board any of the following events within 48 hours of the event:

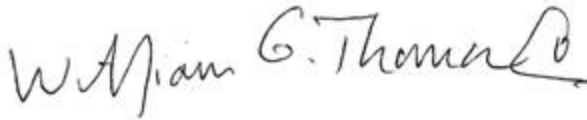
- * Any serious event (including on-site and off-site adverse events, injuries, side effects, deaths, or other problems) which in the opinion of the local investigator was unanticipated, involved risk to subjects or others, and was possibly related to the research procedures;
- * Any serious accidental or unintentional change to the IRB-approved protocol that involves risk or has the potential to recur;

- * Any publication in the literature, safety monitoring report, interim result or other finding that indicates an unexpected change to the risk/benefit ratio of the research;
- * Any breach in confidentiality or compromise in data privacy related to the subject or others; or
- * Any complaint of a subject that indicates an unanticipated risk or that cannot be resolved by the research staff.

For projects which continue beyond one year from the starting date, the IRB will request continuing review and update of the research project. Your study will be due for continuing review as indicated above. The investigator must also advise the Board when this study is finished or discontinued by completing the enclosed Protocol Final Report form and returning it to the Institutional Review Board.

If you have any questions, please contact the IRB office at 472-6965.

Sincerely,

A handwritten signature in dark ink, reading "William G. Thomas". The signature is fluid and cursive, with a large, stylized "W" and "T".

William Thomas, Ph.D.
Chair for the IRB



Appendix B

Referral Sources for Therapy

UNIVERSITY OF NEBRASKA – LINCOLN

If You Need Help Dealing with Bullying:

REFERRAL SOURCES FOR THERAPY

Your school guidance and counseling office

ADHD and Related Behaviors Clinic

Merilee McCurdy, Ph.D.

Issues: ADHD, academic concerns, pediatric behavior concerns

Ages: children, adolescents, families

472-1152

Sliding scale fees

Note: only available during school year (August through April)

Adolescent Anger Management (Bryan LGH)

481-4118

Behavioral Pediatric and Family Therapy Program

Issues: mental health

Ages: children, adolescents

483-1936

Insurance only

Therapists:

- George E. Williams, Ph.D.
- Scott A. Napolitano, Ph.D.
- Lorrie E. Bryant, Ph.D.
- Tim R. Riley, Ph.D.
- Jennifer M. Perry, Ph.D.
- Paulette T. Cary, Ph.D.
- Julie K. Almquist, M.S.
- Julie Miakranz, Ph.D.

Boys Town National Hotline

1-800-448-3000

Catholic Social Services

Issues: mental health

Ages: children, adolescents, adults, families

489-1834

Sliding scale fees or Insurance

Therapists:

- Eve Herrera, Ph.D.
- Courtney Miller, Ph.D.
- Aaron Stratman, Ph.D.

Cedars Youth Services

Issues: mental health, substance abuse (inpatient and outpatient services)

Ages: children, adolescents

434-5437

24 Hour Crisis Line

437-8888

Centerpointe

Issues: dual diagnosis of substance abuse and mental illness

Ages: 16 and over

475-5161

Child and Adolescent Therapy Clinic

Susan Swearer, Ph.D.

Issues: mental health, individual child therapy

Ages: children, adolescents, families

472-1152

Sliding scale fees

Note: only available during school year (August through April)

Child Guidance Center

Issues: mental health

Ages: children, adolescents, families

475-7666

Sliding scale fees

First Step Recovery & Wellness Center

Issues: substance abuse

Ages: adolescents, adults

434-2730

Issues: eating disorders, mental health

Ages: children, adolescents, adults, families

441-9280

Issues: gambling

Ages: adults, families

434-2923

Heartland Big Brothers Big Sisters

464-2227

Lincoln Action Program (LAP)

471-4515

210 "O" Street

**Lincoln Medical Education Foundation (LMEF)
Behavioral Health Center**

Issues: mental health

Ages: adolescents, adults, families

483-4571

Therapists:

- Mary Fran Flood, Ph.D.
- Laurel Van Ham, Ph.D.
- Lindy Lue Bixler, Ph.D.
- Corrie Davies, Ph.D.

Helen Montoya, Ph.D. (Clinical Psychologist)

Issues: mental health

Ages: children, adolescents

483-4335

Insurance

Spectrum Psychology Associates

Issues: mental health

Ages: children, adolescents

486-1101

Insurance

Therapists:

- Karen Ellefson, Ph.D.

The Mediation Center

Issues: Resources for Collaborative Decision Making

441-5741

1120 "K" Street, Suite 200 (68508)

UNL Psychological Consultation Center (UNL Dept of Psychology)

Issues: mental health, substance abuse

Ages: adolescents, adults, couples, families

472-2351

YMCA Survival Skills

434-3494

Appendix C

Demographics Form

Please enter your basic information:

Sex:

_____Male _____Female

Age: _____

Grade: _____

Race:

_____White/Caucasian

_____Black/African American

_____Latino/Hispanic

_____Native American

_____Asian

_____Biracial (please specify: _____)

_____Other (please specify: _____)

Appendix D

Bystander Vignettes

Participants will respond to four total vignettes: one vignette from each category (physical, verbal, social, cyber). Vignettes within each category will differ from one another in three ways: **the gender of the victim**, **the number of other students present**, and **the relationship between the reader and the other bystanders**.

PHYSICAL

Imagine that you arrive to class early. When you sit down at your desk, you notice that two students are pushing another **[girl, boy]**. They have done this to this person before in the past. **[No one else, One, Five]** **[of your friends also, other student[s] you do not know also]** see[s] what is happening.

VERBAL

Imagine that you arrive to class early. When you sit down at your desk, you notice that two students are making fun of another **[girl, boy]**. They have done this to this person before in the past. **[No one else, One, Five]** **[of your friends also, other student[s] you do not know also]** see[s] what is happening.

SOCIAL/RELATIONAL

Imagine that you arrive to class early. When you sit down at your desk, you notice that two students are talking about spreading a rumor about another **[girl, boy]**. They have done this to this person before in the past. **[No one else, One, Five]** **[of your friends also, other student[s] you do not know also]** see[s] what is happening.

CYBER

Imagine that you and your class are working on a project using laptops in the computer lab. While working on your project, you notice that two students are posting an embarrassing photo on Instagram of another **[girl, boy]**. They have done this to this person before in the past. **[No one else, One, Five]** **[of your friends also, other student[s] you do not know also]** see[s] what is happening.

Appendix E

Indicators of Helping Behavior

Following each vignette, participants will respond on a 1-9 scale (1 being “*not likely at all*” and 9 being “*very likely*”) to each of the following questions:

Overall helping behavior

How likely would you be to help the person being [bullied]?

Specific helping behaviors

How likely would you be to ignore or stay out of the situation?

How likely would you be to keep watching?

How likely would you be to leave the area?

How likely would you be to tell the teacher?

How likely would you be to tell the students who are doing it to stop?

How likely would you be to try to comfort the person being [bullied] later on?

Appendix F

Interpersonal Reactivity Index (IRI; Davis, 1983)

Participants will respond to each of the following 28 questions using a 1 (“*strongly disagree*”) to 9 (“*strongly agree*”) Likert type scale. *** indicates reverse scoring.

Perspective-taking subscale

I sometimes find it difficult to see things from the “other guy’s” point of view ***

I try to look at everybody's side of a disagreement before I make a decision.

I sometimes try to understand my friends better by imagining how things look from their perspective.

If I'm sure I'm right about something, I don't waste much time listening to other people's arguments. ***

I believe that there are two sides to every question and try to look at them both.

When I'm upset at someone, I usually try to "put myself in his shoes" for a while

Before criticizing somebody, I try to imagine how I would feel if I were in their place.

Fantasy subscale

I daydream and fantasize, with some regularity, about things that might happen to me.

I really get involved with the feelings of the characters in a novel.

I am usually objective when I watch a movie or play, and I don't often get completely caught up in it. ***

Becoming extremely involved in a good book or movie is somewhat rare for me.***

After seeing a play or movie, I have felt as though I were one of the characters.

When I watch a good movie, I can very easily put myself in the place of a leading character.

When I am reading an interesting story or novel, I imagine how I would feel if the events in the story were happening to me.

Empathic Concern subscale

I often have tender, concerned feelings for people less fortunate than me.

Sometimes I don't feel very sorry for other people when they are having problems.***

When I see someone being taken advantage of, I feel kind of protective towards them.

Other people's misfortunes do not usually disturb me a great deal.***

When I see someone being treated unfairly, I sometimes don't feel very much pity for them. ***

I am often quite touched by things that I see happen.

I would describe myself as a pretty soft-hearted person.

Personal Distress

In emergency situations, I feel apprehensive and ill-at-ease.

I sometimes feel helpless when I am in the middle of a very emotional situation.

When I see someone get hurt, I tend to remain calm.***

Being in a tense emotional situation scares me.

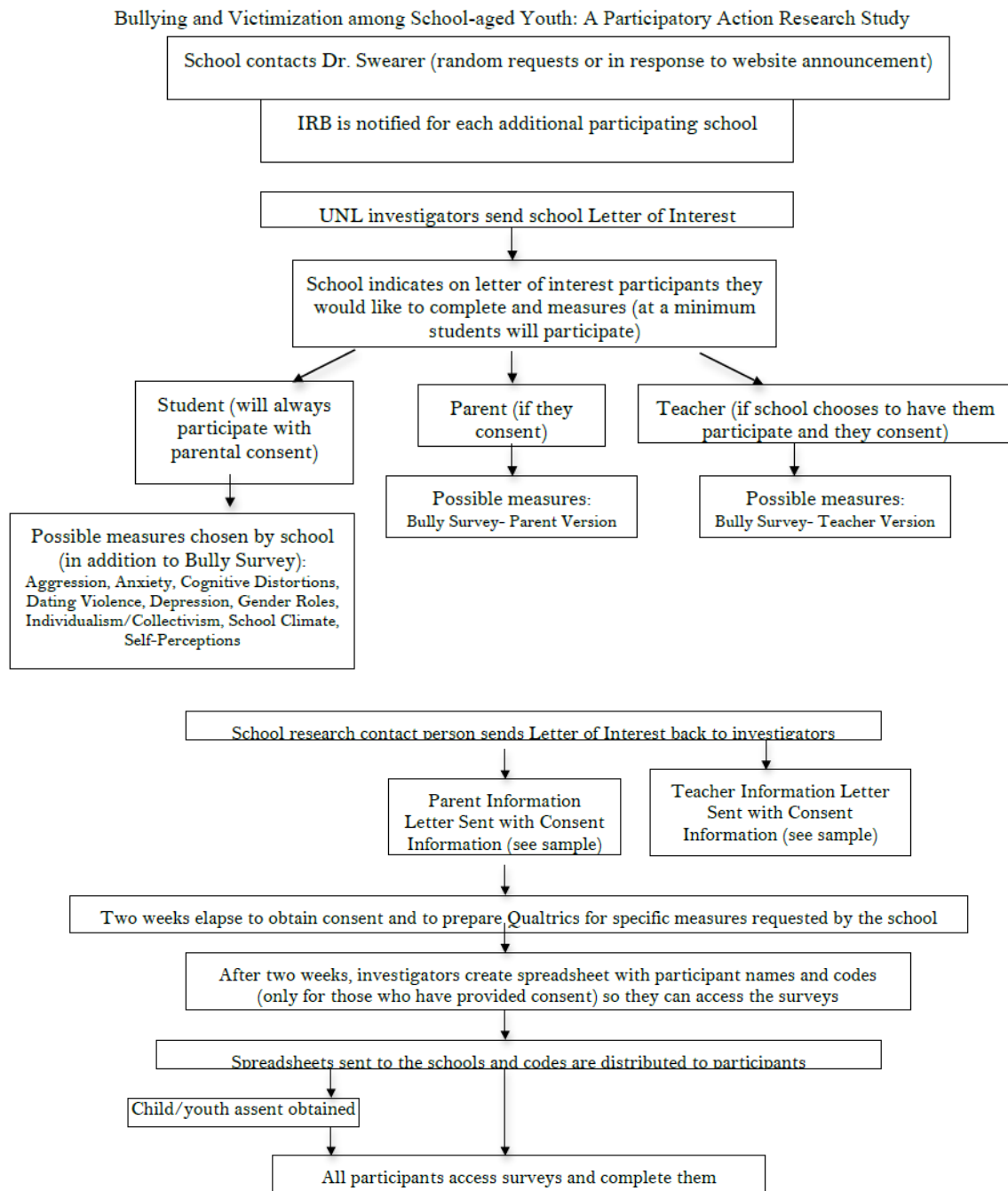
I am usually pretty effective in dealing with emergencies.***

I tend to lose control during emergencies.

When I see someone who badly needs help in an emergency, I go to pieces.

Appendix G

Flow Chart of Participatory Action Research Study Design



Appendix H

Site Letter of Interest and Support

Dear Dr. Swearer,

I am contacting you because I am interested in having *(school name here)* participate in the Target Bullying Survey and Intervention Project. We recognize the importance of the school-wide assessment of bullying and know that other psychosocial factors play an important role in maintaining these behaviors. Therefore, collecting data is a crucial first step to understanding the bullying behaviors of our student body and to identifying effective strategies for reducing bullying at *(school name here)*.

We are equipped to administer the survey measures via the Qualtrics Survey Software, after electronic parent consent and youth assent are obtained. If parent consent is not provided, surveys will not be administered to those students.

We understand that gathering information on constructs related to bullying can provide valuable information for us, and that we can customize this project to fit our interests. For example, by selecting to administer the Body Image and Anxiety measures, we may learn that the way our students' view their bodies impacts how they feel about themselves. In addition to information on bullying/victimization, we would like to gather information about the constructs that are checked below:

In addition to the Bully Survey – Student Version, my school is interested in administering the following questionnaires:

- ☐ **Aggression** (ages 9 and up)
The Aggression Questionnaire provides an understanding of aggressive tendencies, including tendencies towards physical and verbal aggression. *34 items; approximately 5-10 minutes to complete.*
- ☐ **Anxiety** (ages 8-19)
Anxiety is strongly linked to bullying and victimization. The Multidimensional Anxiety Scale for Children measures a students' anxiety, and can give schools a picture of how many students suffer from high levels of anxiety. *39 items; approximately 10 minutes to complete.*
- ☐ **Body Image** (ages 5 and up)
The Body Image Silhouettes of the Kids Eating Disorders Survey (KEDS) is a brief measure of body image. The child is asked to choose one image that looks most like him/herself as well as the image that he/she would most like to look like. *2 items; approximately 1 minute to complete.*
- ☐ **Bystander Reactions to Bullying/Victimization** (ages 12 and up)
Most bullying is seen by bystanders, yet most bystanders do not intervene. The Bystander Questionnaire helps schools understand how often their students choose to help the bully or the victim, as well as why they make that choice. *51 items, approximately 10 minutes to complete.*
- ☐ **Callous Unemotional Traits** (ages 12 and up)
The Inventory of Callous-Unemotional Traits (ICU) provides an assessment of traits related to antisocial and aggressive behavior in youth that may relate to bullying. Youth, parent, and teacher report options are available. *24 items; approximately 10 minutes to complete.*

- ☐ **Cognitive Distortions (ages 13-20)**
The How-I-Think Questionnaire measures thinking errors, such as “you have to get even with people who don’t show you respect,” that affect our behavior. *54 items, approximately 5-15 minutes to complete.*
- ☐ **Depression (ages 7-17)**
Depression is strongly linked to bullying and victimization. The Children’s Depression Inventory measures depressive symptoms in children. *27 items, approximately 5-10 minutes to complete.*
- ☐ **Empathy (ages 14 and up)**
The Interpersonal Reactivity Index measures empathy, including how students’ think about empathy and how much they feel empathy. *28 items, approximately 5-10 minutes to complete.*
- ☐ **Friendship Networks (ages 5 and up)**
The Friendship Network Scale asks students to list one to eight friends whom they hang out with most often in school, as well as who is teased most often, who teases most often, and who is most popular. *8 items; approximately 5 minutes to complete.*
- ☐ **Hazing (ages 12 and up)**
The Hazing Perceptions Questionnaire asks students to identify the degree to which various behaviors constitute bullying and/or hazing. *70 items; approximately 15 minutes to complete.*
- ☐ **Parent Reports of Bullying/Victimization**
The Bully Survey – Parent Version is designed to parallel the Bully Survey completed by your students. It measures parental attitudes towards the bullying their children face. *33 items; approximately 20 minutes to complete; note: this measure is completed by parents.*
- ☐ **School Climate (ages 12 and up)**
Positive school climates can help reduce the risk of bullying and victimization. The Thoughts About School Questionnaire assesses students’ perceptions of their school’s climate. *35 items; approximately 5-10 minutes to complete.*
- ☐ **Social Skills (ages 5 and up)**
The Strengths and Difficulties Questionnaire (SDQ) measures students’ social strengths and weaknesses. *25 items; approximately 10 minutes to complete.*
- ☐ **Students’ Self-Perceptions (ages 8 and up)**
The What I Am Like self-perception scale measures students’ sense of self-worth, their self-esteem, and how they generally feel about themselves. *35 items, 5-10 minutes to complete.*
- ☐ **Teacher Reports of Bullying/Victimization**
The Bully Survey – Teacher Version is designed to parallel the Bully Survey completed by your students. It measures teachers attitudes towards the bullying their students face. *33 items; approximately 20 minutes to complete; note: this measure is completed by teachers.*

We understand that any data collected will be used for research purposes and can be published and/or presented at conferences. We are also pleased that aggregate responses from the Bully Surveys and other measures will be shared with us since they will provide us with valuable information that can be disseminated to our teachers, school staff, students, and parents. We look forward to partnering with the Target Bullying Survey and Intervention Project team. Please let me know as soon as possible what steps need to be taken to begin the data-collection process at *(school name here)*.

Sincerely,

Appendix I

Parental/Guardian Consent



COLLEGE OF EDUCATION AND HUMAN SCIENCES
Educational Psychology

Parental/Guardian Consent

Bullying and Victimization among School-aged Youth: A Participatory Action Research Study

Dear Parent or Guardian:

You are invited to permit your child to participate in this research study. The following information is provided in order to help you make an informed decision whether or not to allow your child to participate. If you have any questions please do not hesitate to ask.

Your child is eligible to participate in this study because he or she is a student in the *(Insert school name here)*. The research project will take place at your child's respective school on paper or on the computer during school hours.

The purpose of this study is to investigate bullying behavior and victims of bullying behavior among school-aged students in the United States.

This study will take approximately 30 minutes to one hour of your child's time. Your child will be asked to complete several questionnaires concerning his or her behaviors while at school, at home, in his or her neighborhood, as well as questions about his or her emotional status. Specifically, the students will be asked questions about whether or not they or any student they know have been bullied.

You and your child's teachers will also provide ratings of students' behaviors, which will take approximately 30 minutes of your time. Additionally, your child's school records will be accessed by the researchers to look at age, ethnicity, current living arrangement, standardized testing, special education status, attendance, grades, and office referrals.

Your child may experience mild discomfort when completing the questionnaires (for example, questions asking them to describe any bullying they may have personally experienced). There are no direct benefits to you as a research participant. However, as a result of participating in this research, it is possible your child will learn new coping skills for dealing with bullying, as he or she will be given a referral list of counselors in your community who are available to talk about bullying. If you should choose to access any of these services, you will be responsible for payment.

Parent/Guardian's Initials _____



Any information obtained during this study that could identify your son or daughter will be kept strictly confidential. Every participant will be given a code number so he or she will not be able to be identified by peers, teachers, or researchers. Because of the nature of the classroom environment, it may be possible that someone will see answers as they complete the surveys, but all persons will be encouraged to maintain privacy. The information obtained in this study may be published in scientific journals or presented at scientific meetings, but your child's identity will be kept strictly confidential. Each school will be provided with an aggregate summary of the results of the surveys and questionnaires. All data will be de-identified and summarized so no individual participant will be able to be identified. Study records will be kept for seven years in a locked file cabinet or on a secure website in the principal investigator's office at the University of Nebraska-Lincoln.

You are free to decide not to enroll your child in this study or to withdraw your son or daughter at any time without adversely affecting your child's or your relationship with the investigators, the University of Nebraska-Lincoln, or *(Insert school district)*. Since data collection will take place in computer labs, non-participating students will work on existing computer programs/activities that are typically occurring in computer labs. Your child's grades will not be affected based upon their decision to participate and any relationship with the *(specific participating school)* will also not be affected along with the *(Insert school district)*. Your decision will not result in any loss of benefits to which your child is otherwise entitled.

Your child's rights as a research participant have been explained to you. If you have any questions about this study, please contact Dr. Susan Swearer at (402) 472-1741. If you have any questions concerning your child's rights as a research participant that have not been answered by the investigator, or to report any concerns about the study, please contact the UNL Institutional Review Board at 402-472-6965.

DOCUMENTATION OF INFORMED CONSENT

YOU ARE VOLUNTARILY MAKING A DECISION WHETHER OR NOT TO ALLOW YOUR CHILD TO PARTICIPATE IN THIS RESEARCH STUDY. YOUR SIGNATURE CERTIFIES THAT YOU HAVE DECIDED TO ALLOW YOUR CHILD TO PARTICIPATE HAVING READ AND UNDERSTOOD THE INFORMATION PRESENTED. YOU WILL BE GIVEN A COPY OF THIS CONSENT FORM TO KEEP.

SIGNATURE OF PARENT/GUARDIAN

DATE

PRINT YOUR CHILD'S NAME

IN MY JUDGEMENT THE PARENT/LEGAL GUARDIAN IS VOLUNTARILY AND KNOWINGLY GIVING INFORMED CONSENT.



SIGNATURE OF SCHOOL OFFICIAL

DATE

SIGNATURE OF INVESTIGATOR
IDENTIFICATION OF PRIMARY INVESTIGATORS

DATE

Susan M. Swearer, Ph.D.

Office: 402-472-1741

Scott M. Fluke, M.A.

Office: 402-472-6216

Appendix J

Youth Assent



COLLEGE OF EDUCATION AND HUMAN SCIENCES
Educational Psychology

YOUTH ASSENT FORM**Bullying and Victimization among School-aged Youth: A Participatory Action Research Study**

We are inviting you to participate in this study because you are a student at *(Insert school name here)* and we are interested in your school experiences.

This research will take you about 30 minutes to one hour to do. We will ask you to fill out several questionnaires on paper or on the computer that ask questions about your emotions and about how you and other students in your school get along with each other. We will also look at your school records to find out information about your age, grades, ethnicity, current living arrangement, standardized testing, special education status, attendance, and office referrals.

There are no direct benefits to you as a research participant. Some of the questions may cause you to feel uncomfortable as they may touch on personal subjects. Being in the study may help you think about some of your feelings and concerns you experience at school. We will provide you with a list of teachers and counselors who may be able to further help you. We hope the information from this research will help us better understand the struggles and challenges students may experience. Additionally, we hope to gain an understanding of how to help students feel safer in school.

Your responses will be kept strictly confidential. Even though one of the questions will ask for your name, this information will not be attached to your responses. So, there will be no way for us to know which responses belong to you or someone else after we have coded each questionnaire. Each questionnaire will have a code number that we will use to organize the data. Because of the nature of the classroom environment, it may be possible that someone will see answers as they complete the surveys, but all participants will be encouraged to maintain privacy. We may publish a summary of everybody's responses or present a summary at a scientific meeting, but your identity and your responses will be totally confidential. Each school will be provided with an aggregate summary of the surveys and questionnaires. All data will be de-identified and summarized, so no individual participants will be able to be identified.

_____ Student's Initials



We will also ask your parents or guardians for their permission for you to do this study. You may talk this over with them before you decide whether or not to participate. You are free to decide not to participate in this study or to withdraw at any time without negatively affecting your relationship with the investigators, the University of Nebraska, or *(Insert school district)*. Your grades will not be affected based upon their decision to participate and any relationship with the *(Insert specific participating school)* along with the *(Insert school district)* will not be affected. Your decision will not result in any loss of benefits to which you are otherwise entitled. If you decide not to participate, you will work on the computer programs or activities that are typically occurring in the computer lab while the other students complete the surveys.

If you have any questions at any time, please ask one of the researchers, or you may call Dr. Susan Swearer at (402) 472-1741.

If you check "yes," it means that you have decided to participate and have read everything that is on the form. You and your parents or guardians will be given a copy of this form to keep.

_____ Yes, I would like to participate in the study.

_____ No, I do not want to participate in the study.

SIGNATURE OF STUDENT

DATE

PRINT YOUR NAME

SIGNATURE OF SCHOOL OFFICIAL

DATE

SIGNATURE OF INVESTIGATOR

DATE

INVESTIGATOR

Susan Swearer, Ph.D.

Office: 472-1741

Scott Fluke, M.A.

Office: 472-6216