

1-1-2014

# Empathy As A Moderator Of Adolescent Bullying Behavior And Moral Disengagement After Controlling For Social Desirability

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**EMPATHY AS A MODERATOR OF ADOLESCENT BULLYING BEHAVIOR AND  
MORAL DISENGAGEMENT AFTER CONTROLLING FOR SOCIAL DESIRABILITY**

by

**AMY ZELIDMAN**

**DISSERTATION**

Submitted to the Graduate School

of Wayne State University,

Detroit, Michigan

in partial fulfillment of the requirements

for the degree of

**DOCTOR OF PHILOSOPHY**

2014

MAJOR: EDUCATIONAL PSYCHOLOGY

Approved by:

\_\_\_\_\_  
Advisor

\_\_\_\_\_  
Date

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## DEDICATION

To the love of my life, Dima ~

I knew from the moment I met you that I'd love you forever, that you were everything I could have asked for in a best friend, a soul mate, a better half;

But I never imagined you would carry me this far.

You believed in me when I didn't, moved mountains for me when I couldn't, and sheltered me when it stormed, which it did so many times...

I could never have done this without you, wouldn't have wanted to if I could, and this is why I dedicate every page to you, because this is just as much mine as it is yours.

Forever and a day ~ Amy

## ACKNOWLEDGEMENTS

Writing this dissertation was a demanding, but satisfying experience because of the many people who encouraged and supported me along the way. First, I would like to thank my advisor, Dr. Stephen Hillman, who taught me the importance of being self-motivated and autonomous by allowing me to learn without constraint and by giving me guidance when necessary, but believing in my capacity to form my own path. I would also like to thank the members of my committee, Dr. Francesca Pernice-Duca, Dr. Jina Yoon, Dr. Alan Hoffman, and Dr. Douglas Barnett, who took the time to review my work and provided me with the professional critiques and beneficial feedback necessary in fine-tuning this challenging task.

I would not have had the flexibility to focus on this research while also concentrating on my professional career had it not been for my supervisor, Dr. Manuel Manrique; from whom I have learned a great deal and will be forever grateful for knowing because of his unique insight and perspective, his trust in my abilities, and the mutual respect that has developed over the course of my entire doctoral process.

I was not able to fully grasp the complexities of my research and statistical analysis until I was thankfully introduced to the truly amazing, Cathy Skimin, who single handedly gave me the confidence to pursue analysis far beyond what I thought I could, and also became a friend along the way.

I would like to thank Drs. Bandura, Jolliffe, Farrington, Calvete, Griezel, Crowne and Marlowe for allowing me to utilize their measures in my research; Dr. Barbara Von Diether for her professional support and encouragement while working on my proposal; Gursharon Shergill with the IRB and Paul Johnson with the College of Education for their record-setting response

time returning my emails and for going above and beyond the call of duty to ensure a panic-stricken doctoral student had all of her ducks in a row; and my research assistants, Elise Goulbourne, Zachary Barrington, my friend and colleague, Nicole Stratton, and my awesome dad, Dennis Skowronski for helping to administer and collect my data with ease. Thank you to the students and staff at O.E. Dunckel Middle School; specifically Principal Allen Archer and Dr. Kristen Gekiere, for allowing me to return to my very own middle school to collect the data for my dissertation. It truly was a surreal experience and an honor to be able to do this there, with you.

Thank you to my friends, Lori and Ben Scott and Zhanna Rozenberg, whose unwavering support and encouragement led me through the ups and downs of this process years beyond my original plan. Without their patience and understanding, I would not have felt like there would be a party at the end of this venture, which is further guaranteed by my friends Jenny Martin, Katya Ternyayeva, and Andre Berezkin, who I thank dearly for always believing in me. Thank you to my brother, Todd for being someone who, despite being younger than me, I've always looked up to literally and metaphorically and my sister-in-law, Carolyn, who is the symbolic glue ensuring there was always time for family. Thank you to my furry friends, BZ, Titus, Ducky, and Molly, for their much needed, fun-filled, cuddle time distractions.

Saving the best for last, and from the deepest depths of my heart and soul; thank you Mom and Dad for everything you are and everything I am; you are truly my inspiration in all things and you have set the standard for everything I hope to become.

*“Listen to the MUSTNTS child, Listen to the DONTs, Listen to the SHOULDNtS, the IMPOSSIBLES, the WONTs, Listen to the NEVER HAVES, Then listen close to me ~ ANYTHING can happen, child, ANYTHING can be”.*

*~ Shel Silverstein*

## PREFACE

Numerous theories providing a better understanding of human nature and psychological processes have addressed matters of human behavior, cognition and emotion; however, most were established well before the rapid progression of technology (Bandura, 2001). While there has been a well-documented course of historical research on bullying behavior and its correlates (Pornari & Wood, 2010), understanding of the contexts under which this behavior is implemented is increasingly developing thanks to technological advances in social networking and communication. Examining the concept of empathy as having a moderating role between moral disengagement and bullying behavior is the main focus of the present study while also assessing to what degree social desirability influences reports of this relationship. A lack of empathic qualities supports the role of moral disengagement as having a probable influence on bullying behavior.

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## CHAPTER 1

### INTRODUCTION

Aggression is a highly researched human behavior that has many detrimental qualities negatively affecting all involved (Nansel et al., 2001; Olweus, Limber, & Mihalic, 1999). Aggression can occur in numerous ways and in many different contexts. While aggression and bullying are often used interchangeably, bullying is considered a subcategory of aggression (Hymel, Rocke-Henderson, & Bonnanno, 2005; Mason, 2008) and a social epidemic (Lagerspetz, Bjorkqvist, Berts, & King, 1982; Lovett & Sheffield, 2007; Pepler, Jiang, Craig, & Connolly, 2008), which often takes place as a group process (Gini, Albiero, Benelli, & Altoe, 2008; Salmivalli, Lagerspetz, Bjorkqvist, Osterman, & Kaukiainen, 1996; Sutton & Smith, 1999).

Bullying is one of the most researched elements of aggressive behavior (Lovett & Sheffield, 2007) and has been thoroughly and empirically investigated for the past few decades (Monks et al., 2009; Vaillancourt et al., 2008). A search of the literature revealed an incomplete and unbalanced record of empirical research about bullying in relation to moral disengagement and the effects of empathy on both. The present quantitative study is an exploration of the relationship between moral disengagement, bullying behavior and victimization, the degree to which moral disengagement is predictive of bullying behavior, whether empathy serves as a moderator between bullying behavior and moral disengagement, and the impact socially desirable reporting has on responses regarding objectionable behavior.

#### **Background of the Problem**

While the study of bullying behavior has an extensive history, there continues to be debate regarding an explicit definition of the term. There is a general consensus (Patchin &



Hinduja, 2006) that bullying entails the recurring, willful objective to produce harm on another, which typically includes an imbalance of power between the aggressor and the victim (Nansel et al., 2001). What typically distinguishes aggression from bullying is the repetitive nature of bullying, as well as the imbalance of power where the victim is frequently unable to defend his or herself (Obermann, 2010; Roland & Idsoe, 2001). Depending on the severity of the act, it is also possible that only one harassing event causes significant degradation of the victim (Olweus, 1993b), which can lead to further victimization. However, bullying is not normally considered one specific phenomenon, but instead, occurs as a plethora of behaviors including physical bullying (e.g., hitting, kicking, punching, pushing), verbal bullying (e.g., name-calling, yelling, teasing), relational/social bullying (e.g., social exclusion, rumor spreading) (Olweus, 1994, Olweus et al., 1999), and most recently, cyber bullying (e.g., harassment via text, email, social networking sites).

Although bullying behavior can sometimes take place well into adulthood, it is most noted as an adolescent behavior that peaks in the middle school years, but declines gradually in the high school years (Williams & Guerra, 2007); and to a moderate degree, bullying is a common occurrence for many youths (Pepler et al., 2008). The need to communicate and interact in a social environment is imperative in early development especially during adolescence when identifying with a group tends to drive personal identity formation. Not feeling as if one belongs can sometimes lead to detrimental emotional and/or psychological difficulties. Mason (2008) stated that both traditional and cyber forms of bullying should be thought of as “distinguished from peer harassment as a subset of aggressive behaviors because bullying represents a pattern of behavior over a period of time” and cyber bullying itself is best described as “a covert form of verbal and written bullying” (p. 323). This leads to the implication that

cyber bullying likely represents a modern form, or an extension of, relational or social aggression with information and communication technology as the messenger.

Raskauskas and Stoltz (2007) argued it is important to highlight what has previously been acknowledged and researched in regard to the detriments of bullying behavior and to extend such information to include the possibly global, negative impact of bullying. Of further concern regarding all forms of bullying is the reality that some adolescents may have, at one time or another, played a role as both a bully and a victim (Mason, 2008; Patchin & Hinduja, 2006; Trolley, Hanel, & Shields, 2006; Willard, 2007b), which is classified as another group; the bully-victims (Kowalski, Limber, & Agatson, 2008).

Hymel et al. (2005) assessed moral disengagement and adolescent bullying among a population of 8th, 9th, and 10th grade Canadian students. Results indicated higher levels of moral disengagement as indicative of higher levels of bullying, and those students who reported no engagement in bullying behavior as having the lowest levels of moral disengagement. Hymel et al. (2005) did not include any references to the effects of empathy in their study. However, Hymel et al. (2005) reported that to a small degree, levels of moral disengagement decreased when those who engaged in bullying also experienced increased victimization. This finding further supports the role of empathy as a moderator in that experiencing, either directly or vicariously, the emotional effects of victimization likely inhibits moral disengagement and bullying behavior; thus, empathy was not found in the review of the literature as a component in studies of bullying.

Lovett and Sheffield (2007) conducted a critical review of several studies about empathy and aggression that did not include any references to “bullying” specifically. Results showed that affective empathy in adolescents, in comparison to children, was more likely to result in a

negative relationship between empathy and aggression. Lovett and Sheffield contended “empathy has been one psychological characteristic repeatedly proposed as a core deficit in aggressive youth” (p. 2). The present study is an attempt to include the assessment moral disengagement as a potential predictor of bullying, which will add a new dimension to the findings of Lovett and Sheffield.

When an individual experiences being both the aggressor in bullying behavior as well as the victim of bullying behavior, he or she is commonly referred to as a “bully-victim” (Pellegrini & Bartini, 2000; Schwartz, Dodge, Pettit, & Bates, 1997). Thus, in general, individuals classified as bully-victims were initially the victims of bullying behavior and then became bullies themselves (Kowalski et al., 2008; Li, 2006). The opposite can also occur when a youngster bullies others, and then finds the bullying behavior has turned against him or her by their peers. Victims may look for the support of peers on the Internet to gain the confidence to retaliate against bullies (Li, 2007).

Often, victims who have been bullied in the schoolyard resort to seeking revenge through technological means. This potentially vicious cycle has the ability to convert victims into bullies and vice versa (Diamanduros et al., 2008). Sometimes behaving in dissimilar ways in various contexts, it is critical to assess covariance among different forms of negative behaviors (Jessor, 1992) because individuals are often not easily categorized into one specific group, which supports the addition of assessing moral disengagement (as well as social desirability, which is discussed in detail in the following chapter). Jessor did not compare the disengagement of empathy to the act of bullying nor does he explore the relationship of moral disengagement to bullying and the effect social desirability could have on reports of all of the above mentioned behaviors and cognitions.

## Statement of the Problem

While most children report having a negative view of bullying behavior (Baldry, 2004; Boulton & Underwood, 1992; Fox, Elder, Gater, & Johnson, 2010; Menesini et al., 1997), research on children and adolescents' actual behavior is needed to fully understand the phenomenon (Sutton & Smith, 1999). One's views about various issues do not always correspond with one's behavior (Bandura, 1986, 2001). Both bullies and victims of bullying suffer from greater negative psychological consequences (Bauman, 2010; Diamanduros, Downs, & Jenkins, 2008) than those not involved in bullying behavior. Diamanduros et al. (2008) suggested that continuing to develop an improved understanding of the negative effects, antecedents, and consequences of all forms of bullying behavior is necessary to further develop prevention, response, and education programs.

Kowalski et al. (2008) reported that over the past 50 years a great deal of research has been conducted on the cultural influence of technology and the media. Debate continues as to whether or not the detriments outweigh the benefits. Results have implied a detrimental influence and impact of media on adolescents. One of the primary negative attributions of technological advances is the transfer of bullying practices from the real world to the cyber world (Patchin & Hinduja, 2006). Because of the very limited boundaries set forth through cyber-communication (Feinberg & Robey, 2008), modern forms of technology have allowed children and adolescents to extend their bullying behavior from the physical world to the virtual world (Mason, 2008) leaving children with ample opportunities to bully others in extensive and elaborate ways. This faceless communication may make it easier for individuals to morally disengage from negative behavior and the lack of verbal and physical cues likely inhibits empathy from negative action.

Patchin and Hinduja (2006) suggested that researching the correlates between traditional and cyber bullying is necessary in gaining a full understanding of bullying behavior in general. Patchin and Hinduja investigated the psychosocial consequences of cyber bullying for bullies and targets (victims). An abundance of empirical research has been done on the short and long term consequences of traditional bullying, including the damaging psychosocial disturbances for both victims and bullies (Griezel, Craven, Yeung, & Finger, 2008b), but because of the recent advancements in technology, there is limited longitudinal data on the effects of cyber bullying.

The potential negative long-term effects of both traditional and cyber forms of bullying may stem from the conclusions that the aggressors have gone out of their way to harm, embarrass, or offend the victim (Kowalski et al., 2008). The victims are left knowing that someone chose to intentionally disrupt their lives, which can understandably leave long-term emotional and psychological scars. As bullying research improves and expands, it is likely intervention and prevention programs intended to inhibit this behavior will improve as well (Lovett & Sheffield, 2007).

### **Purpose of the Study**

The purpose of the present study was to explore the relationship between the predictor variables and bullying behavior among male and female adolescents in a Southeast Michigan school district. The focus of the effort was to (a) examine the relationship between moral disengagement and the various forms of bullying behavior, (b) define the degree to which moral disengagement is predictive of bullying behavior, and (c) explore whether empathy serves as a moderator between bullying behavior and moral disengagement after controlling for social desirability. Though a positive relationship has been established between bullying inhibition and empathy, (a positive relationship with moral disengagement has also been established, but not

with empathy as a moderator between the two) it is important to assess other factors contributing to the bullying epidemic; thus, the present study assessed moral disengagement as a potential predictor of bullying.

Moral disengagement has been positively correlated with dysfunctional and delinquent conduct (Kiriakidis, 2008). In reference to a study by Rutter (2005), Kiriakidis (2008) stated that there is a “need to follow an approach examining mediational mechanisms that translate adverse experiences into psychosocial maladjustment...one approach is to examine the way humans cognitively represent these experiences” (Rutter, 2005, in Kiriakidis, 2008, p. 581). Given this, the present study added a measure of social desirability in order to address concern for the validity of self-reported cognitive representations in relations to the remaining variables.

After a detailed exploration through the research on adolescent bullying behavior, the relationship between moral disengagement and the various forms of bullying behavior, the degree to which moral disengagement is predictive of bullying behavior, and the effect empathy might have in mitigating this connection has not yet been assessed. Furthermore, past research has not yet assessed whether empathy moderates the relationship between bullying behavior and moral disengagement, which highlights the importance of the present study’s goals and framework; thus, it is necessary to examine whether or not cognitive variables (i.e., empathy) strengthen or weaken the relationship between one’s beliefs (moral disengagement) and action (bullying).

### **Theoretical Framework**

Social cognitive theory explains the bidirectional interaction and reciprocal causation of human behavior and includes cognitive and personal factors and events which take place within ones environment (Wood & Bandura, 1989; Bandura, 2001). Social cognitive theory provides a

framework for understanding human behavior regarding the reasons people behave in certain ways given their individual cognitive style and environmental influences, specifically when ones behavior is contradictory to his or her general beliefs. It is not only through direct instruction that humans learn from one another, but also through indirect means such as observation and modeling (Wood & Bandura, 1989). The main component of social cognitive theory associated with the study of bullying is cognition. Cognition influences individual preference for perceiving and processing information. Bullying is often a conscious determination one makes to control another individual, and according to Social Cognitive Theory, can be learned through direct, vicarious, and self-produced means of motivation (Bandura, 1986, 2001).

The development of cognition as defined by Wood and Bandura (1989) involves observational learning and the influence that it has on an individual's behavior. Wood and Bandura posited that observational learning involves four processes including, (a) attentional processes through which individuals selectively observe (the modeled behavior) and what information they retain, (b) cognitive representational processes that involve the retention of information about events in the form of rules and concepts (i.e., schemas), (c) behavioral production processes that translate symbolic conceptions into appropriate courses of action (behavior), and (d) motivational processes that provide the incentive to act wherein individuals are more likely to manifest if outcomes are valued as positive as opposed to unrewarding or punishing (Bandura, 1986, 2001; Wood & Bandura, 1989).

A second psychological mechanism in social cognitive theory is agentic influence. Bandura (2001) suggested that "to be an agent is to intentionally make things happen by one's action" (p. 1). Bandura noted that personal influence is manifested through an individual's belief system and self-regulatory skills. He hypothesized that human behavior can be explained

through cognition, which is the individual's ability to process, represent, retrieve, and use coded information to manage tasks as well as goal setting, self-motivation, and self-enabling functions that also determine the level of commitment to act. Bandura (2001) theorized that social cognition through the self-regulatory functions of forethought, intention, self-reflectiveness, self-monitoring, and self-efficacy "address what it means to be human" (p. 6; Bandura, Barbaranelli, Caprara, & Pastorelli, 1996b).

The present study is based on social cognitive theory (Bandura, 1986, 2001) as the foundation for understanding bullying behavior. Motivation can be influenced by what the individual experiences in society (external incentives) or through personal encounters (internal incentives). Bandura (1986) described the effects of motivation through the value and force placed on the incentive in stating, "Direct incentives have greater motivational power than vicarious ones when it comes to maintaining behavior over time" (p. 303). Witnessing rewarded behavior can serve as a motivational factor, but is unlikely to produce long-term effects absent of other factors. People identify certain degrees of importance on their own consequences through witnessing what other individuals experience in similar situations. Through observation of the outcomes, either positive or negative, the criterion for determining the fairness and value of the outcome is established. Observing inequitable rewarding behavior discourages motivation while observing equitable reward is encouraging motivation (Bandura, 1986).

Extensive research exists on symbolic modeling with the disinhibition of aggressive acts (Bandura, 1986). Violence tends to be portrayed in a positive light through the media. The aggressive lifestyle is sometimes depicted as suitable in social acceptance and prevalence. Observing violence has been shown to be conducive to aggressive conduct (Bandura, 1986). Individuals tend to rely on the media to gain information about current events; however, to keep



it entertaining, news stations generally report tragedies, violence, and sorrow before reporting positive events. Viewers are consistently exposed to negative images through the electronic media (Bandura, 1986). Aggressive outcomes are generally altered to convey dramatic pictorials over less entertaining, but beneficial consequences (Bandura, 1986). Bandura (2001) concluded “Inhibitory and disinhibitory effects stemming from self-sanctions are mediated largely through self-regulatory mechanisms. After standards have been internalized, they serve as guides and deterrents to conduct by the self-approving and self-reprimanding consequences people produce for themselves” (p. 277).

Steinberg (2004) made reference to the ability to self-regulate as a more difficult task for adolescents who generally do not reach full maturity and proficiency until they reach adulthood. Further, novelty and sensation-seeking increase dramatically at puberty; thus, an immature self-regulatory system and the pursuit of sensory pleasure (Arnett, 1992; Jessor, 1992; Steinberg, 2004) help explain why some children and adolescents resort to bullying others in both traditional and electronic ways. When exploring adolescent cognitive factors contributing to antagonistic behavior, all forms of bullying can be seen as resulting partly due to the failure of probability reasoning (Bandura, 1986; Mason, 2008; Steinberg, 2004). The adolescent weighs the benefits and detriments of engaging in the bullying behavior based on his or her past experiences or through observing the experiences of others (Bandura, 1986).

If the adolescent has not yet either personally or vicariously observed the damaging effects of his or her bullying behavior, the thorough understanding of the complexity of his or her actions is not fully understood. This is most often the case specifically with cyber bullying as the consequences of ones actions can go seemingly unnoticed. Bullying behavior is less likely to take place if it is qualified as objectionable and immoral rather than as tolerable and

acceptable in society in general, but even more so among peers. Regarding the present study, the adolescent who bullies others in traditional and/or electronic forms was expected to be less concerned with moral reasoning or to justify his or her actions through the process of moral disengagement. Furthermore, it is also predicted that empathy will moderate the relationship between moral disengagement and bullying behavior. Lastly, because of the societal stigma attached to bullying and victimization, the present study addressed the possibility of biased answering by adding a measure of social desirability in order to determine if response bias occurred and if so, to what extent. Adding this variable allowed for the the Based on the purpose and theoretical framework of the current study, the following section recites the primary research questions and hypotheses that drove the conduct of the study.

### **Research Questions**

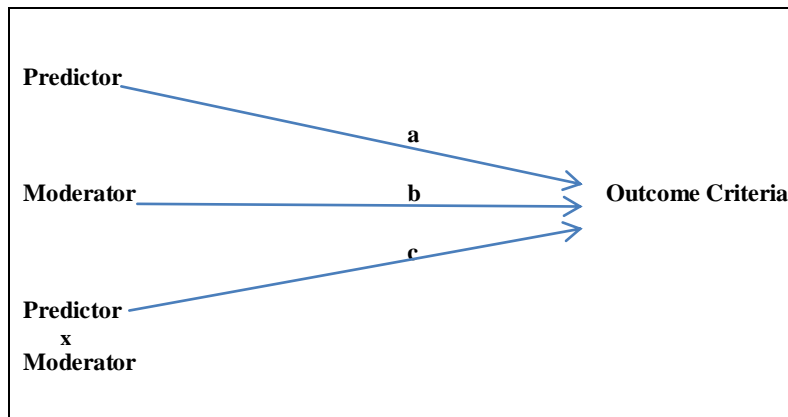
Based on the information presented previously, the following research questions were utilized in order to obtain supportive information relevant to the purpose of the study:

1. Does a change in levels of bullying, moral disengagement, empathy, and social desirability emerge between grades 7 and 8, between male and female adolescents, and across different ethnicities?
2. Do reports of social desirability affect reports of bullying, victimization, moral disengagement, and empathy?
3. To what degree is bullying behavior (physical, verbal, social, cyber) correlated with moral disengagement?
4. Does empathy significantly affect reports of bullying and moral disengagement after adjusting for social desirability?
5. Which of the six predictors (moral disengagement, empathy, social desirability, gender, grade, and ethnicity) improve the regression equation to predict bullying behavior; and do empathy and social desirability serve as moderators of this relationship?

## Significance of the Study

The present study is intended to provide results that can identify the relationship between moral disengagement and the various forms of bullying behavior, the degree to which moral disengagement is predictive of bullying behavior, and whether empathy serves as a moderator between bullying behavior and moral disengagement, and to what degree social desirability influences reports of the variables. As stated by Baron and Kenny (1986), “a moderator is a qualitative (e.g., sex, race, class) or quantitative (e.g., level of reward) variable that affects the direction and/or strength of the relation between an independent or predictor variable and a dependent or criterion variable” (p. 1174, Baron & Kenny, 1986; see Figure 1).

Figure 1. *Moderator Model*



If a relationship is established between the independent and dependent variables (bullying behavior and moral disengagement), a third variable (empathy) will be added to assess the influence empathy has in strengthening and/or weakening the direction of the relationship between bullying behavior and moral disengagement. The inclusion of empathy as having a moderating influence on bullying behavior and moral disengagement was hypothesized in the following two ways: 1) high levels of empathy will negatively correlate with low levels of moral

disengagement and bullying behavior, and 2) low levels of empathy will positively correlate with high levels of moral disengagement and bullying behavior. The addition of social desirability as a potential moderator was also included in order to assess whether empathy remains a moderator of moral disengagement and bullying after controlling for socially desirable response bias.

The results aim to prove to be significant by providing users with a methodology for improving anti-bullying campaign efforts, specifically, those efforts focused on improving empathy and diminishing moral disengagement in order to lower rates of bullying and victimization among adolescents. Results may bolster and expand on current bullying research and reinforce theoretical concepts about socialization and behavior commonly utilized in helping to explain why adolescents behave as they do, especially in morally opposing ways. Regarding the social cognitive framework of explaining human behavior (Bandura 1986, 2001; Wood & Bandura, 1989), which is the theoretical framework for the present study, it is imperative to acknowledge the potential risks children and adolescents take when engaging in social environments with others, whether in person or in cyberspace. Gaining a better understanding of the attitudinal or cognitive variables that are instrumental in producing bullying behavior is of great concern to social psychologists, criminal psychologists, and stakeholders in the K-12 educational environment.

It is hypothesized that adolescents who engage in bullying behavior are more likely to justify their behavior through moral disengagement than those who do not engage in bullying. Further, it is hypothesized that individuals who are highly empathic will have low moral disengagement and be less likely to engage in bullying behavior than those who are less empathic. If the results from this study determine empathic characteristics are indeed moderating bullying and moral disengagement, a focus on teaching empathy and moral equality

within the anti-bullying realm will be justified. Furthermore, social desirability will be examined to determine whether or not students attempted to report a more favorable representation of his or her self as a way to avoid appearing socially or morally unacceptable and to what degree this potential response bias may have affected results, if at all.

The information provided in the results of this study intends to enhance our understanding of adolescent's experiences with bullying behavior as victims and as perpetrators; and to provide a more definitive direction in terms of the development of intervention and prevention programs. The results will either support or discount the proposition that empathy moderates the relationship between moral disengagement and bullying behavior.

### **Summary**

Chapter 1 was a discussion of the background of the problem culminating in a statement of the problem, the purpose of the study, and the research questions. The theoretical foundation for the study and nature of the study are cited. In Chapter 2, a comprehensive literature review concerning the effects of bullying and related issues is presented. Chapter 2 concludes with a summary of the existing literature review, citing the gap in the knowledge the present study is intended to address. Chapter 3 will discuss details of the research method.

## CHAPTER 2

### REVIEW OF LITERATURE

Bullying is a common, but unacceptable form of adolescent behavior that has become a detrimental and prevalent problem (Mason, 2008). The methods of bullying, either inflicted or experienced, have been found as non-determining factors regarding whether or not the victim chose to report the bullying incident (Unnever & Cornell, 2004). Bullying has historically taken place in tangible ways in school and other public places within the community where youths physically interact (Patchin & Hinduja, 2006), but this has changed drastically with the development of modern technologies allowing for a new environment for bullying to take place. The following chapter is a review of the empirical literature concerning behavioral theories that may contribute to bullying behavior, the similarities and differences between traditional and cyber bullying, gender and grade differences regarding bullying behavior, and developmental, psychosocial, and group process factors that may be associated with bullying behavior. In addition, moral disengagement as a potential contributor to bullying behavior and empathy as a potential determinant of bullying behavior are reviewed.

#### **Behavioral Theories**

Social cognitive theory was cited in Chapter 1 as the theoretical framework for the present study; however, numerous theories providing a better understanding of human nature and psychological processes have addressed matters of human behavior, cognition, and emotion. Most were established well before the rapid progression of technology (Bandura, 2001). While there has been a well-documented course of historical research on bullying behavior and its correlates (Pornari & Wood, 2010), understanding of the contexts under which this behavior is implemented is increasingly developing thanks to technological advances in social networking

and communication. Examining the concept of empathy as having a moderating role between moral disengagement and bullying behavior was the main focus of the present study as a result of a search of the literature that failed to find evidence of similar empirical studies; the knowledge was found to be incomplete and unbalanced. A lack of empathic qualities supports the role of moral disengagement as having a probable influence on bullying behavior. A discussion of relevant theories of behavior follows.

**Social Acceptance.** Adolescence marks the time when youngsters put greater emphasis on peer socialization than at any other developmental period (Dobbs, 2011). Perceived social rejection or exclusion from others often takes a toll on adolescent self-esteem, along with additional detrimental consequences resulting from such factual or erroneous perceptions (Leary, Schreindorfer, & Haupt, 1995). This condition is referred to as the social acceptance model theorized originally by Charles Cooley in 1902. Throughout adolescence, the ways in which youths observe others and make assumptions regarding the views and intentions of others greatly effects their self-esteem (Griezel, Craven, Yeung, & Finger, 2008a; Olweus, 1993b; Patchin & Hinduja, 2006). These internal representations and social cues are sometimes misconstrued and viewed as threatening, which can lead to angry and aggressive reactions (Cullerton-Sen, Cassidy, Murray-Close, Cicchetti, Crick, & Rogosch, 2008).

Adolescence is a time for youths to explore the many personal and social choices life has to offer. It is also the developmental period when the need for socialization increases and social networks potentially expand, “which generally makes us healthier, happier, safer, and more successful” (Dobbs, 2011, p 49). The search to formulate various personal identities peaks during adolescence, and the urgency to form close bonds with peers to gain a feeling of group

belonging become most crucial. It is a time when youngsters begin to develop their identity, values, and personal opinions (Cullerton-Sen et al., 2008).

Of notable reference is the well-renowned research performed by Erikson in 1963 in which adolescence is noted as involving the search for independence and autonomy. It is also characterized as a developmental period consisting of confusion and sometimes boredom resulting from parental and societal restriction. During this time, the adolescent is ideally able to explore various identities in a healthy and normal fashion, which results in fostering feelings of confidence in who they believe they are, with a strong and certain sense of identity. Should the adolescent fail to achieve this positive sense of identity, negative attributions tend to arise, leaving the youngster unable to fully develop a well-rounded sense of identity, which can possibly lead to feelings of inferiority (Erikson, 1963).

Adolescence marks the time when youths strive for autonomy, but continue to look to others for inspiration and guidance (Tolman, Striepe & Harmon, 2003). As physical maturation begins to emerge, the adolescent begins to explore their identity and new forms of relationships begin to transpire. Behavioral changes such as impulsivity and sensation-seeking behavior peaks in mid-adolescence (Dobbs, 2011). Through the observation of others, adolescents gradually develop ideas regarding who it is they would like to be and how they would like to be perceived (Bandura, 1986). Confusion results when the adolescent is unable to adequately develop his or her personal identity, which results in what has been termed 'the crisis of identity' (Erikson, 1963).

While youths struggle to form their identities and develop a sense of self, they tend to take on different roles in an effort to determine who they are and who they want to be (Suler, 2004). Currently, the environment allows adolescents even further exposure to potential roles



they can experiment with when constructing their identities, thanks to technological advances such as the Internet (Suler, 2004). Valkenburg and Peter (2008) made reference to ‘online identity experiments’ as an adolescents propensity to pretend to be someone else or imitate other personas online. As an example, Lenhart, Rainie and Lewis (2001) found experimenting with differing online identities was acknowledged by almost 75% of adolescents who use instant messaging, but this is experienced more often with early adolescents than with older adolescents (Valkenburg & Peter, 2008).

Many aspects exist in which adolescent developmental tasks take place including, but not limited to (a) the search for individuation and autonomy, (b) developing a sense of self, (c) formation of personal identity, (d) biological, sexual, social, psychological, and cultural features of identity exploration, (e) development of important personal relationships with others, (f) controlling of one’s impulses, and (g) learning to take responsibility for one’s actions (Bandura, 1986; Ponton, 1997). Given the many perspectives proposed by professionals and the various dimensions in which behavior takes place personally and socially, as well as the numerous implications symptomatic of the difficulty in decreasing the occurrence and frequency of aggressive behavior, it is no wonder adolescence is considered one of the most complex periods of human development.

**Identity Transition from Private to Social Self.** The theory of *identity transition from private to social self* alludes to the fact that adolescence is marked by the change from elementary school to middle school, which is commonly considered a rather complicated time in human development (Li, 2007). Adolescence often involves the occurrence of drastic changes socially and biologically. Biological change is comprised of bodily and hormonal transformations through puberty, while social changes involve the transitions from child to

adolescent, which involves the formation of not only personal identity, but group (peer) identity as well (Dobbs, 2011). Erikson (1963) identified developmental stages that pertain to personally accomplishing developmental tasks. If the transition is not successful, the individual is theorized to be at risk of having some form of an identity crisis.

The elementary school years are commonly considered a time when youths make attempts at developing a sense of self, which is generally accomplished through the refinement of various personal skills (Erikson, 1963). On the other hand, the middle school years and adolescence are generally regarded as a time when youths attempt to integrate the many roles they play (e.g., son/daughter, student, sister/brother, friend) into one collaborative person or a unified self. Both stages generally include the search for identification of self, but young children tend to identify through individual tasks in proficiency enhancement while adolescents are apt to identify through the numerous roles they play within their social (e.g., family, peer, community) standing (Bornstein & Lamb, 2005; Erikson, 1963).

**Social Information Processing (SIP) and Decision-Making Perspective.** The Social Information Processing model proposed by Crick and Dodge (1994) posited aggression and bullying as driven by the ways in which one processes social information, which includes five interrelated cognitive processes attributed to the ways individuals socialize. These processes include the ability to (a) assess internal and external stimuli, (b) interpret and make attributions of intent and causality of stimuli, (c) produce a social goal, (d) generate and then attain a response, and (e) select the most valuable response (Bornstein & Lamb, 2005; Dodge & Coie, 1987; Dooley, Pyzalski, & Cross, 2009). In regard to aggression and the SIP model, it is theorized that the tendency for some to behave aggressively is due to a negative attribution style

whereby the aggressive response is made as the result of assuming hostile intent (Dodge & Coie, 1987; Crick & Dodge, 1994).

Quite similar to the SIP model is the decision-making perspective proposed by Furby and Beyth-Marom (1992). This process accentuates the individual choices adolescents make regarding their courses of actions, weighing of options, and chosen alternatives regarding engaging in bullying behavior. The basic steps toward decision-making specified in this model include the adolescents' ability to (a) identify the possible options (including the consideration of other possible options and the final chosen alternative), (b) identify the possible consequences resulting from each option, (c) evaluate the interest of each consequence, (d) assess the likelihood of the potential consequences, and (e) combine the above information in order to establish (choose) the "best" option. What is generally considered the optimal choice usually depends on the individual's personal values and perceived outcomes.

As an example, while attempting to determine which factors influence adolescents' decisions to engage in risk-taking behavior, Rolison and Scherman (2002) assessed the effects of sensation-seeking behavior, locus of control and perceived costs and benefits. The authors define locus of control as "the perception one has of the control he or she has over the events that occur in one's life" (p. 587). This is an important concept in that the amount of control one believes they possess over a given outcome may influence his or her decision to engage in bullying another person (Fontaine, 2008). Rolison and Scherman mention an internal and external dimension of locus of control with internal control referring to one's ability to personally manipulate positive or negative events in his or her life, and external control as those negative or positive events, which occur beyond the individual's control. This concept has important implications regarding bullying behavior. An individual who believes they have

personal control over situations may utilize bullying as a mechanism of manipulation and power, but when it is believed the situation is beyond their control, the same bully would likely have to find less aggressive means (Bandura, 1986, 2001).

Results of the Rolison and Scherman (2002) study showed sensation seeking as a significant predictor of adolescent risk-taking behavior. They also discovered that the more risky a given behavior appears, the less likely the adolescent will become involved in bullying behavior. Therefore, the adolescent who assesses his or her behavior as highly consequential is less likely to bully another person. On the other hand, if an individual perceives the bullying behavior as having rewards that outweigh the consequences, such as respect from peers or control over another person, the choice to bully someone may appear worthwhile (Bandura, 1986, 2001).

Many adolescents are ill equipped in their decision-making skills (Dobbs, 2011; Mason, 2008), and often construct irrational judgments based solely on emotion without utilizing proper problem-solving techniques (Bornstein & Lamb, 2005; Dodge & Coie, 1987). This has important implications because the adolescent most likely assesses the amount of risk involved in bullying and then decides whether or not to engage in the action based on their assessed beliefs. It is the level of perceived risk that sometimes differs between adolescent and adult decision-making processes as adolescents are more likely to place a greater value on the rewards of risk-taking than adults (Dobbs, 2011).

Potentially negative risks youngsters take resulting from engaging in all forms of bullying behavior include hurting others in physical or psychological ways, getting caught and then punished for his or her negative conduct, but somehow learning that this behavior is beneficial (e.g., positive feedback from peers), thereby risking further engagement in bullying behavior.

During this developmental period, adolescents ideally learn crucial decision-making skills (Dobbs, 2011; Furby & Beyth-Marom, 1992), which are necessary in engaging in social situations among peers. Should the adolescent go without learning the detrimental consequences of bullying and instead gain beneficial results, the behavior is likely to continue. On the other hand, if the adolescent ideally learns the detrimental outcomes of bullying another person, the likelihood of the bullying continuing decreases (Bandura, 1986, 2001), which is a key aspect in the present studies attempt at determining the degree of empathy's inhibitive influence. The following sections are a survey of the empirical literature on both traditional and cyber bullying.

### **Traditional Bullying Research**

A detailed history of the research already done on more traditional forms of bullying provides “a comparative point of reference” to cyber bullying (Patchin & Hinduja, 2006, p. 149). Bullying is defined as “a form of social interaction in which a more dominant individual [the bully] exhibits aggressive behavior which is intended to and does, in fact, cause distress to a less dominant individual [the victim]” (Stephenson & Smith, 1989, p. 45). Traditionally, bullying is thought of as a direct, physical (hitting, kicking, pushing) or verbal (teasing, threatening, name calling) threat, but in actuality, bullying can also be relational (social), non-verbal (i.e., dirty looks) and indirect (Olweus, 1994; Olweus et al., 1999). Both direct forms of aggression, physical and verbal, are often referred to as *overt aggression* (Tomada & Schneider, 1997).

Relational aggression is defined as social conduct involving “overtly or covertly socially manipulating behaviors used to harm relationships between two or more individuals” (Cullerton-Sen et al., 2008, p. 1737) and includes behaviors such as purposeful social exclusion, intentional embarrassment, renegeing on friendships, and sabotaging relationships through behaviors such as spreading rumors or sharing someone's privately disclosed secrets with others to embarrass or

humiliate the person (Crick, 1995; Crick & Grotpeter, 1995; Tomada & Schneider, 1997; Willard, 2007a).

Traditional bullying becomes increasingly hazardous the more frequently it is committed and therefore takes on a more violent and aggressive role than basic harassment (Li, 2007; Mason, 2008; Olweus, 1993b; Patchin & Hinduja, 2006; Pellegrini & Bartini, 2001). Bullies most often engage in aggressive behavior to gain a sense of power and control, and satisfaction is achieved through domination by negatively affecting their victims (Diamanduros et al., 2008) either emotionally, physically, or both. Additionally, bullying is often rewarded and reinforced by the reactions from peers, which may appear positive because there is either a fearful or admirable group response (Kowalski et al., 2008), which supports moral justification (disengagement) (Bandura, 1999, 2001; Bandura et al., 1996a; Kiriakidis, 2008).

Olweus (1993b) conducted one of the most wide-ranging studies relative to traditional adolescent bullying behavior, utilizing 150,000 first through ninth grade Norwegian and Swedish students. Fifteen percent of students indicated involvement in problems relative to bully/victim behavior “several times or more” with approximately 9% reporting having been bullied and 7% reporting they had bullied others over a 3 to 5 month period. Of all students, approximately 2% indicated that they were both victims and aggressors of bullying behavior (or bully/victims). In a more recent study conducted with institutionalized youths, Sekol and Farrington (2010), found bully/victims did not differ from pure bullies and pure victims in the ways they bullied or were victimized, nor did they differ in a number of background and personality variables (e.g., age, length of institutionalization, empathy, self-esteem). The authors also mention a study conducted with an adolescent population within the school system, performed by Unnever (2005), which projected a distinctive underlying predictor of bullying behavior among the

bully/victim population. Both studies (Sekol & Farrington, 2010 and Unnever, 2005) had similar results as, “bully/victims did not significantly differ from either pure bullies or pure victims...results, therefore, imply differences in degree, not in kind” (p. 1760; Sekol & Farrington, 2010).

Bullying behavior among today’s adolescents does not necessarily differ greatly from what was experienced by their parents as youngsters (Kowalski et al., 2008); if anything, the vehicles through which bullying is now portrayed may have advanced, but the fundamental qualities remain. Research on traditional bullying behavior has discovered that being the victim of bullying results in negative psychosocial functioning and adjustment, including higher rates of depression, anxiety (Craig & Pepler, 1997; Olweus, 1993a; Rigby & Slee, 1999) and feelings of loneliness (Nansel et al., 2001). For victims of bullying, many of these detrimental, long-term effects can sometimes extend beyond adolescence and into adulthood (Nansel et al., 2001; Olweus, 1993b, 1994). Conversely, it is not only the victim of bullying who is likely to suffer detrimental consequences due to this behavior, but the bully may as well. Traditional school bullies have been associated with severely detrimental issues such as criminality (Olweus et al., 1999) and suicidal ideation (Rigby & Slee, 1999; Roland, 2002). As is the case for the the victims of bullying, bullies themselves are also at risk of developing psychosocial difficulties persisting well into adulthood (Mason, 2008; Nansel et al., 2001). Many individuals who engage in antisocial activity as adults were bullies as adolescents (Kiriakidis, 2008).

### **Cyber Bullying Research**

Cyber bullying is a relatively new phenomenon introduced through recent technological advances over the past decade (Kowalski et al., 2008), and the practice of researching cyber bullying is gradually advancing into common practice (Patchin & Hinduja, 2006; Reidel, 2008;

Willard, 2007a, 2007b). There are many distinctive challenges that now arise as the result of these recent developments in terms of making distinctions between traditional and modern forms of bullying behavior. Cyber bullying is a rapidly increasing problem, which takes place in the virtual world and therefore stretches its damaging arms into the lives and homes of people throughout the entire world (Mason, 2008).

*Cyber bullying* is defined as the sometimes repetitious and harassing redistribution or sharing of harmful or offensive material by an individual or group that is intended to deliberately harm, humiliate, deceive, impersonate, embarrass, threaten, exclude or provoke an individual or group through textual or digital electronic technologies. This material is generally either sent on the Internet through instant messaging, chat rooms, and social networking sites, on cell phones, smart phones, or PDA's (personal digital assistants) via text messaging (Diamanduros et al., 2008; Feinberg & Robey, 2008; Finkelhor, Mitchell, & Wolak, 2000, 2001; Kowalski et al., 2008; Mason, 2008; Patchin & Hinduja, 2006; Ybarra & Mitchell, 2004a, 2004b).

As is the case for traditional bullying, cyber bullying can also take on direct and indirect forms (Chibbaro, 2007; Kowalski & Limber, 2007), and there are numerous ways in which cyber bullying may occur. Willard (2007a) identified differing ways in which cyber bullying can take place: (a) *flaming* – is considered an indirect method of cyber bullying and entails the distribution of offensive material sent either privately to an individual or publicly to a group of individuals online and generally constitutes a dispute between two people through the use of threats and insults, (b) *harassment* – is considered a direct form of cyber bullying and involves the repeated distribution of harmful material to the victim, (c) *denigration* – includes the distribution of cruel, harmful, and sometimes untrue information about the victim to others, (d) *cyber-stalking* – entails the harassment of the victim, which is generally threatening in nature, (e)



*masquerading* – is the imitation of someone else; pretending to be the person in order to portray the victim in a negative way or places the victim in a potentially dangerous predicament, (f) *outing* and *trickery* – involves the implementation of deceiving others to divulge information, which is then generated in a publicly to humiliate the victim, (g) *online exclusion* – entails intentionally excluding the victim from involvement in the online group through either ignoring the individual or blocking him or her from participation altogether, h) *impersonation* – involves the aggressor pretending to be the victim and voicing negative and harmful thoughts as if they were the target; commonly through stealing the victims passwords, and Kowalski et al. (2008) added, (i) *happy slapping* – directly assaulting an individual, recording the attack, and subsequently downloading and placing the video on the Internet for thousands to see (Beale & Hall, 2007; Chibbaro, 2007; Kowalski et al., 2008; Willard, 2007a, 2007b).

Electronic communication tools allow bullies to send denigrating material to not only the victim, but also to third parties and public forums such as social networking sites (Mason, 2008). While certain forms of electronic communication may be more highly utilized among children and adolescents, most forms of cyber bullying are generally, not mutually, exclusive (Valkenburg & Peter, 2007). Willard (2007a, 2007b) posited that all adolescents involved in the utilization of electronic communication have played a part in the cyber bullying triad, which includes the bully, the victim, and the bystander. Some adolescents may have, at one time or another, played a role in all three categories (Mason, 2008; Trolley et al., 2006). An individual who participates sometimes as the aggressor and sometimes as the victim is referred to as a “bully-victim” (Pellegrini & Bartini, 2000; Schwartz et al., 1997). Generally speaking, individuals who are classified as bully-victims were originally considered the victims of bullying behavior and then became bullies themselves (Kowalski et al., 2008; Li, 2006), which more than

likely becomes a learned behavior, now possibly even further justified as a response to unfair treatment (which is a form of moral disengagement). Furthermore, victims may look for the support of peers on the Internet in order to gain the confidence to retaliate against their bullies (Li, 2007; Trolley et al., 2006), which explains one of the many reasons one may initiate engagement in cyber bullying.

Frequently, victims who were previously bullied in the schoolyard sometimes seek revenge through technological means (Mason, 2008). In other words, this potential vicious cycle turns victims into bullies and vice versa. Bully-victims often have an even more problematic psychosocial developmental course (Kowalski et al., 2008; Li, 2007) than those who are classified as either bullies or victims alone. The reason for this is the fact that, while both victims and bullies generally suffer negative ramifications from bullying behavior, bully-victims experience the detrimental consequences of playing the role of both victim and bully; thereby replicating both sides of the detrimental coin. As a result, bully-victims tend to do poorly in school, develop inadequate social skills necessary in maintaining healthy relationships, and exhibit behavioral problems, which may lead to social isolation (Diamanduros et al., 2008).

Regarding the various ways in which an adolescent can partake in cyber bullying, as either a bully, victim, or bystander, six roles have been identified (Mason, 2008), including: (a) *entitlement bullies* – those who believe they are superior to their targets, either because the victim is different or inferior in some way; leaving the bully with the belief that they are afforded the privilege to demean the victim, (b) *targets of entitlement bullies* – those who are victimized due to the belief that he or she is somehow inferior to the entitled/superior bully, (c) *retaliators* – those of whom have been bullied by others and now utilize the internet to retaliate against his or her bully, (d) *victims of retaliators* – individuals who have bullied others in the real world who

are now being bullied by others through electronic means in the virtual world, (e) *problem bystanders* – those who support the bullying behavior by either encouraging this behavior, or witnessing the behavior and doing nothing to help the victim, and (f) *solution bystanders* – those who witness the bullying behavior and make attempts to defend the victim by either interfering or protesting against it, telling an authority about the victimization or supporting the victim directly by intervening (Trolley et al., 2006; Willard, 2007a).

Mason (2008) states that both traditional and cyber forms of bullying should be thought of as “distinguished from peer harassment as a subset of aggressive behaviors because bullying represents a pattern of behavior over a period of time” and cyber bullying itself is best described as “a covert form of verbal and written bullying” (p. 323). This leads to the conclusion that cyber bullying is likely an extension of traditional forms of bullying presenting similar negative consequences. Patchin and Hinduja (2006) described changes in modern technology stating, “Though they are intended to positively contribute to society, negative aspects invariably surface as byproducts of the development of new technologies such as these. The negative effects inherent in cyber bullying, though, are not slight or trivial and have the potential to inflict serious psychological, emotional, or social harm” (p. 149). With the encouraging emergence of sophisticated technological advances, there have also been negative advancements in the methods and avenues with which youths can now bully others.

Feinberg and Robey (2008) make assertions that cyber bullying has many detrimental effects on the educational system including the victims’ actual experience within the school climate, which has the potential to disrupt school safety and the students’ mental health, which may be compromised negatively. Mason (2008) stated “the Internet inadvertently undermines the quality of human interaction, allowing destructive emotional impulses freer reign under

specific circumstances” (p. 328). Overall, the negative consequences resultant from the use of cyber bullying includes the weakening of inhibitions, the anonymous facade of the computer screen, the ability to behave in ways one may never act publicly, and a lack of physical contact, all of which may potentially create a contemporary but hazardous environment for bullies to victimize their targets.

Of great importance and concern is the ability for today’s youth to extend their capability to bully others while in school or on the playground, but to also invade the victim’s home and personal life through the use of information and communication technologies (Diamanduros et al., 2008). Cyberspace is a newly developed territory where bullies may now broaden their torment, which likely amplifies the harm in comparison to traditional bullying because of the potential anonymity of the bully’s actions and the extended social network of the Internet (Bauman, 2010). As stated by Suler (2004), “In the case of expressed hostilities or other deviant actions, the person can avert responsibility for those behaviors, almost as if superego restrictions and moral cognitive processes have been temporarily suspended from the online psyche” (p. 322).

Finkelhor et al. (2000) and Wolak, Mitchell, and Finkelhor (2006) conducted two groundbreaking studies utilizing the Youth Internet Safety Survey’s 1 & 2 (YISS-1/YISS-2). The study conducted in 2006 (YISS-2) consisted of 1,501 phone interviews with regular Internet users, ages 10 to 17. It was found that 85% of respondents were harassed online while using their personal home computers. Of further note, results indicated 9% of respondents had been harassed online within the past year, and 28% admitted to making rude or nasty comments to others on the Internet, which was an increase from the 2000 (YISS-1) study in which only 14% of respondents admitted to this behavior. There was an increase from 1% (YISS-1, 2000) to 9%

(YISS-2, 2006) of respondents admitting to using the Internet to harass and embarrass someone with whom they were angry (Finkelhor et al., 2000; Wolak et al., 2006).

Kowalski and Limber (2007) researched cyber bullying and its prevalence among 3,767 female and male middle school adolescents. This study was limited because it only assessed cyber bullying experiences within the last few months. Results would likely be higher had the timeline been extended. Nevertheless, results indicated 11% of students reported having been the victims of cyber bullying, 7% were bully/victims, and 4% reported cyber bullying. Of all admitted victims, 48% reported not knowing the identity of the person who cyber bullied them, however, the majority of bullying took place with known individuals including friends, acquaintances, or siblings.

Li (2007) studied 177 seventh grade Canadian students (80 males and 97 females) and discovered almost 54% of participants were considered traditional bully-victims. Over 25% of these bully-victims reported being victimized through cyber bullying. Almost 33% of participants acknowledged bullying others in the traditional form while 15% reported engaging in cyber bullying. Of all participants, 52.4% reported knowing someone who was being cyber bullied. Of those who reported being victims of cyber bullying, 31% were bullied by known peers within the school, 11.4% were bullied by people outside of the school and 15.9% were bullied by numerous sources (i.e., classmates, outside sources, and others). The majority of students (40.9%) reported not knowing the aggressor's identity.

Although little is known regarding the long-term consequences of cyber bullying, emerging literature suggests there is a correlation between psychological health and cyber bullying (Mason, 2008; Ybarra & Mitchell, 2004b). Thus far, research has alluded to the fact that many victims of cyber bullying suffer from psychologically and emotionally distressing

symptoms such as depression, anger, low self-esteem, feelings of social isolation, insecurity, increased stress, poor academic performance, and sometimes violence and suicide (Diamanduros et al., 2008; Finkelhor et al., 2000; Kowalski et al., 2008; Litwiller & Brausch, 2013, Mason, 2008; Wolak et al., 2006; Ybarra & Mitchell, 2004a, 2004b). Adolescents who are victims of cyber bullying suffer from similar detrimental consequences as those who are bullied traditionally (Diamanduros et al., 2008; Ybarra, Diener-West, & Leaf, 2007).

**Cyber Invisibility.** The notion of invisibility as concealing appearance, facial expression, and verbal cues when engaging with others online likely makes it easier for bullies to justify their behavior through moral disengagement. Even if engaging with known individuals, the visual and auditory cues typically afforded in verbal conversation and social interaction are no longer required during online encounters, which likely adds to moral disengagement and likely inhibits empathy (Suler, 2004). Those involved in the online exchange are unable to assess the tone of voice and facial expression of the other, leaving a great deal of room for misguided assumptions and interpretations of intent and context (Crick, Grotpeter, & Bigbee, 2002; Suler 2004). When communicating with others electronically, individuals are able to avoid eye contact and facial expressions, which emit emotions, such as disapproval, anger, hurt, or annoyance. These emotions may sometimes inhibit someone from bullying another, but the lack of having to acknowledge or confront his or her behavior, and instead, ignore or deny its detrimental impact, increases the likelihood of moral disengagement and may also decrease empathy (Suler, 2004).

**Asynchronicity.** An impatient adolescent can send an email expecting a prompt response from a friend and become irritable when a response is not made in what the sender considers a reasonable amount of time (Suler, 2004). The recipient may have never received the email in the first place, or may not have had the opportunity to respond, or may need to think of a

response. Unlike dissociative imagination, which is the ability to seemingly separate ones online and offline behavior, asynchronicity could leave the individual with the choice of encompassing alternative identities in different contexts, which could also influence moral disengagement by attributing online moral behavior as separate from reality or virtual behavior, which may not be taken seriously, thereby decreasing empathy for others.

**Cyber Disinhibition.** Biologically speaking, some adolescents may be able to behave in a more disinhibited fashion “due to an underdeveloped prefrontal cortex, which subsequently affects their reasoning and ethical decision making” (Mason, 2008, p. 329; Willard, 2007a). The online disinhibition effect is the reduction of personal concern regarding the welfare of others on the Internet because of the anonymous and impersonal facade set forth through its’ ambiguous nature (Joinson, 1998; Kowalski et al., 2008; Zuckerman & Kuhlman, 2000). This leaves individuals more inclined to express themselves in ways they normally would not (Suler, 2004).

The Internet allows individuals to experiment with different roles that they may never play in the real world and, as such, sometimes leads many adolescents to freely express themselves in more aggressive and harmful ways (Fontaine, 2008; Kowalski et al., 2008; Wolak et al., 2006; Ybarra & Mitchell, 2004b). Joinson (1998) reported a disconnection between the “real” and “virtual” identity of the adolescent, which is assumed to lead to a decline in inhibition. This is likely the result of faceless communication, which leaves many individuals feeling as if they are invisible and interacting with others while leaving their identity hidden (Suler, 2004; Willard, 2007a).

Suler (2004) described six factors considered influential in explaining online disinhibition. Each factor can interrelate with the others as explanations of disinhibited online behavior and are not necessarily mutually exclusive. *Dissociative anonymity* is the ability of

individuals to determine what personal information to disclose or conceal when communicating online. The capability of some to behave in a disinhibited manner while also remaining anonymous is one of the main components explaining the differentiation between online and traditional bullying behavior. *Invisibility* is the seemingly undetected sense some individuals experience when online, thereby leaving one feeling free to explore websites or chat rooms they normally would not openly browse and to talk with individual's they may never feel comfortable interacting with in person.

*Asynchronicity* (discussed in an earlier section) is a unique component of electronic communication because the exchange does not take place in real time and therefore leaves unsubstantiated gaps in time between initial delivery and response, which could cause misunderstandings, especially for impatient adolescents. *Solipsistic Introjection* is the capability to consciously or unconsciously project personal characteristics of the self onto the online associate thereby blending what was actually portrayed by the associate with an interpretation of what is believed to be descriptive of the associate, creating a representational character, which may not actually match that of the associate. *Dissociative Imagination* is the ability of some individuals to intentionally or unintentionally separate their actual persona from their online persona(s), thereby behaving and communicating in a contradictory manner in differing environments. *Minimization of Status and Authority* describes the reduction of influence and power when communicating electronically because of the loss of physical cues such as body language, eye contact, uniform, etc., when engaging in textual contact (Suler, 2004).

Siegal, Dubrovsky, Kiesler, and McGuire (1986) performed a study comparing individuals utilizing three different methods of communication, with one group communicating face-to-face (in person), and the other two groups communicating on the computer with their



identities as either identified (non-anonymous) or unidentified (anonymous). Based on the assumption that anonymity promotes inhibition (Joinson, 1998), results suggested individuals who communicated via the computer in both anonymous and non-anonymous manners, demonstrated a considerable increase in disinhibited behavior than those who communicated in person.

Concomitantly, Kowalski et al. (2008) stated “Without the threat of punishment or social disapproval, people may carry their actions much further than they normally would” (p. 65). This information supports the notion that it is more likely for individuals to maintain a proper disposition when engaging with others in an interpersonal manner rather than while sitting behind a computer screen where inhibitions lessen and no contextual cues are visible. While engaging with others in the real world, behaviors are more likely modified depending on the emotional responses of others. The bully often feels seemingly “safer” because of the schools limited jurisdiction, which leaves the bully believing the school is somehow limited in being able to administer disciplinary action (Mason, 2008). Kowalski et al. (2008) supported the notion of a strong relationship between cyber and traditional bullying as a result of the disinhibition effect because “Once individuals have anonymously perpetrated cyber bullying and experienced the feeling of power associated with doing so, as well as the reinforcement from peers, perpetrating traditional bullying at school become easier (and vice versa)” ( p. 82).

The Internet allows individuals to avoid social and contextual cues, such as body language, and tone of voice (Mason, 2008; Trolley et al., 2006; Willard, 2007a), which are often necessary in deciphering intent and emotion while engaging in communication. Communicating online is often accompanied by a decline in vision and auditory cues (Suler, 2004; Valkenburg & Peter, 2008), which reduces the likelihood that those who bully will witness the consequences of

their actions. As a result, it is assumed that disinhibition will arise, thereby leaving the bully unable to fully empathize with the victim and feel remorseful for his or her actions (Mason, 2008; Suler, 2004; Trolley et al., 2006; Willard, 2007a). The consequences of the negative actions activated by the cyber bully's behavior can be more easily overlooked or ignored than while bullying in person (Strom & Strom, 2005). This ability to behave in contradictory ways online than one would in face-to-face interactions, may potentially decrease empathy and increase the ability to morally disengage. The following section compares the similarities and differences between traditional and cyber bullying.

### **Similarities and Differences between Traditional and Cyber Bullying**

Traditional and cyber bullying have many similarities and are typically discussed as extensions of the same behaviors, but through differing means (Ybarra et al., 2007). Traditional and cyber bullying occur along the same developmental timeframe in which both forms of bullying reach their peak. Developmentally, bullying in all forms, tends to escalate in the elementary school years, peak throughout the middle school years and deteriorate in the high school years (Beale & Hall, 2007; Kowalski et al., 2008). Two hypotheses have been proposed to assist in explaining the gradual increase, peak and then decline of both traditional and cyber forms of bullying behavior (Varjas, Henrich & Meyers, 2009).

The first hypothesis draws from the work of Pellegrini and Bartini (2000) who postulated that early adolescence (middle school) is the developmental stage in which youths' transition to a new school environment, which is theorized to give cause for youngsters to reestablish a new social hierarchy (Pellegrini & Bartini, 2001; Pepler et al., 2008). The second hypothesis was postulated by Unnever and Comell (2004) and is a speculation that the middle school environment itself creates a "culture of bullying," which is supported by adolescents learning

that bullying is either acceptable, tolerable, or ignored by fellow students or authority figures. This hypothesis is further supported by the well-known concept of observational learning proposed by Bandura (1986), whereby adolescents learn either punishing or rewarding consequences through the observation of others. Through the observation of beneficial or detrimental results, an individual may become vicariously motivated to either avoid or engage in the behavior based on the observed punishments or rewards (Bandura, 2001; Dobbs, 2011).

Adolescents are theorized to be less likely to engage in bullying behavior if the behavior is qualified as objectionable conduct rather than as tolerable conduct. Also similar to traditional bullying, cyber bullying is used as a methodical abuse of power with the intention to control and manipulate an individual who is considered vulnerable and weak (Kowalski et al., 2008; Mason, 2008; Naylor, Cowie, & del Ray, 2001) and this power imbalance leaves the victim seemingly unable to defend him or herself against the bully (Kowalski et al., 2008; Nansel et al., 2001; Olweus, 1992, 1993a).

The main difference between traditional and cyber bullying is the anonymity involved in cyber bullying. When adolescents believe their identity can be hidden while still bullying in a seemingly open forum, inhibitions and reluctance diminish because the consequences of being identified and then punished are less probable (Beale & Hall, 2007; Finkelhor et al., 2000, 2001; Patchin & Hinduja, 2006; Ybarra & Mitchell, 2004a, 2004b). Electronic methods of communication leave individuals with the ability to interact from within the comfort of their personal and private space, leaving him or her with the impression that the screen is something that one can hide behind without having to accept accountability for his or her actions (Beale & Hall, 2007).

In support of this, Yan (2009) stated, “The Internet...is an enormous virtual universe but exists almost invisibly behind a computer screen”, and its “simple interface could be perceptually misleading to younger Internet users” (p. 104). The seamless and constant switching between the actual computer and the virtual world is assumed to lead to confusion in terms of developing a genuine understanding of the Internet (Yan, 2009). This leaves cyber bullies with the ability to avoid dealing with the negative ramifications they place on the victim of their bullying behavior because of the lack of face-to-face interaction and physical location (Mason, 2008).

Because of the lack of face-to-face interaction and physical encounter, the cyber bully can avoid witnessing the victim’s reaction to his or her bullying behavior (Willard, 2007a). This makes bullies feel less responsible for their behavior, which then diminishes the likelihood of feeling guilt, remorse and regret (Finkelhor et al., 2000, 2001; Mason, 2008; Patchin & Hinduja, 2006). Further, if the cyber bully is caught, he or she can easily deny engaging in bullying behavior by blaming someone else. This is because cyber bullies are not as easily identified due to the anonymity of cyberspace and other electronic tools (Suler, 2004). The traditional bully cannot simply deny being the aggressor because of the more public and confrontational, face-to-face nature of the offense. Traditional bullies are not afforded the luxury of anonymity. The probability of being caught increases drastically in real world bullying, and the effects and consequences are generally more tangible.

Victims of traditional bullying have some advantage in usually knowing who the perpetrator is, thereby allowing the victim the opportunity to confront the aggressor and seek feasible action and punishment (Beale & Hall, 2007). The victim may then feel as though some form of justice was served. This is often not the case for many victims of cyber bullying, who sometimes never determine who is at fault for his or her torment. While there is the capability to

trace the account from which a harassing e-mail was sent, being able to prove who actually sent the e-mail is often not a possibility (Beale & Hall, 2007). Because the aggressor is unknown, the victim will likely feel more vulnerable and insecure than when traditionally bullied because of the unknown aggressor (Naylor et al., 2001). In support of this, Dooley et al. (2009) contended “The reward for engaging in cyberbullying is often delayed (in contrast to face-to-face interactions), and this is anticipated to have an effect on how goals for these aggressive interactions are formed and pursued” (p. 18).

Victims of traditional bullying are able to escape the bullying by leaving the site from which the bullying is taking place, such as the schoolyard or playground. The same cannot be said for victims of cyber bullying who may not necessarily be able to find home as his or her refuge (Mason, 2008; Suler, 2004). While it may not mend the problem, victims of traditional bullying are able to physically escape their aggressor, while victims of cyber bullying are generally overwhelmed with feeling as though escape is not an option (Kowalski et al., 2008; Ybarra et al., 2007). Essentially, the only means for a cyber-victim to break away from online harassment is ceasing to engage in electronic communication, which means giving up a privilege afforded to most adolescents.

Regardless of the method with which cyber bullying is implemented, there are sometimes specific characteristics shared with victims of traditional bullying, such as not being popular or being overly sensitive, which can lead to victimization based solely on personality or physical characteristics (Beale & Hall, 2007; Ybarra et al., 2007). Certain traits generally make victims of traditional bullying stand out as targets, such as a smaller physique, a lack of friendships, social awkwardness, and unattractive physical looks. The same, however, cannot be said for victims of cyber bullying. All adolescents who use electronic methods of communication are at

risk of becoming potential victims of cyber bullying because of the limitless boundaries established within cyberspace, because the bully is no longer limited by existential cues.

In terms of deciphering between the harmful effects of traditional and cyber forms of bullying, Beale and Hall (2007), eluded to the idea that cyber bullying is likely more deleterious than traditional forms of bullying. The reasons for this are the ease with which cyber bullying is executed, the widespread and more global threat of the information being spread, the ability for the aggressor to remain anonymous if desired, and the seeming inability of the victim to escape from the harassment. Moreover, cyberbullying has the tendency to affect multiple avenues of social networking making the bullying data seemingly more invasive and far-reaching than traditional bullying because it can have a more continuous impact, affecting the victim at all times of the day or night (Diamanduros et al., 2008; Strom & Strom, 2005). Victims of bullying today not only have to worry about what the students within their school and community witness, either through hearsay or in person, but now have an additional worry, which likely adds a more deleterious element of harassment, with cyber bullying, which seems to reach global proportions.

Given this, egocentricity commonly found in youths becomes almost justified. Youths cannot be reassured that the rumors, gossip, or torment will stop (Kowalski et al, 2008). Nor can they be convinced that no one outside of their inner-circle of peers will become privy to the suffering because the Internet has no boundaries and can potentially reach all networks of communication (Kowalski et al, 2008). While it is highly unlikely that the cyber bullying information will actually spread to all people throughout the world, the thought that it is possible, even if extremely doubtful, can be emotionally devastating for the adolescent victim. This may potentially cause serious psychological harm far exceeding the harmful consequences commonly seen among victims of more traditional forms of bullying (Beale & Hall, 2007).

Information posted on the Internet will likely reach a greater number of spectators at a much faster pace than information spread via word-of-mouth or face-to-face (Dooley et al., 2009). This information may remain stagnant for an undetermined span of time unless the information is requested to be removed. Even then, the removal of information may not be an easy task. Many individuals who admit to being the aggressors or victims of cyber bullying, also admit to being victims of traditional bullying (Kowalski et al., 2008; Ybarra & Mitchell, 2004). Kowalski and Limber (2006) found a strong correlation between being the aggressor and victim of cyber bullying ( $r = .43$ ). In comparison, there is a much lesser correlation between being the victim and aggressor of traditional bullying ( $r = .22$ ) (as cited in Kowalski et al., 2008).

Griezel et al. (2008b) attempted to compare traditional and cyber bullying in terms of the effect these forms of bullying have on self-concept, which is the cognitive process of determining the type of person we are through personal judgments and beliefs, or schemas (Bandura, 1986, 2001). Schemas are developed from the perception of one's environment and the assessments made through personal experience and sometimes the influence of others, which is based on the individual's representation of the world. Self-concept helps individuals construct behaviors and ambitions through self-evaluations, which are either positive or negative and affect personal cognitions, beliefs, and emotions (Bandura, 2001; Griezel et al., 2008b).

Regarding the previously acknowledged similarities with traditional forms of bullying (i.e., physical, verbal, and social/relational), it has been proposed that being the victim or the aggressor of cyber bullying are fundamentally different constructs and "may represent a unique modality of victimization and bullying" (Varjas et al., 2009, p. 170). When cyber bullying and cyber victimization were compared to traditional forms of bullying (i.e., physical, verbal, and social/relational), affiliated relevance and similarity were not determined (Varjas et. al., 2009).

Conversely, Li (2007) found students who bully in traditional forms have a propensity to bully others electronically as well. Traditional bully-victims were more likely to be victims of cyber bullying than those who were victimized traditionally only. The author suggested there was “a close tie” between traditional and cyber forms of bullying and “cyberbullying should not be examined as a separated issue” (p. 1787); instead, researchers should take into account what is already known about traditional bullying and apply this knowledge to examinations of cyber bullying behavior.

In support of Li (2007), Patchin and Hinduja (2006) expressed the need for researchers examining cyber bullying to take a close look into past investigations performed on traditional methods of bullying behavior to assess comparable references and expand comprehension regarding the antecedents and consequences of bullying behavior in general. As all forms of bullying are manifested with the intention and purpose of victimizing and harassing others, the ways with which one goes about producing ill effects likely has little bearing on the consequential outcome.

### **Gender Differences and Bullying**

It is critical for any research on bullying behavior to take into account gender differences (Chisholm, 2006) because females tend to be underrepresented as bullies and overrepresented as non-bullies (Olweus, 1993b), which may be due to the differing definitions of bullying (Pepler et al., 2008). Pepler et al. (2008) concluded that adolescents think of bullying as a physically or verbally aggressive behavior; however, the concept of relational aggression, which is typically linked with females, is not as commonly acknowledged unless specifically defined. Females may not consider their behavior as “bullying.” The same definitional problem is likely true for



cyber bullying as it is a new phenomenon, which is just beginning to establish rules and boundaries within the educational and legal systems (Pepler et al., 2008).

Gender differences in traditional forms of bullying have been researched and results are well documented (see extensive review in Olweus, 1992, 1993a, 1994, 1999). In face-to-face combat, boys who bully tend to be much more physically aggressive and are more likely to utilize physically aggressive behavior (Crick & Grotpeter, 1995; Kowalski et al., 2008). They tend to be less empathic towards others, are more dominant and impulsive in their bullying strategies, and are generally more reactive in their aggression towards others (Mason, 2008; Olweus et al., 1999). Girls are more likely to be relationally aggressive (Crick & Grotpeter, 1995; Kowalski & Limber, 2007; Pepler et al., 2008) using non-physical, covert bullying strategies such as verbal insults or threats of social exclusion. They are more likely than boys to be socially, rather than physically dominant, and prefer to be the center of attention within their groups, exhibiting socially reactive patterns of asserting aggressive behavior (Mason, 2008; Olweus et al., 1999).

When comparing elementary school children's aggressive behavior, Crick and Grotpeter (1995) found boys were overtly aggressive and girls were relationally aggressive with little overlap, but both groups were found to be equally aggressive overall. Interestingly, cultural differences have also been discovered regarding relationally aggressive youths. Tomada and Schneider (1997) performed a study in Italy and reported no gender differences in terms of relational aggression with boys and girls equally as likely to engage in this form of bullying behavior.

Even with the limited resources available pertaining to cyber bullying behavior, gender differences have arisen. In 2006, Wolak et al. discovered girls (58%) were more likely than boys

(42%) to be the victims of electronic aggression, and girls (68%) were more likely than boys (32%) to find this harassment distressing. Significantly more males (50%) than females (35%) were the aggressors of cyber bullying. Similarly, Li (2006) discovered approximately 22% of males and 12% of females were the aggressors of cyber bullying, but there were no differences between males (25%) and females (25.6%) as victims of cyber bullying. In a later study, Li (2007) discovered approximately 60% of cyber bullying victims were female while over 52% of the aggressors of cyber bullying were male.

Kowalski and Limber (2007) noted gender differences as one of the main variables contrasting traditional and cyber bullying, as girls are more likely than boys to be both victims and perpetrators of cyber bullying. Similarly, Agatston and Carpenter (2006) discovered 27% of the females and 9% of the males reported being the victim of cyber bullying *at least once in the previous 2 months*, which documents a significant gender imbalance regarding cyber victimization (cited in Kowalski et al., 2008, p. 75). As stated earlier, in comparison with boys, girls tend to be more emotionally distressed when victimized online (Wolak et al., 2006). This is likely due to the notion that girls tend to be more concerned with being socially competent than boys and because girls often consider interpersonal relationships as more significant than boys (Chisholm, 2006; Valkenburg & Peter, 2007).

### **Developmental Factors of Bullying**

Adolescents engage in bullying behavior during the transitional periods between elementary and middle school and between middle and high school (Pellegrini & Bartini, 2001; Pepler et al., 2008) most notably to maintain dominance over another person. Longitudinal research has discovered that adolescents who were bullies at some point, but desist over time, scored similarly low on moral disengagement compared to those who never engaged in bullying

(Pepler et al., 2008). Theories relative to evolutionary and ecological perspectives relate bullying to establish dominance, but this power becomes less necessary once the dominant status is established (Pellegrini & Bartini, 2001; Pepler et al., 2008). Once this occurs, the bully no longer needs to utilize control, but instead uses the group to which he or she belongs and the stance already maintained to continue asserting influence over others (Lagerspetz et al., 1982).

Arnett (1992) proposed a model representing sensation seeking and egocentrism as prominent factors in determining adolescent reckless behavior, which can be applied in explaining cyber bullying behavior (Bornstein & Lamb, 2005). The developmental perspective analyzes reckless behavior as a general feature of adolescence instead of an unusual behavior indicative of psychopathology. The adolescent who engages in bullying behavior is not necessarily engaging in abnormal behavior. This perspective supports the notion that reckless behavior, such as bullying, is a virtually common characteristic in adolescent development.

Individuals who are seen as high sensation seekers are more willing to engage in reckless behavior (Rolison & Scherman, 2002) with the purpose of producing intense results, and adolescents are notably elevated in sensation seeking (Zuckerman & Kuhlman, 2000). Willard (2007a) suggested that adolescents who engage in bullying behaviors are aiming for some form of excitement behind the idea that they are controlling the emotions of another person. Simply being aware of the negative consequences does not necessarily deter reckless behavior. The likelihood of engaging in this behavior increases if bullying others is thought to be advantageous. For example, adolescents who cyber bully others are unlikely to be fully aware of the consequences of their actions because of the anonymous quality of electronic communication and the lack of social cues (Trolley et al., 2006; Willard, 2007a, 2007b). The deficiency in physical contact decreases empathic and remorseful responses (Mason, 2008).

Jean Piaget was one of the first theorists to concentrate on the cognitive processes and moral development of human beings (Bornstein & Lamb, 2005). His theories included the concept of egocentrism, which is thought of as an immature state adolescents experience resultant from an inability to differentiate one's self from the world around them. With regard to egocentrism, the available precedents may actually enhance the adolescent belief that they are exempt from detrimental consequences because they engaged in reckless behavior in the past and did not undergo any damaging outcomes (Bandura, 1986, 2001). The idea that the bully had gotten away with his or her bullying behavior may actually bolster and inflate whatever cognitive distortion and reasoning for avoidance that may have initially existed.

### **Psychosocial Perspective**

The psychosocial perspective incorporates attention to both the individual and situational/contextual variables, differentiating both sets of variables into risk factors and protective factors (Jessor, 1992). The potential influence of self-regulation has been suggested because of a “disjunction between novelty and sensation seeking (both of which increase dramatically at puberty) and the development of self-regulatory competence (which does not fully mature until early adulthood)” (Bandura, 1986, 2001; Steinberg, 2004, p. 51). Adolescence is seen as a product of interacting between “heightened stimulation seeking and an immature self-regulatory system” (p. 55) leaving the individual unable to modify reward seeking desires.

When attempting to gain a thorough understanding of human nature in general, it is critical to take into account the antecedents and consequences of behavior (Bandura, 1986, 2001; Jessor, 1992). All forms of bullying behavior could put the aggressor at risk of (a) retaliation by the victim, the victim's friends, or family members, (b) impending legal action being brought

against them because of harming others emotionally and psychologically, (c) punishment through the school system, and (d) increase in conflict with his or her parents and/or peers.

Jessor (1992) also suggested the loosening of the concept of risk regarding aversive, negative, and undesirable outcomes in risk-taking behavior. Continuing with the example of bullying, some adolescents actually observe or experience results that have seemingly positive effects such as peer acceptance and a newly developed sense of personal autonomy and control over others. When risk-taking behavior is assessed, it is necessary to encompass both the negative and the positive effects (or costs and benefits) the behavior manifests (Jessor, 1992; Zuckerman & Kuhlman, 2000).

Risk-taking behaviors such as bullying are seen as instrumental in gaining acceptance and respect from peers, in rejecting norms and values determined by conventional authority, in coping with anxiety-producing events, and/or in establishing maturity in movement from adolescence into a more adult-like role (Zuckerman & Kuhlman, 2000). Risk-taking behaviors are also seen as endangering success in accomplishing development considered normal at the relevant age and in establishing expected social roles and acquiring essential skills, such as learning and socializing (Lagerspetz et al., 1982). The psychosocial perspective considers “risk behavior” as any behavior that compromises “these psychosocial aspects of successful adolescent development” (Jessor, 1992, p. 378). The above-mentioned consequences and outcomes of bullying behavior have revealed both positive and negative attributes. It is therefore necessary to determine potential psychosocial antecedents and determinants (Jessor, 1992).

Jessor (1992) provided a comprehensive social-psychological model for explaining behavior including five explanatory domains of variance: the social environment, the perceived environment, personality, biology/genetics and other behavior (Zuckerman & Kuhlman, 2000).

While these domains likely influence adolescent behavior, it does not necessarily mean an individual will engage in detrimental conduct simply based on exposure. Instead, the experience “was countered by exposure to and experience of protection” and these protective factors are seen as serving to “attenuate, counter, or balance the impacts and effects” (p. 386) of risk-taking behavior.

### **Bullying as a Group Process**

Traditionally, research on bullying behavior has focused on the individual characteristics of bullies and/or victims (Gini et al., 2008). Because bullying is a social epidemic (Lagerspetz et al., 1982) typically occurring in a multi-dyadic environment, some researchers note the importance of addressing bullying concerns as a group process (Crick et al., 2002; Gini et al., 2008; Salmivalli et al., 1996; Sutton & Smith, 1999) rather than as an isolated event taking place between two individuals. Current research has found the majority of bullying episodes taking place in social settings among peers (Craig & Pepler, 1997; Craig, Pepler, & Atlas, 2000; Gini et al., 2008; Sutton & Smith, 1999). For example, one study found 85% of observed bullying incidents to have occurred in the presence of peers (Pepler & Craig, 1995).

A study conducted by Salmivalli et al. (1996) established six groups an individual may be categorized into regarding his or her role in bullying scenarios. The groups are (a) bullies (aggressors), (b) victims (targets), (c) reinforcers - those who encourage the bullying behavior, (d) assistants (followers) – those who directly or indirectly contribute to the bullying behavior, (e) defenders - those who protect the victim from bullying, and (f) outsiders - those who are uninvolved in the bullying behavior, either through avoidance, denial, or maintaining silence; also known as passive bystanders (e.g., Cowie, 2000, as cited in Gini et al., 2008). Salmivalli et

al. also conducted a 2-year follow-up with the above stated study and found the participant roles to be considered relatively stable over time (Salmivalli, Lappalainen, & Lagerspetz, 1998).

Sutton and Smith (1999) found the defender, outsider, and victim roles as distinct from one another, while the bully, reinforcer, and assistant roles were determined as having parallel characteristics in that they all involve some method of bullying, either directly or indirectly. The roles individuals play in the participation of bullying behavior support the inclusion of moral disengagement as a critical variable in the present study because certain individuals are able to take part in the bullying behavior without being directly involved. This indirect involvement may leave individuals less likely to anticipate punishment and in turn, they may not feel guilty for taking part in the bullying behavior. Also, some individuals who support or encourage the bullying behavior may not recognize their own contribution, which allows moral disengagement to correspond with an active defence mechanism such as denial (Bandura, 1999; Bandura et al., 1996a) or a lack of self-awareness.

A bully likely experiences satisfaction from overpowering another person, the affirmation he or she experiences from the support of peers and perhaps their recruitment also buffers this group effect (Shariff, 2008, as cited in Dooley et al., 2009; Lagerspetz et al., 1982; Olweus, 1992, 1993a, 1993b, 1994). Bullies are often seen as socially incompetent by many because of an inability to control their emotional and behavioral responses, which is known as reactive aggression (Dodge & Coie, 1987). However, research has shown that many bullies are considered proactively aggressive in that they are often popular, are seen as having high self-esteem and social status, and possess strong leadership qualities (Dodge & Coie, 1987).

Peer influences may also play an important role in bullying behavior (Pellegrini & Bartini, 2000) because the adolescent who shares a high level of sensation seeking through

bullying others is often attracted to other adolescents on a similar basis (Arnett, 1992; Barchia & Bussey, 2011). Both traditional and cyber bullying behavior may be learned through more vicarious influences and observational learning (Bandura, 1986, 2001). The impact of feeling as if one is justified in their behavior sometimes occurs as the result of witnessing others support or through imitation of the behavior (Bandura, 1999; Bandura et al., 1996a). The adolescent may witness a friend bullying another peer and notice rewarding results such as receiving attention from others, gaining a feeling of power by controlling or manipulating the emotions of someone else, and displaying a sense of control. The observed behavior may eventually be mimicked to carry out similar results. This concept of justification either individually, vicariously, or as a group process is addressed in the following section.

### **Moral Disengagement and Bullying**

Bandura's (1986, 2001) social cognitive theory posits moral disengagement as being influenced through a cognitive process based on the individual's personal behavioral judgments, which are typically attained through the acquisition of social norms (Obermann, 2010). These social norms tend to be established within one's social environment, such as among friends, or within the school system. What may be considered a violation of social norms within the authoritarian school system, may be, on the contrary, perfectly acceptable within the friendship network. These contradictions support the dilemma of gaining a thorough understanding of moral disengagement, because an individual may behave a certain way in one environment and the opposite in another. This can also be said to be based on one's cognitive process, meaning a person may hold differing beliefs in dissimilar contexts around different people.

Using Bandura's social cognitive theory (1986, 2001) as the basis, the present study investigated moral disengagement, the cognitive processes utilized in justifying and explaining



behavior that otherwise contradicts ones moral beliefs. Moral disengagement has been determined as having a positive correlation with aggressiveness overall (Bandura, 1999; Bandura et al., 1996a) along with cyber bullying specifically (Pornari & Wood, 2010). Adolescent bullying behavior in both traditional (physical, verbal, and social/relational) and modern (cyber) forms can likely be attributed to various aspects of moral disengagement. Because of the rapid growth of cyber bullying (Bauman, 2010), concerns have arisen at an increasing pace about adequate responses to this new and complicated addition to the bullying research. Bullying of all varieties has a typically detrimental impact on all those involved.

Because individuals are able to behave in contradictory ways in differing contexts, they are also able to be selective in deciding what is acceptable in some contexts, but not in others. Bandura (2001) defined moral disengagement as “the self-regulatory process at which moral control can be disengaged from censurable conduct” (p. 277). Moral disengagement describes four domains under which eight mechanisms of disengagement occur (Obermann, 2010; Pornari & Wood, 2010). The first domain is the reconstructing of immoral behavior which includes, (a) *moral justification* – cognitively restructuring the perception of behavior generally considered immoral, as honorable through validation and rationalization of the self, (b) *euphemistic labeling* – using convoluted verbiage or minimally simplistic language to downplay the behavior or activity, and (c) *advantageous comparison* – referencing far worse scenarios or consequences in relation to the present to minimize negative effects.

The second domain is the obscuring of personal responsibility which includes, (d) *displacement of responsibility* – not having to fully acknowledge responsibility for immoral behavior by placing the bulk of the blame on more superior sanctions, and (e) *diffusion of responsibility* – distributing responsibility of moral wrongdoing among a group, leaving the

individual with only a portion of the blame. The third domain is the misrepresenting of injurious consequences which includes (f) *distortion or disregarding of consequences* – either seeking to justify negative behavior by putting a positive twist on things or neglecting to acknowledge any negative outcome in the first place. The fourth and final domain is the blaming of the victims which includes, (g) *dehumanization* – ascribing inferior, subhuman qualities to the victim and, 8) *attribution of blame* – finding fault in the victim as having instigated the immoral behavior leaving the other on the defense (Bandura, 2001; Obermann, 2010; Pornari & Wood, 2010).

One of the more complex inquiries regarding human aggression is often focused on the contradictions between ones' moral beliefs and subsequent inconsistent behavior. It is not uncommon for individuals to hold beliefs and attitudes' regarding what is immoral and what is proper, but behave in opposing ways for a variety of reasons. Reasons for the paradoxical relationship between a person's cognitions and actions are often explained through Bandura's social cognitive theory (1986, 2001) that describes the individual's cognitive self-regulatory system as influencing one's ability to make judgments, self-monitor, and formulate reactions (Bandura et al., 1996a; Bauman, 2010). This theory includes the concept of moral disengagement; a cognitive process utilized by individuals in justifying and rationalizing ones aggressive behavior which would normally conflict with their moral reasoning (Obermann, 2010; Pornari & Wood, 2010).

Strom and Strom (2005) concluded "Everyone should experience a positive self-concept, but sometimes it is in a person's best interest to be ashamed of his or her behavior, even if the misconduct did not result in disapproval from others" (p. 29). Key elements in determining the development of maturity is the ability to self-evaluate and closely monitor one's personal thoughts, emotions, and behaviors as determined as appropriate, exaggerated, or unacceptable.

Adolescence is the developmental period when the maturational transition ideally begins to form and self-evaluative practices become increasingly and beneficially utilized. This is a difficult task for numerous adolescents and likely helps to explain why many youths today resort to bullying others in all contexts. Moral disengagement is somewhat explained and supported by the fact that many adolescents have not yet developed the capability to self-reflect, self-evaluate, and self-monitor (Bandura, 2001; Pornari & Wood, 2010).

In support of the current study, the inclusion of age and gender as having a potential association with moral disengagement has been supported through research (Obermann, 2010). Longitudinal research has established the stability of moral disengagement among a population of Italian adolescents ages 14-20 and the higher the levels of moral disengagement, the higher the likelihood of engaging in aggressive and violent ways (Paciello, Fida, Tramontano, Lupinetti, & Caprara, 2008). In comparison with females, males of any age tend to display higher levels of moral disengagement (Bandura et al., 1996a; McAlister, Bandura, & Owen, 2006).

Concurrent with Bandura's (1999; et al; 1996a) mechanisms of moral disengagement, and in further support of the present studies utilization of a moderating variable (empathy), Kiriakidis (2008) references the cognitive dissonance approach originally proposed by Festinger (1957) in which Kiriakidis states that

Inconsistency between different beliefs leads to psychological tension motivating the individual to a reconciliation of the inconsistent beliefs and in search of rationalization. Any departure in behavior from personal standards would lead to punishing self-reactive effects in terms of shame, guilt, and reduced self-esteem. There are many mechanisms that can be employed to neutralize the aversive effects of immoral behavior or even present it as moral, thus rationalizing the immoral behavior. Immoral behavior under these influences appears either as neutral or as the only alternative. These cognitive transformations serve the function of alleviating the self-punishing consequences of transgressive behavior by cognitively representing the behavior as morally justifiable and acceptable both personally and socially." (p. 572).

Studies in Europe have assessed adolescent attitudes and beliefs regarding bullying behavior (Baldry, 2004; Boulton & Underwood, 1992; Fox et al., 2010; Menesini et al., 1997) with most respondents' reporting an anti-bullying view. Rigby and Slee (1991) executed one of the earliest of these studies in Australia by utilizing a measure assessing respondent's support for victims of bullying (i.e., Pro-Victim Scale). Results suggested that the majority of adolescents held beliefs against bullying while sympathizing with victimization. Studies such as these support the notion that bullying behavior is a global phenomenon. However, despite the consistent finding that the majority of adolescent's report an anti-bullying attitude, there is understandable confusion regarding the reason attitudes and actual behavior do not always correspond.

### **Empathy as a Moderating Variable**

In relation to one's moral behavior (Hoffman, 2000), empathy is considered a significant affective and cognitive trait (Davis, 1994; Jolliffe & Farrington, 2006, 2011; Sahin, 2012), which allows individuals to understand and vicariously experience the emotional state of another person (Albiero, Matricardi, Speltri, & Toso, 2009; Jolliffe & Farrington, 2011; Sahin, 2012). Prior empirical research supports the notion that empathy promotes prosocial interactions by allowing people to connect on an emotional level by being aware of another's thoughts and feelings (Jolliffe & Farrington, 2006, 2011; Sahin, 2012). Henry et al. (1996) found empathic traits as positively correlating with supportive, unified, and responsive family relations. Empathy is also determined as supporting the development of secure friendships (Hay, 1994). As stated by Jolliffe and Farrington (2006), "empathy and the acquisition of empathy are considered essential components of adequate moral development" (p. 589). Maintaining empathic characteristics, results in the inhibition of aggressive tendencies. As an immoral and anti-social trait, those who

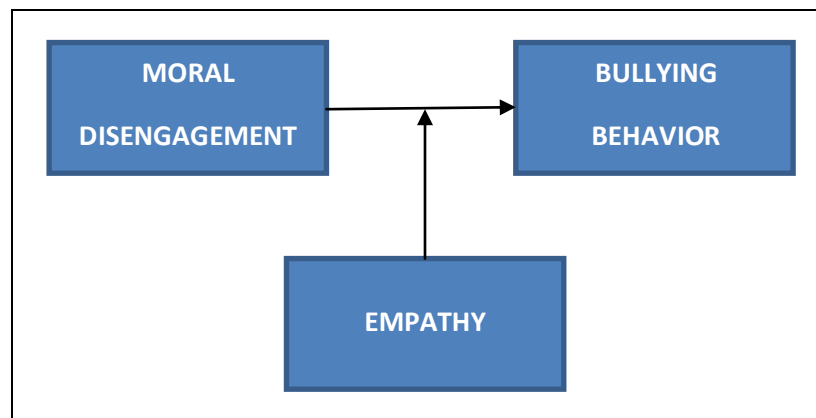
display high levels of aggression likely exhibit lower levels of empathy, while those high in empathy are less likely to behave aggressively (Jolliffe & Farrington, 2004, 2006).

Empathy is not experienced personally, but instead experienced vicariously through the emotions of another person, which may be the result of having experienced something similar in the past, thereby relating to the person's emotions (Albiero et al., 2009). Higher levels of empathy promote prosocial behavior thereby obstructing antisocial behavior (Hymel et al., 2005). Alternatively, lower levels of empathy emit less concern for others, which increases the likelihood of behaving in aggressive ways (Jolliffe & Farrington, 2006). An individual with highly empathic tendencies often makes attempts to diminish the discomfort of the other individual "for altruistic reasons (e.g., to assist the other person) or for selfish reasons (e.g., to reduce vicarious distress)" (Jolliffe & Farrington, 2011, p. 34). The highly empathic person is able to anticipate the emotional response of another individual (Hoffman, 2000).

Fontaine (2008) stated recent elaboration of social cognitive theories (e.g., social learning theory: Bandura, 1986) have posited that beliefs, judgments, and other processing mechanisms may mediate relations between social-information input and social behavior. For the purposes of the present study, empathy was theorized as a cognitive processing mechanism that moderates relations between moral disengagement (i.e., social information input) and bullying (social behavior). High or low levels of empathy are hypothesized to have a moderating effect between moral disengagement and bullying behavior, which is substantiated through prior research finding the predictive power of high empathic responsiveness in regard to the likelihood of defending those who are bullied by others (Gini, Albiero, Benelli, & Altoe, 2007) and a lack of empathy as having predictive power regarding displays of aggressive behavior (Albiero et al., 2009; Gini et al., 2007).

For the purposes of the present study and based on the previously mentioned supportive data, it is hypothesized that empathy will have a moderating effect on moral disengagement and bullying behavior (see Figure 2). Based on the information provided thus far, higher levels of bullying behavior and moral disengagement are hypothesized to negatively correlate with high levels of empathy, while lower levels of bullying behavior and moral disengagement are hypothesized to positively correlate with high levels of empathy. In other words, those who are highly empathic will be less likely to justify and rationalize immoral behavior, thereby being less likely to participate in bullying behavior. If empathy is found to play a moderating role in the inhibition of bullying behavior and moral disengagement, it is reasonable to believe intervention and prevention programs emphasizing the use of empathic techniques will help to decrease anti-social behavior (Sahin, 2012).

Figure 2. *Empathy as a Moderator of Bullying and Moral Disengagement*



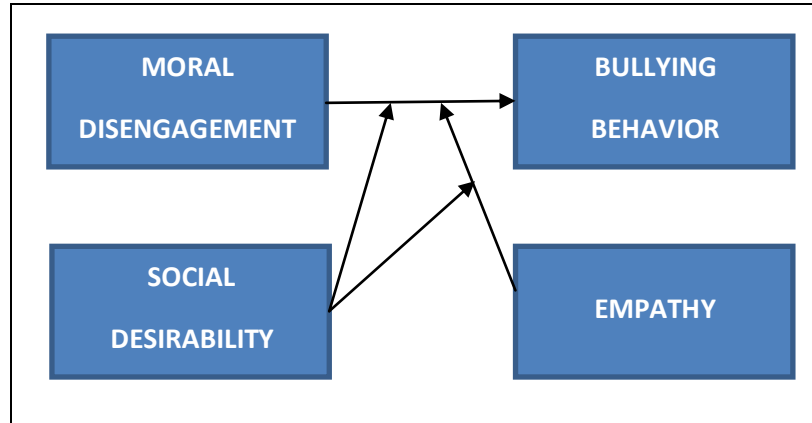
### **Social Desirability**

While there is generally no better person to ask questions about one's feelings and beliefs than the actual person, it is also possible that the same person will want to present themselves in a favorable light (van de Mortel, 2008), especially when questioning socially sensitive topics

(King & Brunner, 2000) such as moral disengagement and bullying behavior. This tendency to portray a positive image of oneself in public settings is known as social desirability (SD). Self-report questionnaires may result in distorted representations (i.e., response bias), which could potentially invalidate the data (Loo & Thorpe, 2000). Scales measuring SDR (social desirability responding) have been developed because of concerns that responding to questionnaires in a socially desirable way could potentially “confound(s) results by creating false relationships between variables” and these measures “can be used to detect, minimize, and correct for SDR in order to improve the validity of questionnaire-based research” (van de Mortel, 2008, p. 40).

Social desirability is what one considers to be acceptable and appropriate behavior in social settings, which is generally conventional and helps to gain the approval of others; however, the likelihood of behaving this way at all times is doubtful (Crowne & Marlowe, 1960). Because of the social, and unfavorable aspects of the present studies variables (i.e., bullying and moral disengagement), it is possible that some participants will not answer honestly, exaggerate his or her behavior to appear in a more positive light, or genuinely believe he or she is without wrongdoing. The present study assessed whether empathy significantly affects reports of bullying and moral disengagement after adjusting for social desirability. Further, a moderation analysis was used to determine whether social desirability played a moderating role in adolescent’s reports of moral disengagement, bullying, and empathy (see Figure 3).

Figure 3. *Social Desirability as a Moderator of Bullying and Moral Disengagement*



### Conclusion

Adolescents, specifically those in middle school, appear to be the ideal candidates for participation in the study of empathy as a moderator of moral disengagement and bullying behavior. As previously mentioned, Lovett and Sheffield (2007) found researching adolescents as more likely to result in a negative relationship between empathy and aggression in comparison to children, but other cognitive factors, which may have potentially correlated with bullying behavior, were not considered. Even though a negative relationship is established between bullying and empathy, it is important to assess other factors contributing to the bullying epidemic. The present study will assess moral disengagement as a potential predictor of bullying for this reason. Some studies have assessed moral disengagement and delinquency (Kiriakidis, 2008) while others have included moral disengagement and bullying behavior specifically (Bandura, 1999; Bandura et al., 1996a), but not with the inclusion of empathy as a potential moderator after controlling for social desirability.

While this study is a contribution to the decades of bullying research previously performed, the present study's addition of cyber bullying (a modern form of bullying that was nonexistent little more than a decade ago) is a current approach in understanding adolescent



behavior and cognition. Similar to the present study, Barchia and Bussey (2011) examined cognitive factors such as self-efficacy and moral disengagement in reference to student aggression, but did not include cyber aggression, which is crucial in this modern time. Studies such as Agatson et al., (2007) take into account student perspectives on cyber bullying specifically, but do not include the other forms of bullying addressed in this study.

Wang, Iannotti, and Nansel (2009) has taken into consideration adolescent physical, verbal, relational, and cyber bullying, but assessed these variables along with parental support and number of friends, which excludes the cognitive processes of bullying assessed in the present study. The addition of assessing moral disengagement with the various methods of bullying and cyber bullying specifically, will bring new insight into the literature previously mentioned in this chapter. Furthermore, researchers have recently begun to look into the benefits of utilizing empathy training in bullying prevention and intervention programs (see Sahin, 2012), which is the primary motive behind the present study's focus on empathy and its moderating influence on antisocial cognitions and behavior (i.e., moral disengagement and bullying).

### **Summary**

Chapter 2 was a comprehensive review of research examining the detrimental effects of bullying behavior and its correlates. Similarities and differences regarding traditional and cyber bullying, behavioral and developmental factors contributing to the study of bullying, and documentation pertaining to moral disengagement and empathy were addressed within this chapter. In Chapter 3, the details of the research methodology, research design, and statistical analyses are discussed, which will be utilized in the analysis of results presented in Chapter 4.

## CHAPTER 3

### METHODS

#### Participant Demographics

Data were collected from 676 adolescent seventh (52%) and eighth (48%) grade students in a Southeast Michigan, suburban middle school (50% male,  $n = 329$ ; 50% female,  $n = 327$ ). Demographic analyses showed participants were 46% Caucasian, 23% African American, and 9% Asian. The remaining 22% of students reported being more than one race or “other”. Demographic information forecasted on the city’s website, which was last updated in 2009 (<http://www.ci.farmington-hills.mi.us/Business/DemographicsandOtherData.asp>), reported the population as consisting of 76% Caucasian, 9% African American, 12% Asian, and 3% more than one race or “other” (see Table 1). These demographic differences may be in part due to the 4 year difference in the present studies research and data collection or the adolescents’ awareness of his or her ethnicity when reporting this information as some students questioned whether they should circle only one race, or more than one race. These differences may also be due to the school-of-choice program presently adopted within the district, which has likely shifted the demographic composition.

**Table 1**  
*Frequency Distributions - Demographic Characteristics of Student Participants*

Demographic Characteristics	Percent	Frequency
<b>Gender</b>		
Male	50.2%	329
Female	49.8%	327
Missing	_____	20
<b>Grade</b>		
7th	52.3%	342
8th	47.7%	312
Missing	_____	22
<b>Ethnicity</b>		
Caucasian	45.9%	296
African American	22.8%	147
Asian	9.3%	60
Mixed/Other	22.0%	142
Missing	_____	31

### **Sampling and Data Collection Procedures**

Once IRB approval was obtained, the principal of the middle school contacted all parents/guardians of all students via listserv email. This modern, paperless method of communication between parent and school has been deemed satisfactory by the school as it is more environmentally sound and cost-efficient in comparison to traditional postal services. The listserv email process is the primary method of communication regarding general school news and updates as well as individualized information for parents. All parents/guardians of the potential participants were provided with the parental information sheet (Appendix D) informing them of the study with an option to opt out his or her child from the study. The information sheet included the purpose of the research, what would be asked of participants regarding the

completion of questionnaires, the time it was expected to take students to complete the questionnaires, and the voluntary nature of the study.

Parents who did not wish for his or her child to participate were requested to print and sign the waiver attached to the research information sheet and return this slip to the school's front office on or before October 24, 2012. At the time of data collection, which took place on October 29, 2012, only one parent opted his or her child out of the study. The purpose of the student's non-participation was due to the parents concern for their child's present victimization at the school. Unfortunately, this student would have been an ideal candidate to provide an outlook on his or her bullying experiences; but the option was taken to not participate. The principal of the school ensured that any student not involved in the administration and completion of the questionnaires would be given another task to complete. Parents/guardians were also given the option to review copies of the questionnaires in the front office of the school. Consent was implied if the parent/guardian did not sign the sheet opting out his or her child from the study.

The administration of questionnaires took place during a social studies class on a half day of school. Each class period was 25 minutes long and completion of the surveys took approximately 10-11 minutes. This was determined as the most time efficient and least disruptive approach to gathering the research data. All 7<sup>th</sup> and 8<sup>th</sup> grade students have a social studies class and the schedule was as follows: 1<sup>st</sup> hour – 4 classes, 2<sup>nd</sup> hour – 5 classes, 3<sup>rd</sup> hour – 5 classes, 4<sup>th</sup> hour – 3 classes, 5<sup>th</sup> hour – 4 classes, 6<sup>th</sup> hour – 5 classes. Based on the maximum amount of classes per period (5), the researcher had 4 research assistants helping with the distribution and collection of questionnaires, however, only the researcher had access to the students' answers, which were requested to be put back into the manila envelope upon

completion. The research assistants were trained in the administration of the questionnaires and were asked to answer student's questions. Students were asked to wait for directions before opening his or her packets and requested not to write any identifying information anywhere on the packets. Packets and pencils (if needed) were distributed by the researcher and the research assistants and collected at the end of each class.

The packets included the research information sheet (Appendix E), a demographic questionnaire (Appendix G), and 6 questionnaires (the latter distributed in a counterbalanced/randomized order). The researcher and research assistants briefly went over the information sheet with the students to ensure all students understood what was being asked of them and they also had the option to keep the information sheet. They were informed of the voluntary nature of the study and given the option to withdraw from participation at any time. Students were also informed that by completing the questionnaires, they were agreeing to participate in the study. Participants were thanked for their time and cooperation in the study (Appendix F). Once the students completed the questionnaires, they were asked to leave the packets at his or her seat for the researcher or the research assistants to collect.

### **Instrumentation**

Participants were asked to complete the following measures assessing bullying behavior and victimization, moral disengagement, empathy, and social desirability. In order to ensure that all measures were assessed on similar scales, an average score was determined by dividing the total score by the total number of items on each measure. A description of the data collection procedures will follow.

**Demographic Survey.** A demographic survey designed by the researcher to gather information on students age, grade, gender, and ethnicity was administered. The demographic survey was the first page of all packets, followed by the 6 survey instruments described below.

**Adolescent Peer Relations Instrument – Bully/Target (APRI-B and APRI-T).** The APRI-BT (Griezel et al., 2008a, 2008b; Marsh, Nagengast, Morin, Parada, Craven & Hamilton, 2011; Appendix H and I, respectively) is a multidimensional measure consisting of two domains (bullying and target - victimization) assessed in relation to three subdomains (social/relational, verbal, and physical) resulting in six total scales (Marsh et al., 2011). Each subscale has 6 questions with a total of 36 items. The APRI includes 3 bullying subscales (Marsh et al., 2011): (a) physical bullying - involvement in behaviors such as hitting and kicking, (b) verbal bullying - involvement in behaviors such as name-calling and teasing, and (c) social bullying (i.e., relational) - involvement in behaviors such as social exclusion and rumor spreading; and 3 victimization subscales: (d) physical victimization - victimization through physical means such as being hit, pushed, kicked, (e) verbal victimization - victimization by being called names, yelled at, or teased, and (f) social victimization - victimization by being socially isolated or having rumors spread about him or her.

The 36 factor items are preceded by the stem sentence “In the past year at this school I...” and each item is scored on a 6-point Likert scale (1 = Never, 2 = Sometimes, 3 = Once or twice a month, 4 = Once a week, 5 = Several times a week, 6 = Everyday). Because of the changes occurring within the entire district, the stem sentence in the present study read as follows, “In the past year I...” and there are two reasons for this change. First, the district was in a transitional state of rearranging each middle school in the 2010-2011 school years. Before this, the district consisted of four middle schools, grades 6 through 8. Currently, the district consists

of two middle schools, grades 7 and 8, and two upper elementary schools, grades 5 and 6. Therefore, having students reference “this school” could potentially cause unnecessary confusion because over the past year, many had likely changed schools. Secondly, referencing “at this school” implies the questioned bullying behavior is more limited than intended in the present study. The goal is for students to reference bullying behavior inside and outside of school; in the real and virtual world.

Scoring is achieved by adding the scores on the 18 items with the above mentioned 6-point Likert scale. An average score was utilized for each student, which was divided by the total number of items (36), which resulted in a possible range of scores from 1-6. There is no cut off score for this instrument. Each student received a total Bully and Victimization score as well as three scores for each of the subscales (physical, verbal, and social/relational). A score equal to or less than 6 on any subscale means the student has reported never being victimized and/or having never bullied others in that particular way. The maximum score for each subscale is 36.

#### *APRI-BT Validity and Reliability*

Initially, Griezel et al. (2008a) presented the revised APRI-BT, which included a measure of cyber bullying; however, this was removed in a later publication of the measure (Marsh et al., 2011). The following information reflects only the results of the traditional bullying scales reported by Griezel et al. (2008a). Sound reliability estimates are established for the three first order subscales of the APRI-B (physical, verbal, social) with Cronbach’s alpha estimates ranging from .83 to .88, and for the higher-order, overall traditional ( $\alpha = .93$ ) bully factors (Griezel et al., 2008a). Factor loading estimates are well defined by their corresponding items and all loadings, ranging from .59 to .80, were significant, positive, and substantial in size (Griezel et al., 2008a). Estimates of first-order confirmatory factor analysis (CFA) demonstrate a good fit with the data.

Both the comparative fit index (CFI) and the Tucker-Lewis Index (TLI) vary along a 0-to-1 continuum, which generally reflect good to excellent fit at values of .95 and above, and the root mean square error of approximation (RMSERA) generally reflects goodness of fit with values less than .06 (Calvete, Orue, Estevez, Villardon, & Padilla, 2010); however, Marsh et al. (2011) state values less than .05 reflect a close fit while values less than .08 are reasonable. Parada, Marsh, and Craven (n.d.) researched the APRI-BT (target), which assesses experiences as both victim (target) and bully with 3500 high school students in Australia. CFA results provided a good fit for the data (RMSEA = .048, TLI = .93, and CFI = .94). Although Parada et al. (n.d.) assessed a 6 factor model for the APRI, the author's state, "factor correlations indicated reasonable discrimination between the scales in particular between those measuring bullying and being the target of bullying" (2<sup>nd</sup> par, 8<sup>th</sup> page). Factor loadings for the bully items were statistically significant, with verbal  $\alpha = .89$  ( $\alpha = .89$  for males and  $\alpha = .86$  for females), social/relational  $\alpha = .82$  ( $\alpha = .85$  for males and  $\alpha = .76$  for females), and physical  $\alpha = .85$  ( $\alpha = .85$  for males and  $\alpha = .76$  for females). CFA factor loadings among the bullying items ranged from .60 to .81 and correlations ranged from .73 to .83.

Finger, Yeung, Craven, Parada, and Newey (2008) assessed the APRI utilizing a population of 894 Australian students (5<sup>th</sup> and 6<sup>th</sup> grade). Correlations among the bullying and target factors ranged from .78 to .88 and .79 to .84, respectively ( $p < .001$ ). Goodness of fit were RMSEA = .043, TLI = .98, and CFI = .99. This indicates 98% of the covariance can be explained between the variables, with alpha coefficients ranging from .81 to .89 (median = .82) for the bullying variables and from .85 to .90 (median = .89) for the target variables. Furthermore, Finger et al. (2008) stated, "Parameter estimates...demonstrated that the first order



factors loaded onto the two second order factors (Bullying: ranging from .84 to .94, median = .93; Target: ranging from .89 to .94, median .89;  $p < .001$ )” (p. 6 and 7).

More recently, Marsh et al. (2011) reported sample item alpha coefficients for verbal bullying ( $\alpha = .89, .90, .92$ ), social/relational bullying ( $\alpha = .82, .86, .90$ ) and physical bullying ( $\alpha = .85, .87, .90$ ). As was the case for Parada et al. (n.d.), March et al., (2011) utilized the target scales in its goodness of fit measurement. The study’s focus was on the addition of exploratory structural equation modeling (ESEM), which was determined as a solution that fits the traditional, but highly restrictive (i.e., allows loading in only one factor; non-target loadings constrained to be zero) independent clusters model (ICM) typically used in CFA studies. The ICM-CFA approach resulted with CFI =.943, RMSEA =.029, TLI = .938 (bullying factor loadings ranging from .60 to .81) while the ESEM solution resulted with CFI =.963, RMSEA =.025, TLI = .955 (bullying factor loadings ranging from .43 to .72). Therefore, either method produces satisfactory goodness of fit and “the model is well defined in that every item loaded more substantially on the factor it is designed to measure (target loadings) than on other factors” (Marsh et al., 2011, p. 712). An additional variable was added to the analysis of bullying by combining answers from the APRI-B and the Cyber Bullying Questionnaire (CBQ - discussed below) in order to develop an overall (total) bullying variable.

**Basic Empathy Scale (BES).** The BES (Jolliffe & Farrington, 2006; Appendix J) was used to assess student responses to a 20 item self-report questionnaire assessing two different components of empathic responsiveness: (a) affective empathy subscale (i.e., emotional congruence) and (b) cognitive empathy subscale (i.e., understanding another’s persons emotions (Albiero et al., 2009). There are 11 affective items and 9 cognitive items. An example of an affective item is, “After being with a friend who is sad about something, I usually feel sad” and

an example of a cognitive item is, “When someone is feeling ‘down’ I can usually understand how they feel”. Questions are scored on a 5-point Likert scale (1 = Strongly Disagree, 2 = Disagree, 3 = Neither Agree or Disagree, 4 = Agree, 5 = Strongly Agree). Assessing cognitive and affective empathy separately is optional (Jolliffe & Farrington, 2006).

The eight negative items are scored in reverse and then all scores are summed for a total empathy score. An average score was utilized for each student, which was divided by the total number of items (20), which resulted in a possible range of 1-5. The nine cognitive items are summed to produce the cognitive empathy score and the eleven affective items are summed to produce the affective empathy score; however, only a total empathy score was utilized for the present study.

#### *BES Validity and Reliability*

Regarding the psychometric properties of the BES, satisfactory internal, test-retest, and discriminant validity has been established. Jolliffe and Farrington (2006) originally developed a 40 item questionnaire (20 affective empathy items and 20 cognitive empathy items), which established affective empathy accounting for 19.5% of the variance and cognitive empathy accounting for 7.6% of the variance. The BES was shortened to 9 of the original 20 cognitive items ( $\alpha = .79$ ) and 11 of the original 20 affective items ( $\alpha = .85$ ) for the final 20-item questionnaire. A confirmatory factor analysis resulted with loadings ranging from .43 to .62 for the cognitive items and .41 to .71 for the affective items.

In order to determine goodness-of-fit, the following criteria were used: the goodness of fit index (GFI) > .85, adjusted goodness-of-fit index (AGFI) > .80 and the root mean square residual (RMS) < .10. Results of all three indices justified the 2-factor (affective and cognitive) solution was a good fit for the data including when separating males and females (GFI=.89, .88

for males, .86 for females; AGFI=.86, .85 for males, .83 for females; RMS=.06, .07 for males, .06 for females ) in comparison to the unidimensional model, which resulted as less substantial (GFI = .82, .79 for males, .81 for females, AGFI = .78, .74 for males, .76 for females, RMS = .08, .09 for males, .08 for females; Jolliffe & Farrington, 2006).

Recently, Jolliffe and Farrington (2011) conducted another study regarding low empathy and bullying and found the overall reliability of the BES was  $\alpha = .87$  (.85 males and .83 females), the reliability of the affective scale was  $\alpha = .85$  (.79 males and .74 females), and the reliability of the cognitive scale was  $\alpha = .79$  (.79 males and .78 females). When comparing males who bullied others frequently with males who did not bully others, the frequent bullies scored significantly lower on all scales of empathy: total ( $d = -.44$ ,  $p < .05$ ), affective ( $d = -.35$ ,  $p < .05$ ), and cognitive ( $d = -.31$ ,  $p < .05$ ). On the other hand, when comparing females who bully others with females who do not bully others, female bullies scored significantly lower on affective empathy ( $d = -.32$ ,  $p < .05$ ) but they did not score significantly lower than those who never bully on cognitive empathy. When comparing females who bullied others frequently with females who did not bully others, the frequent bullies scored significantly lower on the total ( $d = -.78$ ,  $p < .01$ ) and affective ( $d = -.85$ ,  $p < .01$ ); however, this should be assessed as exploratory in nature as only a small number of females ( $n = 12$  out of 344) reported frequent bullying (Jolliffe & Farrington, 2011).

The validity of the BES has been established in both Italian (Albiero et al., 2009) and French (D'Ambrosio, Oliver, Didon, & Besche, 2009). Albiero et al. (2009) established goodness-of-fit with the same indices utilized in the original study (GFI = .91, .87 for males and .90 for females; AGFI = .88, .84 for males and .87 for females) along with additional indices (e.g., the normed fit index NFI = .93 and the comparative fit index CFI = .95). All factors were

determined as significant at  $p < .01$  (ranging from .27 to .85). Confirmatory factorial analysis showed the same two-factor structure (total  $\alpha = .87$ , affective  $\alpha = .86$ , and cognitive  $\alpha = .74$ ). Subscale intercorrelations show significant overlap ( $r = .41$  for males,  $r = .43$  for females), with females consistently showing greater empathy than males. Further, D'Ambrosio et al. (2009) established the reliability and validity of the BES with similar results (GFI = .90; total  $\alpha = .80$ , affective  $\alpha = .77$ , and cognitive  $\alpha = .66$ ). Sekol and Farrington (2010) utilized the BES in a study assessing bully/victims in adolescent residential care, which resulted in the overall Cronbach's alpha  $\alpha = .78$ , the affective subscale  $\alpha = .70$ , and the cognitive subscale  $\alpha = .68$ .

**Cyber Bullying Questionnaire (CBQ).** The CBQ (Calvete et. al., 2010; Appendix K) was used to assess student responses to questions regarding cyber bullying behavior using cell phones and the Internet as the communicative method of bullying others. Items are based on active experiences with cyber bullying (e.g., posting unwanted material of someone on the Internet), with some questions stemming from the previous question (e.g., resending/reposting the link for others to see). The 16 cyber bully factor items are preceded by the stem sentence "I have..." and each item is scored on a 3-point Likert scale (0 = Never, 1 = Sometimes, 2 = Often).

The present study changed the grammatical tense of each question from continuous tense (e.g., texting) to past tense (e.g., texted). Further, a few of the questions on the CBQ leave room for the participant to describe or explain his or her answer. This option was not included in the present study in order to preserve the fluidity with the other questionnaires by simply marking an "x" on a Likert scale. Questions included assessments of bullying via the Internet (e.g., "Sending threatening or insulting messages by email to someone") and bullying via cell phone/text messaging (e.g., "Sent threatening or insulting text messages to someone"). Any

endorsement to engaging in cyber bullying resulted in the categorization of a cyber bully (Calvete et al., 2010).

### *CBQ Validity and Reliability*

The following two paragraphs are a review of the literature regarding the measurement of cyber bullying specifically, along with a brief justification for the use of the CBQ. A description of the CBQ's psychometric properties will follow.

Although cyber bullying is a well-researched topic of interest as displayed throughout the present study, there is currently no solid measure consistently utilized to quantify its occurrence (e.g., test-retest reliability). Wade and Beran (2011) stated, "As cyberbullying is a relatively new area of research, there is no comprehensive published instrument to measure the construct" (p. 47). A thorough review of the literature resulted in a variety of methods to measure cyber bullying, but none were repeated by other researchers to establish solid validity and reliability. Some researchers based their measure of cyber bullying on a few questions from much larger studies (e.g., Mason, 2008; Wang et al, 2009; Ybarra & Mitchell, 2004b; Ybarra et al., 2007), while others developed a measure for his or her study without publishing the actual measure (e.g., Kowalski & Limber, 2007; Bauman, 2010). One group of researchers revised an instrument to include questions regarding cyber bullying (RAPRI-BT, Griesel et al., 2008a), but the addition was later removed from the official measure (APRI-BT, Marsh et al., 2011).

Wang et al. (2009) chose to utilize a highly recognized measure of bullying (Olweus Bully/Victim Questionnaire) and simply added two items regarding cyber bullying. Patchin and Hinduja (2006) utilized two questions in an online survey asking the participants if they were ever involved in cyber bullying and whether or not they threatened someone in a cyber-bullying fashion. Williams and Guerra (2007) used only one item assessing whether the participant told

lies (spread rumors) about others via the Internet. The CBQ, developed by Calvete et al. (2010), was the only published measure of cyber bullying found in this extensive review of the literature with strong psychometric properties covering multiple aspects of cyber bullying (texting, emailing, websites, photo, etc.), but also without the addition of follow-up research to support its validity and reliability, which was a goal of the present study. The CBQ also follows the general pattern of all questionnaires used for the present data (i.e., self-report, Likert scale) and is intended for the assessment of the present study's demographic population (adolescent cyber bullying).

Regarding the validity and reliability of the CBQ, Calvete et al. (2010) assessed their measure with 1431 Spanish adolescents (mean age = 14.09 years; SD = 1.33). The Kaise-Meyer-Olkin index was .96, which determines the correlation matrix as suitable for factor analysis. A one-factor model (Weight Least Squared) was tested with goodness of fit assessments by the comparative fit index (CFI), the non-normed fit index (NNFI), both of which generally reflect good fit at values of .95 and above, and the root mean square error of approximation (RMSERA) which generally reflects goodness of fit with values less than .06. Results indicate excellent fit indexes, chi-square (104, n = 1431) = 140, RMSEA = .016 (.0079; .022), NNFI = 1, and CFI = 1. All factor loadings ranged from .90 and .99. The alpha reliability coefficient was .96 and the mean correlation between items is .64, supporting a highly consistent cyber bullying measure.

Coinciding with the present study, Calvete et al. (2010) assessed the CBQ with other predictor variables, specifically, justification of violence (similar to moral disengagement), which was significantly related to cyber bullying ( $B = .07$ ,  $SE = .03$ ,  $\beta = .08$ ,  $t = 2.20$ ,  $p < .05$ ). Utilizing justification of violence, direct aggressive behavior, proactive aggressive behavior, and

indirect/relational aggressive behavior as predictor variables, the model explained 13% of the variance ( $p < .001$ ). Further, only justification of violence and proactive aggression were determined as significantly associated with cyber bullying. Utilizing contextual variables as the predictor variables (rejection by others, acceptance by others, perceived social support, and exposure to violence; the model explained 2.5% of the variance ( $p < .001$ ). Results from the CBQ were also added to results from the APRI-B in order to develop an additional variable of overall (total) bullying.

**Mechanisms of Moral Disengagement Scale (MMDS).** The MMDS (Bandura et al., 1996a; Appendix L) was used to assess student responses to a 32 item questionnaire measuring the eight mechanisms of moral disengagement (MD): moral justification (e.g., “It is alright to fight to protect your friends”), euphemistic labeling (e.g., “To hit annoying classmates is just giving them ‘a lesson’”), advantageous comparison (e.g., “Stealing some money is not too serious compared to those who steal a lot of money”), distortion of consequences (e.g., “Teasing somebody does not really hurt them”), dehumanization (e.g., “Some people deserve to be treated like animals”), attribution of blame (e.g., “If people are careless where they leave their things, it is their own fault if they get stolen”), displacement of responsibility (e.g., “If kids fight and behave badly in school it is their teacher’s fault”), and diffusion of responsibility (e.g., “A kid in a gang should not be blamed for the trouble the gang causes”).

The 32 items pertain to the 8 mechanisms of moral disengagement with 4 questions per mechanism. Each of the eight mechanisms is assessed with four questions regarding differing ethical statements in relation to one’s environment such as school and community (physically injurious and destructive conduct, verbal aggression, lying, and stealing); however, for the purposes of this research, a total moral disengagement score was utilized rather than assessing

each of the mechanisms individually because of the strong psychometrics supporting a one-factor solution (Bandura, 1996a; 1996b). Respondents indicate on a 3 point Likert scale his or her level of agreement for each statement (1 = Agree, 2 = Neither Agree or Disagree, 3 = Disagree). An average score was utilized for each student, which was divided by the total number of items (32), which resulted in a possible range of scores from 1-3.

### *MMDS Validity and Reliability*

Regarding the validity and reliability of the MMDS, a principal components analysis established the measure as a single factor structure accounting for 16.2% of the variance and a composite measure of the scale was established with an alpha reliability coefficient of .82 (Bandura et al., 1996). Later, internal reliability coefficients of .83, and .86 (Bandura et al., 1996a; Bandura, Caprara, Barbaranelli, Pastorelli, and Regalia, 2001; respectively) were reported by the author of the measure and this was further supported by later research conducted by Kiriakidis (2008) who reported an internal reliability alpha coefficient of .87. Providing further validity for the MMDS, Bandura (1996a; 1996b) performed a principal components factor analysis, which resulted in a one-factor solution (Bandura et al., 2001).

In support of this, when examining moral disengagement and school bullying, Hymel et al. (2005) identified 13 items (resultant in a post hoc approach) indicative of the four main mechanisms of the MMDS, which showed a single loading factor yielding a Cronbach's alpha of .81; suggesting strong internal consistency and student responses regarding moral disengagement accounted for 38% of the variance in reported bullying behavior. Pelton, Gound, Forehand, and Brody (2004) utilized the MMDS to extend its original sample of Italian youths to a demographic sample of African American children within the U.S. Results were consistent with the above stated psychometrics. A principal components analysis resulted in a one factor



solution accounting for 5% of the variance ( $\alpha = .82$ ). A confirmatory factor analysis resulted with only two items below .30 (ranging from .23 to .61).

Regarding Bandura et al.'s (1996a, 1996b) previously mentioned studies of the MMDS, Kiriakidis (2008) states, "Further evidence for its construct validity comes from the positive correlations with aggressive behavior and negative correlations with prosocial behavior obtained from the sample studies" (p. 577). This further supports the inclusion of empathy as a moderating variable of moral disengagement and bullying behavior if moral disengagement and aggression (e.g., bullying) are positively correlated and prosocial behavior (e.g., empathy) are negatively correlated as was the focus of the present study.

**Marlowe-Crowne Social Desirability Scale (SDS).** The Marlowe-Crowne Social Desirability Scale (MCSDS; Crowne & Marlowe, 1960; Appendix M) is a 33-item social desirability (e.g., "faking good" or response bias) questionnaire, which assesses the degree in which one represents him or herself in a social desirable way, which could potentially affect the relationship between variables (van de Mortel, 2008). Items include questions such as, "Before voting, I thoroughly investigate the qualifications of all the candidates" and "I never make a long trip without checking the safety of my car". Terms such as "never" and "always", are implicative of someone who may be intending to appear in a more favorable light. The examples provided show that the original SDS includes questions that may be beyond the age-range of the present studies population (Fleming, 2012)

Shorter versions of the MCSD have been developed, which is ideal for researchers who are utilizing a battery of self-report measures, as is the case for the present study (Fleming, 2012). Researchers have conducted studies assessing the differences between the long and short

forms of the MCDS (Fischer & Fick, 1993; Loo & Thorpe, 2000). Reynolds (1982) utilized the MCDS in order to develop three short forms (A, B, & C with 11, 12, and 13 items, respectively) of the overall measure, which include questions such as “No matter who I’m talking to, I’m always a good listener” and “I have never said something that hurt someone’s feelings”, which are taken from the original long form, but include questions relatable for adolescents and eliminate those that do not correspond with the present studies age group. The present study will utilize form C, which has 13 questions from the original 33 item questionnaire. Of the 13 items, 8 are keyed false and 5 are keyed true, “making a response set interpretation of scores highly improbable” (Crowne & Marlowe, 1960; p. 350). For the present study, scoring is calculated by attributing a 1 for a socially desirable answer and a 0 for a truthful answer.

Crowne and Marlowe (1960) do not specify the categorization of groups for the SDS; they do, however, refer to their measure as most closely resembling a normal distribution, which indicates the following: approximately two-thirds (68.3%) of scores are expected to fall within one standard deviation above or below the mean (+1/-1 SD); one-sixth of the scores are expected to rise more than one standard deviation above the mean; and one-sixth of the scores are expected to fall less than one standard deviation below the mean. Using an ordinal scale for interpretation and based on the normal distribution of scores proposed by the authors of the original SDS, (Crowne & Marlowe, 1960), the present study determined the following criteria for categorizing groups from Reynolds’s (1982) 13-item short form using a normal distribution of scores (i.e., 3 lowest items, 7 middle items, 3 highest items):

- Low social desirability group - implicative of honest, unbiased answering; the student responded in a socially undesirable manner on most items; thereby admitting to negative,

socially adverse, cognitive traits, quite possibly to an exaggerated degree. Approximately 20% of the participants (n = 138) scored between 1 and 3 (the lowest 3 scores).

- Middle (normal) social desirability group - implies “normal” answering with reports of both undesirable and desirable behavior. Approximately 56% of the participants (n = 380) scored between 4 and 10 (the middle 7 scores).
- High social desirability group - implicative of participants answering in socially desirable ways; meaning they more than likely answered questions in an untruthful or approval-seeking manner by underreporting adverse behavior and over reporting “good” behavior. Approximately 23% of the participants (n = 158) scored between 11 and 13 (highest 3 scores).

#### *SDS Validity and Reliability*

Regarding the validity and reliability of the original SDS, Crowne and Marlowe (1960) reported an internal consistency coefficient of .88 and test-retest reliability correlation of .89. A t-test was utilized to assess the differences between the means, which was significant beyond the .0001 level at 15.27. Reynolds (1982) selected a criterion factor-variable correlation of .40 as the minimum level for inclusion of 13 items for the short-form version(s), which was utilized in the present study (Form C). A principal components factor accounted for 15.9% of the variance, which accounted for three times the variance of the next factor, and was confirmed as a single significant factor ( $\lambda_1 = 5.23$ ,  $\lambda_2 = 1.63$ ). For the initial short form (form A, 11 items), factor loadings ranged from .40 to .54, with a median loading of .46. Afterwards, two additional short forms were developed (form B and C, 12 and 13 items, respectively). The additional two items resulted with increased reliability. The present study utilized form C, which has 13 items from

the original 33-item questionnaire and results in satisfactory reliability ( $\alpha = .76$ ) comparing favorably to the original measure (Reynolds, 1982). Furthermore, Loo and Thorpe (2000) established further satisfactory results for form C of Reynolds short version ( $\alpha = .62$ ) and Fischer & Fick (1993) also showed high correlations and high internal consistency among the short forms and the original measure.

### **Internal Consistency of Instruments**

Reliability coefficients for each of the measures in the present study resulted in Cronbach's alphas ranging from .68 to .95 (see Table 2). Only one measure (SDS) fell below  $\alpha = .75$ . Of the remaining 11 variables, 2 subscales (APRI-physical and APRI-verbal) fell within a satisfactory reliability range, and the remaining 9 variables resulted with excellent reliability coefficients above  $\alpha = .80$ . Griezel et al. (2008a) and Marsh et al. (2011) established reliability estimates of the APRI-B (physical, verbal, social) with Cronbach's alpha estimates ranging from .83 to .88, and .82 to .92, respectively, while the present study found similar results with estimates ranging from .75 to .86. Regarding the APRI-T, Marsh et al. (2011) found similar results with the results of the present study with estimates ranging from  $\alpha = .87$  to .93 and  $\alpha = .87$  to .89, respectively. For the APRI-T, Griezel et al. (2008a) established an overall bullying reliability coefficient of  $\alpha = .93$ , while the present study resulted similarly with  $\alpha = .90$ .

Regarding the BES, the present study found similar reliability coefficients ( $\alpha = .81$ ) with studies performed by D'Ambrosio et al. (2009), Jolliffe and Farrington (2006), Jolliffe and Farrington (2011), and Sekol and Farrington (2010), with reliability coefficients reports of  $\alpha = .80$ , .79, .85, and .78, respectively. The present study resulted with a reliability coefficient of  $\alpha = .86$  for the CBQ, while the author of the measure reported a reliability coefficient of  $\alpha = .96$  (Calvete et al., 2010). Regarding the MMDS, the present study found similar reliability ( $\alpha = .88$ )

with those performed in the past by Bandura et al., (1996; 1996a; 2001) and Kiriakidis (2008) with alpha coefficients of .82, .83, .86, and .87 respectively. The present study resulted with an alpha coefficient of .68 for the SDS in comparison to results presented by Reynolds's (1982) who reported a reliability coefficient of .76 for the short version, which was utilized in the present study.

Table 2  
*Reliability of Instruments*

Measure	# of Items	Cronbach's $\alpha$
APRI-B - Total	18	.90
<i>Physical</i>	6	.78
<i>Social</i>	6	.75
<i>Verbal</i>	6	.86
APRI-T - Total	18	.95
<i>Physical</i>	6	.87
<i>Social</i>	6	.89
<i>Verbal</i>	6	.87
BES	20	.81
CBQ	16	.86
MMDS	32	.88
SDS	13	.68

APRI-BT = Adolescent Peer Relations Instrument - Bully and Target; BES = Basic Empathy Scale; CBQ = Cyber Bullying Questionnaire; MMDS = Mechanisms of Moral Disengagement Scale; SDS = Social Desirability Scale

## Statistical Analysis

Below is a summary of the research questions, the accompanying hypotheses, the assessed variables, and the statistical analysis procedures applied to each question (see Figure 4).

Figure 4: *Statistical Analysis*

Research Question/Hypotheses	Variables	Statistical Analysis
<p>1. Does a change in levels of bullying, moral disengagement, empathy, and social desirability emerge between grades 7 and 8, between male and female adolescents, and across different ethnicities?</p>		
<p>H1a. Gender differences will emerge across levels of bullying behavior with males reporting higher levels of physical and verbal bullying than females, and females reporting higher levels of social and cyber bullying than males.</p> <p>H1b. Seventh and eighth graders will not differ in reports regarding all forms of bullying behavior.</p> <p>H1c. Reports of bullying behavior will not differ between ethnicities.</p>	<p><u>Independent Variables</u> Gender Grade (7 and 8) Ethnicity</p> <ul style="list-style-type: none"> <li>• Caucasian</li> <li>• African American</li> <li>• Asian</li> <li>• Mixed Race/Other</li> </ul> <p><u>Dependent Variables</u> Bullying</p> <ul style="list-style-type: none"> <li>• Traditional               <ul style="list-style-type: none"> <li>a. Overall</li> <li>b. Physical</li> <li>c. Verbal</li> <li>d. Social</li> </ul> </li> <li>• Cyber</li> </ul>	<p>A factorial multivariate analysis of variance (MANOVA) will be used to determine if the different types of bullying show statistically significant differences by each demographic variable (gender, grade, and ethnicity).</p> <p>Significant differences will be investigated through follow-up univariate analysis of variance (ANOVA).</p>
<p>H1.2a. Gender differences will emerge across levels of victimization with males reporting higher levels of physical and verbal victimization than females, and females reporting higher levels of social and cyber victimization than males.</p> <p>H1.2b. Seventh and eighth graders will not differ in reports regarding victimization.</p> <p>H1.2c. Reports of victimization will not differ between ethnicities.</p>	<p><u>Independent Variables</u> Grade (7 and 8) Gender (male/female) Ethnicity</p> <p><u>Dependent Variables</u> Victimization</p> <ul style="list-style-type: none"> <li>a. Overall</li> <li>b. Physical</li> <li>c. Verbal</li> <li>d. Social</li> </ul>	<p>A factorial MANOVA will be used to determine if the different types of victimization show statistically significant differences by each demographic variable (gender, grade, and ethnicity).</p> <p>Significant differences will be investigated through follow-up univariate ANOVA.</p>
<p>H1.3a. Levels of moral disengagement will differ between male and female adolescents with males having higher levels of moral disengagement than females.</p> <p>H1.3b. Seventh and eighth graders will not differ regarding levels of moral disengagement.</p>	<p><u>Independent Variables</u> Grade (7 and 8) Gender (male/female) Ethnicity</p> <p><u>Dependent Variable</u> Moral Disengagement</p>	<p>A factorial ANOVA will be used to determine if moral disengagement shows statistically significant differences by each demographic variable (gender, grade, and ethnicity).</p> <p>Significant differences will be investigated through follow-up univariate ANOVA.</p>

<p>H1.3c. Levels of moral disengagement will not differ between ethnicities.</p> <hr/> <p>H1.4a. Levels of empathy will differ among male and female adolescents with females having higher levels of empathy than males.</p> <p>H1.4b. Seventh and eighth graders will not differ regarding levels of empathy.</p> <p>H1.4c. Levels of empathy will not differ between ethnicities.</p> <hr/> <p>H1.5a. There will be no significant gender differences in reports of social desirability.</p> <p>H1.5b. Seventh and eighth graders will not differ regarding reports of social desirability.</p> <p>H1.5c. Levels of social desirability will not differ between ethnicities.</p>	<p><u>Independent Variables</u> Grade (7<sup>th</sup> and 8<sup>th</sup>) Gender (male/female) Ethnicity</p> <p><u>Dependent Variable</u> Empathy</p> <hr/> <p><u>Independent Variables</u> Grade (7 and 8) Gender (male/female) Ethnicity</p> <p><u>Dependent Variable</u> Social Desirability</p>	<p>A factorial ANOVA will be used to determine if empathy shows statistically significant differences by each demographic variable (gender, grade, and ethnicity).</p> <p>Significant differences will be investigated through follow-up univariate ANOVA.</p> <hr/> <p>A factorial ANOVA will be used to determine if moral disengagement shows statistically significant differences by each demographic variable (gender, grade, and ethnicity).</p> <p>Significant differences will be investigated through follow-up univariate ANOVA.</p>
Research Question/Hypotheses	Variables	Statistical Analysis
<p>2. Do reports of social desirability affect reports of bullying, victimization, moral disengagement, and empathy?</p>		
<p>H2a. Those who report high levels of social desirability will report lower levels of bullying, in comparison to those who report lower or normal levels of social desirability.</p> <p>H2b. Those who report high levels of social desirability will report lower levels of victimization, in comparison to those who report lower or normal levels of social desirability.</p> <p>H2c. Those who report high levels of social desirability will report lower levels of moral disengagement, in comparison to those who report lower or normal levels of social desirability.</p> <p>H2d. Those who report high levels of social desirability will also report high levels of empathy, in comparison to those who report lower or normal levels of social desirability.</p>	<p><u>Independent Variable</u> Social Desirability</p> <p><u>Dependent Variables</u> Bullying Victimization Moral Disengagement Empathy</p>	<p>MANOVA will be used to determine whether or not there were statistically significant differences in levels of bullying and victimization by social desirability group.</p> <p>Additionally, univariate ANOVA will be used to determine whether or not there are statistically significant differences in levels of moral disengagement and empathy by social desirability group (high, medium, low).</p> <p>If statistically significant differences were established, multiple comparisons using post hoc analysis (Tukey's HSD) will be used to determine which specific social desirability groups differed from one another.</p>
Research Question/Hypotheses	Variables	Statistical Analysis
<p>3. To what degree is bullying behavior (physical, verbal, social, cyber) correlated with moral disengagement?</p>		

<p>H3a. Levels of moral disengagement will positively correlate with traditional and cyber bullying.</p> <p>H3b. Moral disengagement will be most strongly correlated with physical bullying, and this correlation will decrease in strength with cyber, social, and verbal bullying respectively.</p> <p>H3c. Adolescents classified as both traditional and cyber bullies will have the highest overall levels of moral disengagement.</p>	<p><u>Predictor Variable (Quantitative)</u> Moral Disengagement</p> <p><u>Outcome Variables (Quantitative)</u> Bullying</p> <ul style="list-style-type: none"> <li>• Traditional <ul style="list-style-type: none"> <li>a. Overall</li> <li>b. Physical</li> <li>c. Verbal</li> <li>d. Social</li> </ul> </li> <li>• Cyber</li> <li>• Both/Total (Traditional and Cyber)</li> <li>• No bullying</li> </ul>	<p>A Pearson product-moment correlation will be run to determine the degree of the relationship between moral disengagement and all bullying variables.</p> <p>After classifying each participant into one of four groups (traditional bully, cyber bully, neither, or both), an ANOVA will be run to explore whether or not there were significant differences between groups regarding moral disengagement.</p> <p>To further explore differences between the groups, multiple comparisons using post hoc analysis (Tukey's HSD) will be used to look at all pairs of bullying types to see which have statistically significant differences in regard to moral disengagement.</p>
Research Question	Variables	Statistical Analysis
<p>4. Does empathy significantly affect reports of bullying and moral disengagement after adjusting for social desirability?</p>		
<p>H4a. After controlling for social desirability, empathy will significantly affect reports of moral disengagement with high levels of empathy decreasing moral disengagement.</p> <p>H4b. After controlling for social desirability, empathy will significantly affect reports of bullying with high levels of empathy decreasing engagement in all forms of bullying.</p>	<p><u>Independent Variable:</u> Empathy</p> <p><u>Dependent Variables:</u> Bullying</p> <ul style="list-style-type: none"> <li>• Traditional <ul style="list-style-type: none"> <li>a. Overall</li> <li>b. Physical</li> <li>c. Verbal</li> <li>d. Social</li> </ul> </li> <li>• Cyber</li> </ul> <p>Moral Disengagement</p> <p><u>Covariate:</u> Social Desirability</p>	<p>A multivariate analysis of covariance (MANCOVA) will be used to determine whether bullying differs between empathy groups when controlling for social desirability.</p> <p>An analysis of covariance (ANCOVA) will be used to determine whether moral disengagement differs between empathy groups when controlling for social desirability</p>
Research Question	Variables	Statistical Analysis
<p>5. Which of the six predictors (moral disengagement, empathy, social desirability, gender, grade, and ethnicity) improve the regression equation to predict bullying behavior; and do empathy and social desirability serve as moderators of this relationship?</p>		
<p>H5a. Empathy will negatively correlate with moral disengagement and engagement in bullying behavior; and have a moderating effect on the relationship between bullying behavior and moral disengagement.</p> <p>H5b. Social desirability will be</p>	<p><u>Criterion/Dependent Variables</u> Bullying</p> <ul style="list-style-type: none"> <li>• Traditional <ul style="list-style-type: none"> <li>a. Physical</li> <li>b. Verbal</li> <li>c. Social</li> </ul> </li> <li>• Cyber</li> <li>• Total Bullying</li> </ul>	<p>Five separate hierarchical stepwise multiple linear regression analyses will be used to determine which predictors significantly contribute to the model. A moderation analysis will be conducted across four regression equations to assess the relationship between levels of each type of</p>



<p>negatively correlated with moral disengagement, positively correlated with empathy, and have a main effect on bullying behavior (which will be negatively correlated), and it will have a moderating effect on both moral disengagement and empathy.</p> <p>H5c. Once empathy, social desirability, and moral disengagement have been accounted for, each demographic/predictor variable will not significantly impact reports of bullying behavior.</p>	<p><u>Moderating Variable</u> Empathy Social Desirability</p> <p><u>Predictor/Independent Variables</u> Gender Grade (7 and 8) Ethnicity</p> <ul style="list-style-type: none"> <li>• Caucasian</li> <li>• African American</li> <li>• Asian</li> <li>• Mixed Race/Other</li> </ul> <p>Moral Disengagement</p>	<p>bullying and moral disengagement with empathy and social desirability as the moderating variables. If the interaction between levels of bullying and empathy or social desirability significantly contributes to the model, we can conclude that a moderating relationship exists.</p> <p>The following steps will be utilized for all 5 hierarchical regression analyses:</p> <ol style="list-style-type: none"> <li>1. Bullying predicted by moral disengagement</li> <li>2. Model 1 plus empathy and the interaction term to test for moderation</li> <li>3. Model 2 plus social desirability and the interaction terms to test for moderation</li> <li>4. Model 3 plus gender</li> <li>5. Model 4 plus grade</li> <li>6. Model 5 plus race</li> </ol>
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## CHAPTER 4

### RESULTS

The primary purpose of the present study was to examine numerous cognitive variables and their potential contributions to adolescent bullying behavior. More specifically, the present research attempted to further develop awareness of the associations between moral disengagement and bullying behavior among middle school adolescents. Additionally, the assessment of empathy as a moderator between said variables and the inclusion of a social desirability measure further enhanced the present study's aim; taking into account the potential roles these variables could play in present and future cognitive and behavioral research. Inferential statistical analyses used to test and answer the research questions and hypotheses are included in this chapter. Statistical significance was determined by using a criterion alpha level of .05.

#### **Descriptive Statistics and Frequency Distributions of Instrumentation**

The following is a list of the means, standard deviations, and frequency distributions for each of the 6 instruments utilized in the present study. Additional descriptive statistics, including the range of scores and the possible range of scores for each measure, are provided at the end of this section in Table 3. Because of the large number of tables describing the frequency rates of bullying, victimization, and their subscales, both measures will be briefly discussed together, followed by the distribution tables for all bullying and victimization variables.

*Adolescent Peer Relations Instrument – Bully* – The possible range of scores for the APRI-B was 1 (never) to 6 (every day). The mean score for overall (traditional) bullying, including physical, verbal and social bullying was 1.25 ( $SD = .39$ ) with scores ranging from 1 to 4.4. Individually, the mean score for physical bullying was 1.28 ( $SD = .42$ ) with scores ranging from 1 to 4.5; the mean score for verbal bullying was 1.23 ( $SD = .41$ ) with scores ranging from 1 to 4.33; and the mean score for social bullying was 1.24 ( $SD = .43$ ) with scores ranging from 1 to 4.7. The distribution of scores for the APRI-B and each subscale is positively skewed meaning the majority of participants stated they never or rarely engaged in any form of bullying (see Figure 5).

*Adolescent Peer Relations Instrument – Target* - The possible range of scores for the APRI-T was 1 (never) to 6 (every day). The mean score for overall (traditional) victimization, including physical, verbal, and social victimization was 1.48 ( $SD = .73$ ) with actual scores ranging from 1 to 6. Individually, the mean score for physical victimization was 1.35 ( $SD = .65$ ) with actual scores ranging from 1 to 6; the mean score for verbal victimization was 1.66 ( $SD = .97$ ) with actual scores ranging from 1 to 6; and the mean score for social victimization was 1.43 ( $SD = .76$ ) with actual scores ranging from 1 to 6. The distribution of scores for the APRI-T and each subscale is positively skewed meaning the majority of participants stated they never or rarely experienced bullying victimization (see Figure 6).

Figure 5: *Distribution of Scores on the Adolescent Peer Relations Instrument – Bully Overall (Traditional), Physical, Verbal, and Social Bullying*

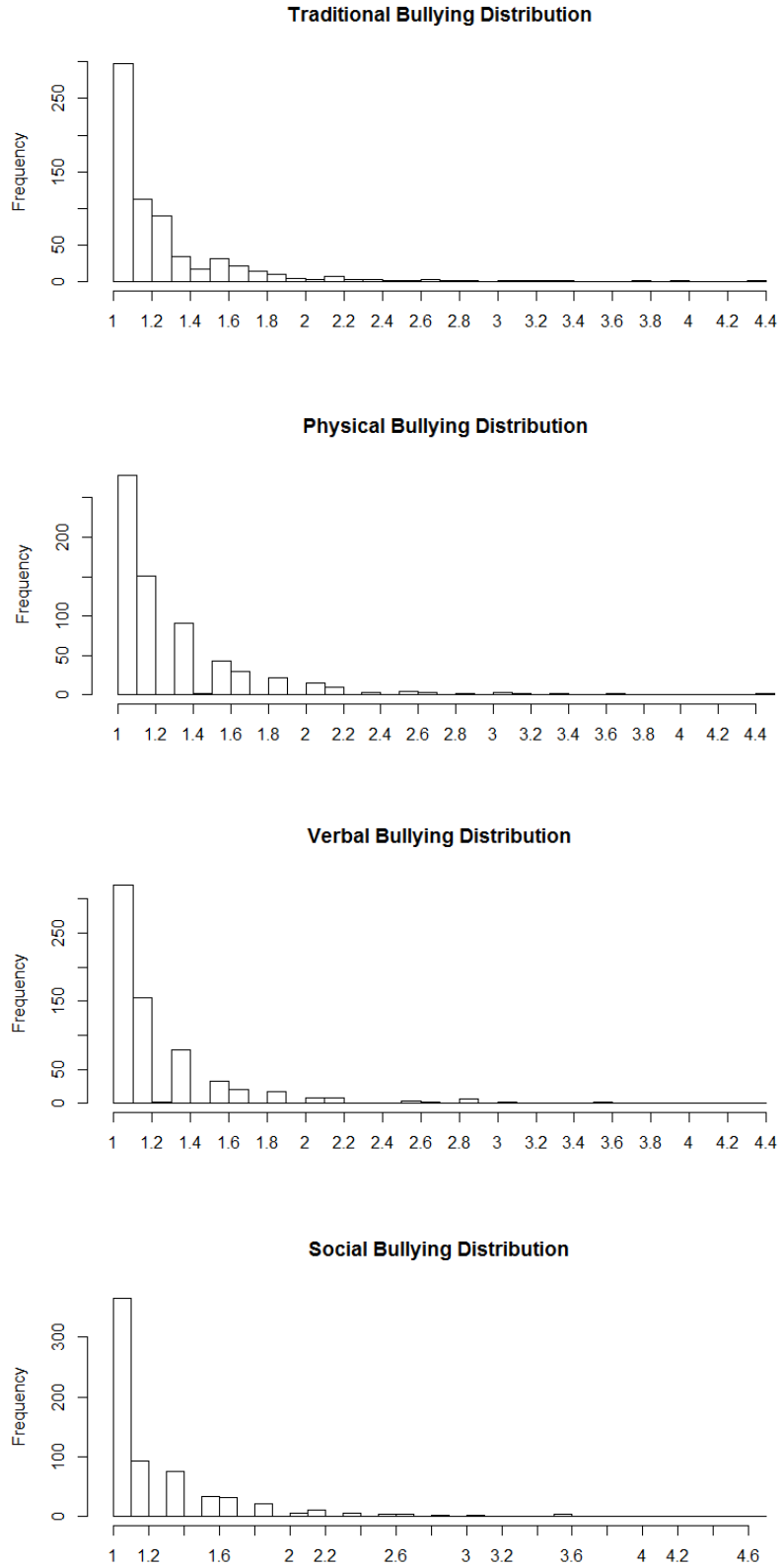
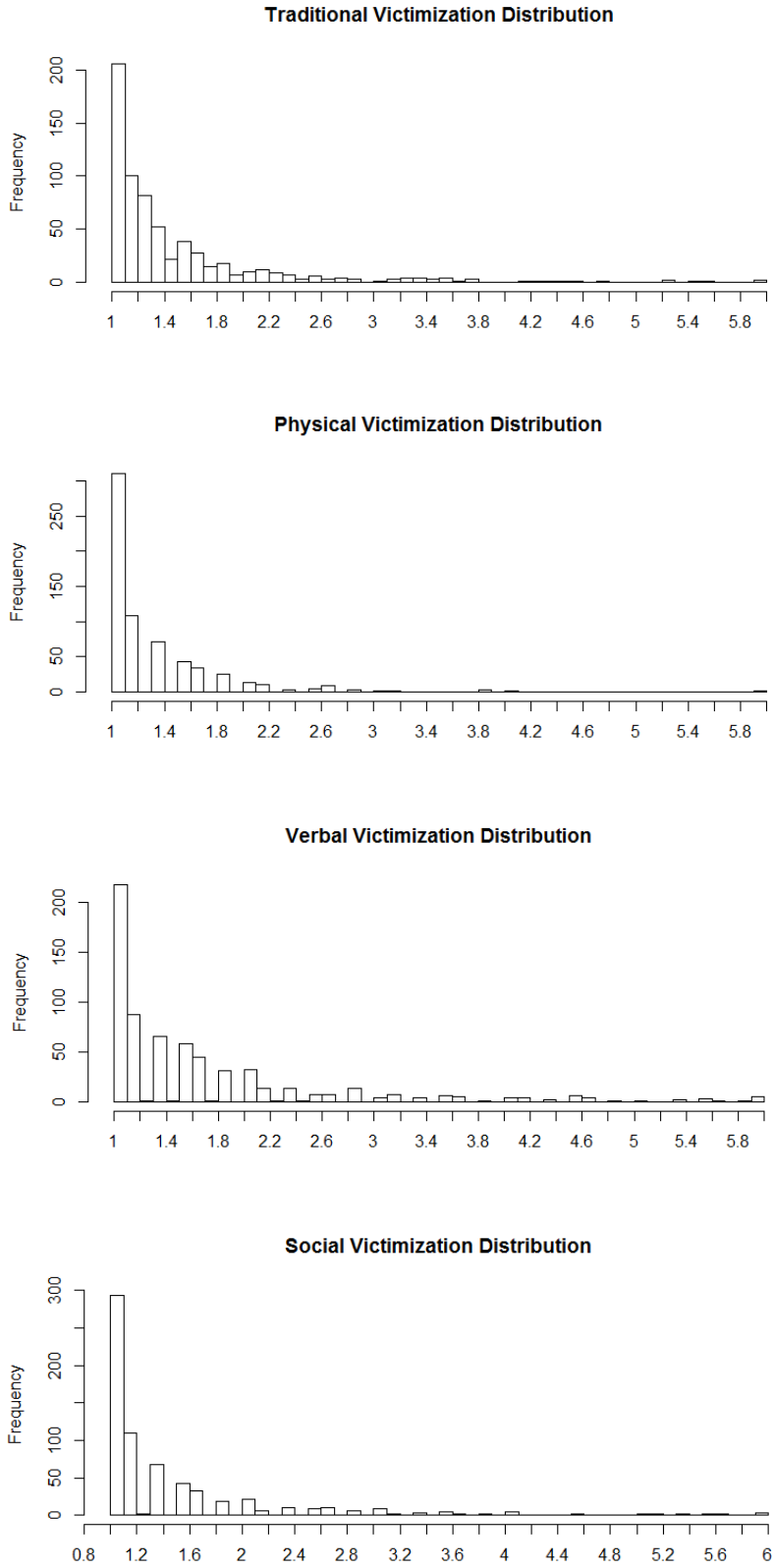
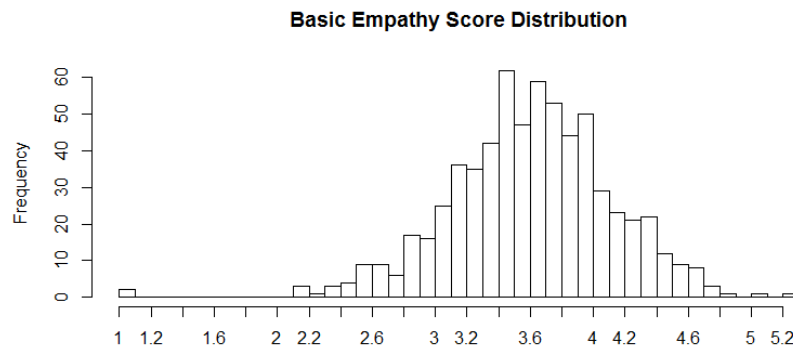


Figure 6: *Distribution of Scores on the Adolescent Peer Relations Instrument – Target Overall (Traditional), Physical, Verbal, and Social Victimization*

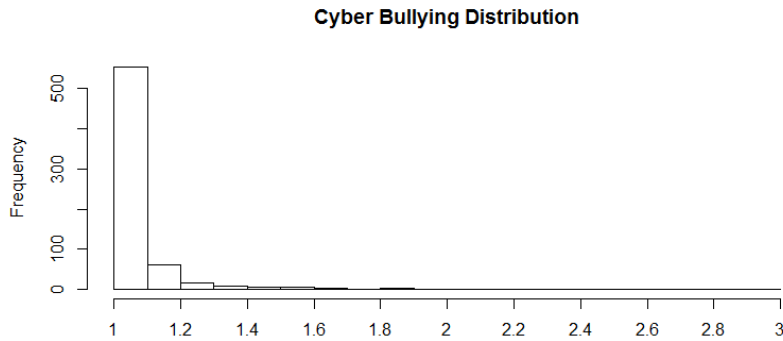


*Basic Empathy Scale* – The possible range of scores for the BES was 1 (strongly disagree) to 5 (strongly agree) with some items scored in reverse. The mean score for empathy was 3.57 ( $SD = .51$ ) with actual scores ranging from 1 to 5. The distribution of scores for the BES is slightly negatively skewed meaning participants reported having empathic traits more often than not (see Figure 7).

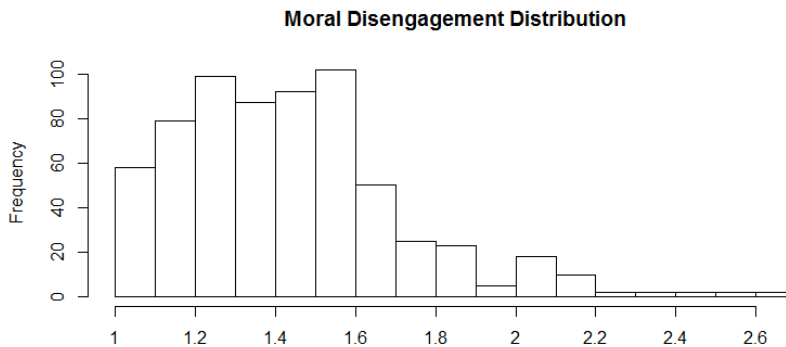
Figure 7: *Distribution of Scores on the Basic Empathy Scale*



*Cyber Bullying Questionnaire* - The possible range of scores for the CBQ was 1 (never) to 3 (often). The mean score for cyber bullying was 1.05 ( $SD = .15$ ) with actual scores ranging from 1 to 3. The distribution of scores for the CBQ is positively skewed meaning the majority of participants stated they never engaged in any cyber bullying (see Figure 8). Potential reasons for this result will be discussed in Chapter 5.

Figure 8: *Distribution of Scores on the Cyber Bullying Questionnaire*

*Mechanisms of Moral Disengagement Scale* - The possible range of scores for the MMDS was 1 (agree) to 3 (disagree). The mean score for moral disengagement was 1.43 ( $SD = .28$ ) with actual scores ranging from 1 to 2.69. The distribution of scores for the MMDS is positively skewed meaning the majority of participants reported lower levels or moral disengagement (see Figure 9).

Figure 9: *Distribution of Scores on the Mechanisms of Moral Disengagement Scale*

*Social Desirability Scale* - The SDS is a true/false test and therefore the scores were coded as either a 0 or 1. The mean score for social desirability was .54 ( $SD = .22$ ) with actual scores ranging from 0 to .92. Twenty percent of the participants ( $n = 138$ ) scored low on social

desirability, 56% of the participants ( $n = 380$ ) scored in the middle (normal) on social desirability, and 23% of the participants ( $n = 158$ ) scored high on social desirability. The distribution of scores for the APRI-T and each subscale is positively skewed meaning the majority of participants stated they never or rarely experienced bullying victimization (see Figure 10).

Figure 10: *Distribution of Scores on the Social Desirability Scale*

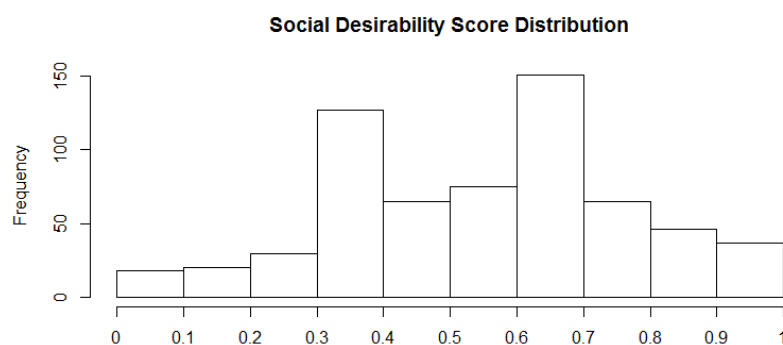


Table 3

*Means, Standard Deviations, Range of Scores, and Possible Range of Scores of administered measures and descriptive variables*

Measure (Subscale)	<i>M</i>	<i>SD</i>	Range of Scores		Possible Range of Scores	
			Min	Max	Min	Max
APRI-B Total	1.25	.39	1	4.40	1	6
<i>Physical Bully</i>	1.28	.42	1	4.50	1	6
<i>Social Bully</i>	1.24	.43	1	4.70	1	6
<i>Verbal Bully</i>	1.23	.41	1	4.33	1	6
APRI-T Total	1.48	.73	1	6.00	1	6
<i>Physical Victimization</i>	1.35	.65	1	6.00	1	6
<i>Social Victimization</i>	1.43	.76	1	6.00	1	6
<i>Verbal Victimization</i>	1.66	.97	1	6.00	1	6
BES	3.57	.51	1	5.00	1	5
CBQ	1.05	.15	1	3.00	1	3
MMDS	1.43	.28	1	2.69	1	3
SDS	0.54	.22	0	0.92	0	1

APRI-BT = Adolescent Peer Relations Instrument - Bully and Target; BES = Basic Empathy Scale; CBQ = Cyber Bullying Questionnaire; MMDS = Mechanisms of Moral Disengagement Scale; SDS = Social Desirability Scale



### *Correlations among Variables*

Of the six measures listed above, the present study resulted in 12 variables of assessment in relation to the research questions. The 12 variables are as follows: traditional (overall) bullying, verbal bullying, social bullying, physical bullying, cyber bullying, empathy, moral disengagement, traditional (overall) victimization, verbal victimization, social victimization, and social desirability. A detailed correlation matrix of all of the present study's variables is provided in Table 4 in order to provide the degree of association among each item.

Table 4: Correlation Matrix among all Study Variables

	TB	VB	SB	PB	CB	BES	MD	TV	VV	SV	PV	SD
TB	_____											
VB	.91 ***	_____										
SB	.95 ***	.78 ***	_____									
PB	.94 ***	.76 ***	.86 ***	_____								
CB	.38 ***	.35 ***	.35 ***	.36 ***	_____							
BES	-.13 ***	-.05	-.18 ***	-.13 ***	-.10 **	_____						
MD	.43 ***	.39 ***	.42 ***	.41 ***	.25 ***	-.23 ***	_____					
TV	.31 ***	.30 ***	.31 ***	.24 ***	.15 ***	.12 ***	.14 ***	_____				
VV	.26 ***	.27 ***	.26 ***	.19 ***	.12 **	.16 ***	.08 *	.94 ***	_____			
SV	.25 ***	.27 ***	.24 ***	.18 ***	.12 **	.15 **	.11 **	.94 ***	.84 ***	_____		
PV	.36 ***	.30 ***	.37 ***	.32 ***	.18 ***	.00	.22 ***	.86 ***	.70 ***	.72 ***	_____	
SD	-.39 ***	-.34 ***	-.37 ***	-.37 ***	-.21 ***	-.02	-.31 ***	-.21 ***	-.19 ***	-.17 ***	-.20 ***	_____

\*\*\*  $p < .001$ ; \*\*  $p < .01$ ; \*  $p < .05$  TB = Traditional Bullying; VB = Verbal Bullying; SB = Social Bullying; PB = Physical Bullying; CB = Cyber Bullying; BES = Empathy; MD = Moral Disengagement; TV = Traditional Victimization; VV = Verbal Victimization; SV = Social Victimization; PV = Physical Victimization; SD = Social Desirability

## Research Questions and Hypotheses

**Research Question 1:** Does a change in levels of bullying, moral disengagement, empathy, and social desirability emerge between grades 7 and 8, between male and female adolescents, and across different ethnicities?

### Bullying Behavior and Demographics

- H1a. *Gender differences will emerge across levels of bullying behavior with males reporting higher levels of physical and verbal bullying than females, and females reporting higher levels of social and cyber bullying than males.*
- H1b. *Seventh and eighth graders will not differ in reports regarding all forms of bullying behavior.*
- H1c. *Reports of bullying behavior will not differ between ethnicities.*

An initial 2x2x4 factorial multivariate analysis of variance (MANOVA) was used to determine if the different types of bullying (overall, physical, verbal, social, and/or cyber) showed statistically significant differences by each demographic variable (gender, grade, and ethnicity). This analysis allowed for a preliminary assessment of which demographic variables showed statistical significance before assessing each demographic variable individually. Results of the factorial MANOVA indicated that all 3 demographic variables were significant at the  $p < .001$  level; with a statistically significant Hotelling's trace of .05 obtained for gender,  $F(5, 616) = 5.61, p < .001, d = .04$ ; Hotelling's Trace of .06 for grade,  $F(5, 616) = 6.81, p < .001, d = .05$ ; and Hotelling's Trace of .06 for ethnicity;  $F(15, 1844) = 2.56, p < .001, d = .02$  (see Table 5).

Table 5  
 2x2x4 Factorial Multivariate Analysis of Variance (MANOVA) for All Bullying Variables by All Demographic Variables

Demographic	Hotelling's Trace	F Ratio	df	Effect Size
Gender	0.05	5.61 ***	5, 616	0.04
Grade	0.06	6.81 ***	5, 616	0.05
Ethnicity	0.06	2.56 ***	15, 1874	0.02
Gender x Grade	0.01	1.06	5, 616	0.01
Gender x Ethnicity	0.03	1.26	15, 1844	0.01
Grade x Ethnicity	0.02	0.76	15, 1844	0.01
Gender x Grade x Eth.	0.03	1.18	15, 1844	0.01

\*\*\*  $p < .001$ ; Note:  $N = 635$ ; Bullying = Physical, Verbal, Social, and Cyber; Grade = 7th and 8th; Ethnicity (Race) = Caucasian, African American, Asian and Mixed/Other

Based on the results of the MANOVA, follow-up independent univariate analysis of variance (ANOVA) was used to assess differences in gender (see Table 6), grade (see Table 7), and ethnicity (see Table 8) across all bullying variables independently.

#### *Bullying by Gender*

A main effect of gender was found for overall bullying behavior,  $F(1, 634) = 14.52, p < .001$ , with males ( $M = 1.31, SD = .46$ ) reporting significantly higher levels of bullying behavior than females ( $M = 1.19, SD = .30$ ). Regarding the differing levels of bullying specifically, a main effect of gender was found for physical bullying,  $F(1, 634) = 13.85, p < .001$ , verbal bullying,  $F(1, 634) = 4.76, p < .05$ , and social bullying,  $F(1, 634) = 21.94, p < .001$ . Males reported significantly higher levels of physical ( $M = 1.34, SD = .49$ ), verbal ( $M = 1.27, SD = .46$ ), and social ( $M = 1.33, SD = .51$ ) bullying behavior than females ( $M = 1.22, SD = .34; M = 1.20, SD = .35$ ; and  $M = 1.16, SD = .32$ , respectively). There were no statistically significant differences in cyber bullying between genders. In summary, with the exception of cyber bullying, which showed no gender differences; results of the present study indicated that males

are more likely than females to report engaging in all forms of traditional bullying behavior overall, including physical, verbal, and social bullying (see Table 6).

**Table 6**  
*Univariate Analysis of Variance (ANOVA) for All Bullying Variables by Gender*

<b>Bullying</b>	<b>Degrees of Freedom</b>	<b>Sum of Squares</b>	<b>Mean Square</b>	<b>F</b>
Overall	1	2.20	2.20	14.52 ***
Physical	1	2.46	2.46	13.85 ***
Verbal	1	1.79	0.79	4.76 *
Social	1	3.96	3.96	21.94 ***
Cyber	1	0.05	0.05	2.29

\*\*\*  $p < .001$ ; \*  $p < .05$ ; Note:  $N = 634$

### *Bullying by Grade*

A main effect of grade level was found for overall bullying behavior,  $F(1, 634) = 13.78, p < .001$ , with 8<sup>th</sup> graders reporting significantly higher levels of bullying behavior ( $M = 1.31, SD = .44$ ) than 7<sup>th</sup> graders ( $M = 1.20, SD = .34$ ). Regarding the differing levels of bullying specifically, a main effect of grade level was found for physical bullying,  $F(1, 634) = 23.02, p < .001$ , verbal bullying,  $F(1, 634) = 3.98, p < .05$ , and social bullying,  $F(1, 634) = 12.55, p < .001$ . 8<sup>th</sup> graders reported significantly higher levels of physical ( $M = 1.36, SD = .49$ ), verbal ( $M = 1.27, SD = .44$ ), and social ( $M = 1.30, SD = .48$ ) bullying behavior than 7<sup>th</sup> graders ( $M = 1.20, SD = .34$ ;  $M = 1.20, SD = .37$ ; and  $M = 1.18, SD = .37$ , respectively). There were no statistically significant differences in cyber bullying between grade levels,  $F(1, 634) = .22, p > .05$ . In summary, with the exception of cyber bullying, which showed no statistically significant grade differences; results of the present study indicated that 8<sup>th</sup> graders were more likely than 7<sup>th</sup>

graders to report engaging in all forms of traditional bullying behavior overall, including physical, verbal, and social bullying (see Table 7).

Table 7  
*Univariate Analysis of Variance (ANOVA) for All Bullying Variables by Grade*

<b>Bullying</b>	<b>Degrees of Freedom</b>	<b>Sum of Squares</b>	<b>Mean Square</b>	<b>F</b>
Overall	1	2.09	2.09	13.78 ***
Physical	1	4.04	4.04	23.02 ***
Verbal	1	0.66	0.66	3.98 *
Social	1	2.30	2.30	12.55 ***
Cyber	1	0.00	0.00	0.22

\*\*\*  $p < .001$ ; \*  $p < .05$ ; Note:  $N = 634$ ; Grade = 7th and 8th

#### *Bullying by Ethnicity*

A main effect of ethnicity was not found for overall bullying behavior,  $F(3, 632) = 2.25$ ,  $p > .05$ . Regarding the differing levels of bullying specifically, a main effect of ethnicity was not found for verbal bullying  $F(3, 632) = 1.06$ ,  $p > .05$ , or social bullying  $F(3, 632) = 2.52$ ,  $p > .05$ . However, there was a statistically significant difference between ethnicities in levels of physical bullying,  $F(3, 632) = 3.31$ ,  $p < .05$ , and cyber bullying,  $F(3, 632) = 5.56$ ,  $p < .001$  (see Table 8).

Table 8  
*Univariate Analysis of Variance (ANOVA) for All Bullying Variables by Ethnicity*

<b>Bullying</b>	<b>Degrees of Freedom</b>	<b>Sum of Squares</b>	<b>Mean Square</b>	<b>F</b>
Overall	3	1.04	0.35	2.25
Physical	3	1.78	0.59	3.31 *
Verbal	3	0.53	0.18	1.06
Social	3	1.42	0.47	2.52
Cyber	3	0.34	0.11	5.56 ***

\*\*\*  $p < .001$ ; \*  $p < .05$ ; Note:  $N=632$ ; Ethnicity (Race) = Caucasian, African American, Asian and Mixed/Other

A post-hoc Tukey's HSD test was used to assess which ethnicity groups showed significant differences regarding reports of physical and cyber bullying behavior, which indicated that African American adolescents reported significantly higher levels of physical bullying ( $M = 1.37$ ,  $SD = .54$ ) and cyber bullying ( $M = 1.09$ ,  $SD = .23$ ) than did Caucasian adolescents ( $M = 1.24$ ,  $SD = .37$  and  $M = 1.03$ ,  $SD = .09$ , respectively). All other comparisons between ethnicities were not significant. In summary, with the exception of physical and cyber bullying, which showed African Americans as reporting engaging in both forms of bullying significantly more than Caucasians; results of the present study indicated that there were no differences between ethnicities regarding reports of bullying behavior overall, as well as with verbal and social bullying. See table 9 for post-hoc test results for physical and cyber bullying by ethnicity.

Table 9  
*Post-hoc Tukey's HSD for Physical and Cyber Bullying by Ethnicity*

Ethnicity	Mean	Standard Deviation	Group Comparisons	Differences Between Groups
Bullying Type				Bullying Type
Caucasian				
Physical	1.24	0.37		
Cyber	1.03	0.09		
African American				
Physical	1.37	0.54		
Cyber	1.09	0.23		
Asian				
Physical	1.27	0.44		
Cyber	1.04	0.09		
Other/Mixed				
Physical	1.26	0.38		
Cyber	1.06	0.14		
			African American-Asian	
			Physical	0.11
			Cyber	0.05
			Caucasian-Asian	
			Physical	-0.03
			Cyber	-0.01
			Other/Mixed-Asian	
			Physical	-0.01
			Cyber	-0.02
			Caucasian-African American	
			Physical	-0.14 *
			Cyber	-0.06 **
			Other/Mixed-African American	
			Physical	-0.12
			Cyber	-0.02
			Other/Mixed-Caucasian	
			Physical	0.03
			Cyber	0.03

\*  $p < .05$ ; \*\* $p < .01$

### Victimization and Demographics

H1.2a. *Gender differences will emerge across levels of victimization with males reporting higher levels of physical and verbal victimization than females, and females reporting higher levels of social and cyber victimization than males.*

H1.2b. *Seventh and eighth graders will not differ in reports regarding victimization.*

H1.2c. *Reports of victimization will not differ between ethnicities.*



A preliminary 2x2x4 factorial multivariate analysis of variance (MANOVA) was used to determine if the different types of victimization (overall, physical, verbal, social) showed statistically significant differences by each demographic variable (gender, grade, and ethnicity). This analysis allowed for an assessment of which demographic variables showed statistical significance before assessing each demographic variable individually. Results of the factorial MANOVA indicated that gender was the only statistically significant demographic variable with a Hotelling's trace of .08,  $F(4, 620) = 11.99, p < .001, d = .07$ . Grade and ethnicity did not show statistically significant differences regarding victimization (see Table 10).

Table 10

*2x2x4 Factorial Multivariate Analysis of Variance (MANOVA) for All Victimization and Demographic Variables*

Demographic	Hotelling's Trace	F Ratio	df	Effect Size
Gender	0.08	11.99 ***	4, 620	0.07
Grade	0.00	0.50	4, 620	0.00
Ethnicity	0.02	1.10	12, 1856	0.01
Gender x Grade	0.01	2.01	4, 620	0.01
Gender x Ethnicity	0.03	1.51	12, 1856	0.01
Grade x Ethnicity	0.03	1.71	12, 1856	0.01
Gender x Grade x Eth.	0.02	1.21	12, 1856	0.01

\*\*\* $p < .001$ ; Note:  $N = 623$ ; Victimization = Physical, Verbal, and Social; Grade = 7th and 8th; Ethnicity = Caucasian, African American, Asian and Mixed/Other

### *Victimization by Gender*

Based on the results of the MANOVA, which showed statistically significant gender differences among the victimization variables, a follow-up independent univariate analysis of variance (ANOVA) was used to assess which types of victimization (overall, physical, verbal, and/or social) vary by gender. A main effect of gender was not found for overall victimization

and verbal victimization. However, regarding the differing levels of victimization specifically, a main effect of gender was found for social victimization,  $F(1, 637) = 5.37, p < .05$ , and physical victimization,  $F(1, 637) = 6.47, p < .05$ , with females reporting significantly higher rates of social victimization ( $M = 1.50, SD = .77$ ) than males ( $M = 1.36, SD = .76$ ); and males reporting significantly higher rates of physical victimization ( $M = 1.42, SD = .72$ ) than females ( $M = 1.29, SD = .59$ ). In summary, female respondents were more likely to report social victimization than were male respondents, while male respondents were more likely to report physical victimization than were females respondents. Male and female respondents answered with similar results (no significant differences) regarding verbal victimization (see Table 11).

Table 11

*Univariate Analysis of Variance (ANOVA) for All Victimization Variables by Gender*

<b>Victimization</b>	<b>Degrees of Freedom</b>	<b>Sum of Squares</b>	<b>Mean Square</b>	<b>F</b>
Overall	1	0.10	0.05	0.09
Physical	1	2.78	2.78	6.47 *
Verbal	1	0.30	0.34	0.35
Social	1	3.10	3.12	5.37 *

\*  $p < .05; N=637$

#### *Victimization by Grade*

A main effect of grade was not found for overall victimization, with 7<sup>th</sup> and 8<sup>th</sup> graders reporting similar levels of victimization. Regarding the differing levels of victimization specifically, a main effect of grade was not found for physical, verbal, and social victimization. In summary, there were no statistically significant differences between 7<sup>th</sup> and 8<sup>th</sup> grade respondents who ultimately reported similar results regarding experiences with all forms of bullying victimization.

### *Victimization by Ethnicity*

A main effect of ethnicity was not found for all forms of victimization, including overall, physical, verbal, and social victimization. In summary, there were no statistically significant differences between all ethnicities with all participants reporting similar results regarding experiences with all forms of bullying victimization.

### **Moral Disengagement and Demographics**

H1.3a. *Levels of moral disengagement will differ between male and female adolescents with males having higher levels of moral disengagement than females.*

H1.3b. *Seventh and eighth graders will not differ regarding levels of moral disengagement.*

H1.3c. *Levels of moral disengagement will not differ between ethnicities.*

A 2x2x4 factorial analysis of variance (ANOVA) was used to determine if levels of moral disengagement showed statistically significant differences by each demographic variable (gender, grade, and ethnicity; see Table 12).

### *Moral Disengagement by Gender*

A main effect of gender was found for moral disengagement,  $F(1, 626) = 27.01, p < .001$ , with males ( $M = 1.49, SD = .31$ ) reporting significantly higher levels of moral disengagement than females ( $M = 1.38, SD = .24$ ). In summary, male respondents were more likely to report higher rates of moral disengagement than were female respondents.

### *Moral Disengagement by Grade*

A main effect of grade was found for moral disengagement,  $F(1, 626) = 5.25, p < .05$ ; with 8<sup>th</sup> graders ( $M = 1.46, SD = .30$ ) reporting significantly higher levels of moral

disengagement than 7th graders ( $M = 1.41$ ,  $SD = .26$ ). In summary, participants in the 8<sup>th</sup> grade reported higher levels of moral disengagement than did participants in the 7<sup>th</sup> grade.

### *Moral Disengagement by Ethnicity*

A main effect of ethnicity was not found for moral disengagement; therefore, there were no statistically significant differences between ethnicities regarding moral disengagement. In summary, participants of all ethnicities reported similarly regarding moral disengagement beliefs.

Table 12

*2x2x4 Factorial Analysis of Variance (ANOVA) for Gender, Grade, and Ethnicity on Moral Disengagement*

Demographic	Degrees of Freedom	Sum of Squares	Mean Square	F
Gender	1	2.07	2.07	27.01 ***
Grade	1	0.40	0.40	5.25 *
Ethnicity	3	0.16	0.05	0.70
Gender x Grade	1	0.03	0.03	0.41
Gender x Ethnicity	3	0.21	0.07	0.92
Grade x Ethnicity	3	0.07	0.02	0.30
Gender x Grade x Eth.	3	0.00	0.00	0.02

\*\*\*  $p < .001$ ; \*  $p < .05$ ; Note:  $N=626$ ; Grade = 7th and 8th; Ethnicity = Caucasian, African American, Asian and Mixed/Other

### **Empathy and Demographics**

H1.4a. *Levels of empathy will differ among male and female adolescents with females having higher levels of empathy than males.*

H1.4b. *Seventh and eighth graders will not differ regarding levels of empathy.*

H1.4c. *Levels of empathy will not differ between ethnicities.*

A 2x2x4 factorial analysis of variance (ANOVA) was used to determine if levels of empathy showed statistically significant differences by each demographic variable (gender, grade, and ethnicity; see Table 13).

#### *Empathy by Gender*

A main effect of gender was found for empathy,  $F(1, 624) = 77.27, p < .001$  with females ( $M = 3.74, SD = .50$ ) reporting higher levels of empathy than males ( $M = 3.41, SD = .48$ ). In summary, for the present study, female participants were more likely to report empathic responses than were male respondents.

#### *Empathy by Grade*

A main effect of grade was not found for empathy, with 7<sup>th</sup> and 8<sup>th</sup> graders reporting similar levels of empathy. In summary, there were no significant differences among 7<sup>th</sup> and 8<sup>th</sup> graders regarding empathy; with participants in both grades responding similarly regarding empathic beliefs.

#### *Empathy by Ethnicity*

A main effect of ethnicity was found for empathy,  $F(3, 624) = 3.24, p < .01$ . To further explore differences among ethnicities, multiple comparisons using post hoc analysis (Tukey's HSD; see Table 14) was used to see which ethnicities have statistically significant differences in regard to empathy. Results indicated that Caucasian ( $M = 3.63, SD = .48$ ) respondents reported significantly higher levels of empathy than African American ( $M = 3.47, SD = .53$ ) respondents. In summary, Caucasian respondents reported significantly higher rates of empathy than African Americans.

Table 13

*2x2x4 Factorial Analysis of Variance (ANOVA) for Gender, Grade, and Ethnicity on Empathy*

Demographic	Degrees of Freedom	Sum of Squares	Mean Square	F
Gender	1	18.21	18.21	77.27 ***
Grade	1	0.09	0.09	0.40
Ethnicity	3	2.29	0.76	3.24 *
Gender x Grade	1	0.01	0.02	0.06
Gender x Ethnicity	3	0.36	0.12	0.50
Grade x Ethnicity	3	1.43	0.48	2.03
Gender x Grade x Eth.	3	2.17	0.73	3.08 *

\*\*\*  $p < .001$ ; \*  $p < .05$ ; Note:  $N=624$ ; Grade = 7th and 8th; Ethnicity = Caucasian, African American, Asian and Mixed/Other

Table 14

*Post-hoc Tukey's HSD for Empathy by Ethnicity*

Ethnicity	Mean	Standard Deviation	Group Comparisons	Differences Between Groups
Caucasian	3.63	0.48		
African American	3.47	0.53		
Asian	3.68	0.49		
Other/Mixed	3.53	0.56		
			African American-Asian	-0.15
			Caucasian-Asian	-0.01
			Other/Mixed-Asian	-0.11
			Caucasian-African American	0.13 *
			Other/Mixed-African American	0.04
			Other/Mixed-Caucasian	-0.10

\*  $p < .05$

### Social Desirability and Demographics

H1.5a. *There will be no gender differences regarding reports of social desirability.*

H1.5b. *Seventh and eighth graders will not differ regarding reports of social desirability.*

H1.5c. *Reports of social desirability will not differ between ethnicities.*

A 2x2x4 factorial analysis of variance (ANOVA) was used to determine if social desirability showed statistically significant differences by each demographic variable (gender, grade, and ethnicity (see Table 15).

#### *Social Desirability and Gender*

A main effect of gender was not found for social desirability, with males and females reporting similar levels of social desirability. In summary, male and female respondents were likely to report socially desirable behavior similarly.

#### *Social Desirability and Grade*

A main effect of grade was found for social desirability,  $F(1, 602) = 15.48, p < .001$ ; with 7<sup>th</sup> graders ( $M = .58, SD = .21$ ) reporting significantly higher levels of social desirability than 8<sup>th</sup> graders ( $M = .51, SD = .23$ ). In summary, participants in the 7<sup>th</sup> grade reported higher levels of social desirability and showed greater concern for appearing “good” than did participants in the 8<sup>th</sup> grade.

#### *Social Desirability and Ethnicity*

A main effect of ethnicity was not found for social desirability; therefore, there were no statistically significant differences among ethnicities regarding social desirability. In summary, participants of all ethnicities reported similarly regarding social desirability.

Table 15

*2x2x4 Factorial Analysis of Variance (ANOVA) for Gender, Grade, and Ethnicity on Social Desirability*

<b>Demographic</b>	<b>Degrees of Freedom</b>	<b>Sum of Squares</b>	<b>Mean Square</b>	<b>F</b>
Gender	1	0.01	0.01	0.11
Grade	1	0.75	0.75	15.48 ***
Ethnicity	3	0.28	0.09	1.92
Gender x Grade	1	0.00	0.00	0.03
Gender x Ethnicity	3	0.05	0.02	0.32
Grade x Ethnicity	3	0.02	0.01	0.17
Gender x Grade x Eth.	3	0.15	0.05	1.01

\*\*\*  $p < .001$ ; Note:  $N = 602$ ; Grade = 7th and 8th; Ethnicity = Caucasian, African American, Asian and Mixed/Other

**Research Question 2:** Do reports of social desirability affect reports of bullying, victimization, moral disengagement, and empathy?

- H2a. *Those who report high levels of social desirability will report lower levels of bullying, in comparison to those who report lower or normal levels of social desirability.*
- H2b. *Those who report high levels of social desirability will report lower levels of victimization, in comparison to those who report lower or normal levels of social desirability.*
- H2c. *Those who report high levels of social desirability will report lower levels of moral disengagement, in comparison to those who report lower or normal levels of social desirability.*
- H2d. *Those who report high levels of social desirability will also report high levels of empathy, in comparison to those who report lower or normal levels of social desirability.*

### **Social Desirability and Bullying**

Using an ordinal scale for interpretation of the SDS, participant's responses were categorized into groups of low (20.5%), medium (56.15%), or high (23.34%) based on his or her answers regarding social desirability. Low social desirability implies truthful answering;



medium social desirability implies “normal” answering with reports of both undesirable and desirable behavior; and high social desirability implies over-reporting of desirable “good” behavior and under-reporting of undesirable behavior.

A preliminary one-way multivariate analysis of variance (MANOVA) was used to determine if bullying showed statistically significant differences by social desirability. This analysis allowed for an assessment of whether statistically significant differences existed before assessing each bullying variable individually. Results of the MANOVA indicated that bullying by social desirability was a statistically significant variable with a Hotelling’s trace of .16,  $F(10, 1236) = 9.59, p < .001, d = .07$  (see Table 16).

Table 16

*One-Way Multivariate Analysis of Variance (MANOVA) for All Bullying Variables by Social Desirability*

Hotelling’s Trace	F Ratio	df	Effect Size
0.16	9.59 ***	10, 1236	0.07

\*\*\*  $p < .001$ ; Note:  $n = 623$ ; Bullying = Overall, Physical, Verbal, Social, and Cyber

Based on the results of the MANOVA, a follow-up independent univariate analysis of variance (ANOVA) was used to assess which types of bullying (overall, physical, verbal, social, and/or cyber) vary by social desirability (see Table 17). Results indicated that a main effect of social desirability was present for all forms of bullying behavior, including overall bullying,  $F(2, 623) = 43.94, p < .001$ , verbal bullying,  $F(2, 623) = 31.00, p < .001$ ; social bullying,  $F(2, 623) = 40.50, p < .001$ ; physical bullying,  $F(2, 623) = 40.90, p < .001$  and cyber bullying,  $F(2, 623) = 10.00, p < .001$  (see Table 17).

Table 17  
Univariate Analysis of Variance (ANOVA) for All Bullying Variables by Social Desirability

Bullying	Degrees of Freedom	Sum of Squares	Mean Square	F
Overall	2	11.87	5.94	43.94 ***
Physical	2	12.99	6.50	40.90 ***
Verbal	2	9.50	4.75	31.00 ***
Social	2	13.38	6.69	40.50 ***
Cyber	2	0.41	0.20	10.00 ***

\*\*\*  $p < .001$ ;  $N=623$

Because statistically significant differences were established for all forms of bullying, multiple comparisons using post hoc analysis (Tukey's HSD) was used to determine which specific levels of social desirability significantly differed among the remaining variables. Post-hoc Tukey's HSD tests showed that those who reported high social desirability reported significantly lower rates on all levels of bullying than those who scored medium and low regarding social desirability: overall bullying (high -  $M = 1.08$ ,  $SD = .14$ ; medium -  $M = 1.24$ ,  $SD = .36$ ; low -  $M = 1.49$ ,  $SD = .53$ ); verbal bullying (high -  $M = 1.08$ ,  $SD = .15$ ; medium -  $M = 1.23$ ,  $SD = .38$ ; low -  $M = 1.45$ ,  $SD = .57$ ); social bullying (high -  $M = 1.06$ ,  $SD = .15$ ; medium -  $M = 1.23$ ,  $SD = .40$ ; low -  $M = 1.49$ ,  $SD = .59$ ), physical bullying (high -  $M = 1.09$ ,  $SD = .18$ ; medium -  $M = 1.27$ ,  $SD = .39$ ; low -  $M = 1.52$ ,  $SD = .56$ ); and cyber bullying (high -  $M = 1.02$ ,  $SD = .06$ ; medium -  $M = 1.06$ ,  $SD = .16$ ; low -  $M = 1.09$ ,  $SD = .16$ ; see Table 18).

Furthermore, those who reported low social desirability reported the highest rates of traditional and cyber bullying overall. In other words, those who reported high social desirability reported the lowest levels of traditional and cyber bullying; indicating that those who answer in a socially desirable manner are significantly less likely to report engaging in all forms of bullying.

Table 18  
*Post-hoc Tukey's HSD for Bullying by Social Desirability*

Bullying Type	Social Desirability Level						df	F
	Low		Medium		High			
	M	SD	M	SD	M	SD		
Overall	1.49	0.53	1.24	0.36	1.08	0.14	2, 623	43.94 ***
Physical	1.54	0.76	1.34	0.65	1.19	0.38	2, 623	40.90 ***
Verbal	1.45	1.57	1.23	0.38	1.08	0.15	2, 623	31.00 ***
Social	1.49	0.59	1.23	0.40	1.06	0.15	2, 623	40.50 ***
Cyber	1.09	0.16	1.06	0.16	1.02	0.06	2, 623	10.00 ***

\*\*\*  $p < .001$

### Social Desirability and Victimization

A preliminary one-way multivariate analysis of variance (MANOVA) was used to determine if victimization showed statistically significant differences by social desirability. Results of the MANOVA indicated that victimization was a statistically significant variable with a Hotelling's trace of .06,  $F(8, 1246) = 4.71$ ,  $p < .001$ ,  $d = .03$  (see Table 19).

Table 19  
*One-Way Multivariate Analysis of Variance (MANOVA) for Victimization by Social Desirability*

Hotelling's Trace	F Ratio	df	Effect Size
0.06	4.71 ***	8, 1246	0.03

\*\*\*  $p < .001$ ; Note:  $n = 627$ ; Victimization = Overall, Physical, Verbal, and Social

Based on the results of the MANOVA, a follow-up independent univariate analysis of variance (ANOVA) was used to assess which types of victimization (overall, physical, verbal,

social) vary by social desirability. Results indicated that a main effect of social desirability was found for all forms of victimization, including overall victimization,  $F(2, 627) = 12.18, p < .001$ , verbal victimization,  $F(2, 627) = 11.18, p < .001$ ; social victimization,  $F(2, 627) = 8.61, p < .001$ ; and physical victimization,  $F(2, 627) = 10.74, p < .001$  (see Table 20).

Table 20

*Univariate Analysis of Variance (ANOVA) for All Victimization Variables by Social Desirability*

Victimization	Degrees of Freedom	Sum of Squares	Mean Square	F
Overall	2	11.97	5.99	12.18 ***
Physical	2	8.47	4.23	10.74 ***
Verbal	2	20.00	10.00	11.18 ***
Social	2	9.20	4.61	8.61 ***
	627			

\*\*\*  $p < .001$ ; Note: Victimization = Overall, Physical, Verbal, Social

Because statistically significant differences were established between reports of social desirability and victimization, multiple comparisons using post hoc analysis (Tukey's HSD) were used to determine which specific levels of social desirability significantly differed among the remaining variables. Post-hoc Tukey's HSD tests showed that those who reported high social desirability reported significantly lower rates on all levels of victimization than those who scored medium and low regarding social desirability: overall victimization (high -  $M = 1.27, SD = .47$ ; medium -  $M = 1.49, SD = .72$ ; low -  $M = 1.68, SD = .84$ ); verbal victimization (high -  $M = 1.39, SD = .69$ ; medium -  $M = 1.68, SD = .99$ ; low -  $M = 1.92, SD = 1.07$ ); social victimization (high -  $M = 1.23, SD = .49$ ; medium -  $M = 1.45, SD = .75$ ; low -  $M = 1.58, SD = .89$ ), and physical victimization (high -  $M = 1.19, SD = .38$ ; medium -  $M = 1.34, SD = .65$ ; low -  $M = 1.54, SD = .76$ ; see Table 21).

Furthermore, those who reported low social desirability reported the highest rates of victimization overall, with the exception of social victimization, which showed no statistically significant differences between medium and low social desirability. In other words, those who reported high social desirability reported the lowest levels of victimization; indicating that those who answer in a socially desirable manner are significantly less likely to report experiencing all forms of bullying victimization.

Table 21  
*Post-hoc Tukey's HSD for Victimization by Social Desirability*

Bullying Type	Social Desirability Level						df	F
	Low		Medium		High			
	M	SD	M	SD	M	SD		
Overall	1.68	0.84	1.49	0.72	1.27	0.47	2, 627	12.18 ***
Physical	1.54	0.76	1.34	0.65	1.19	0.38	2, 627	10.74 ***
Verbal	1.92	1.07	1.68	0.99	1.39	0.69	2, 627	11.18 ***
Social	1.58	0.89	1.45	0.75	1.23	0.49	2, 627	8.61 ***

\*\*\*  $p < .001$

### Social Desirability and Moral Disengagement

A univariate analysis of variance (ANOVA) was used to assess whether moral disengagement is predicted by social desirability. A main effect of social desirability was found for moral disengagement,  $F(2, 630) = 23.88, p < .001$  (see Table 22).

Table 22  
Univariate Analysis of Variance (ANOVA) for Moral Disengagement by Social Desirability

Variable	Degrees of Freedom	Sum of Squares	Mean Square	F
Between Groups	2	3.54	1.77	23.88 ***
Within Groups	630	46.65	.07	
Total	632	50.19		

\*\*\*  $p < .001$

A post-hoc Tukey's HSD test showed that those who reported high social desirability ( $M = 1.32$ ,  $SD = .21$ ) reported significantly lower rates of moral disengagement than those who scored medium ( $M = 1.44$ ,  $SD = .28$ ) and low ( $M = 1.55$ ,  $SD = .31$ ) at the .001 level of significance (see Table 23). Furthermore, those who reported low social desirability reported the highest rates of moral disengagement overall. In other words, those who reported high social desirability reported the lowest levels of moral disengagement overall; indicating that those who answer in a socially desirable manner are significantly less likely to report moral disengagement beliefs.

Table 23  
Post-hoc Tukey's HSD for Moral Disengagement by Social Desirability

Ethnicity	Mean	Standard Deviation	Group Comparisons	Differences Between Groups
High	1.32	0.21		
Medium	1.44	0.28		
Low	1.55	0.31		
			Low-High	0.22 ***
			Medium-High	0.12 ***
			Medium-Low	-0.11 ***

\*\*\*  $p < .001$

### Social Desirability and Empathy

A univariate analysis of variance (ANOVA) was used to assess whether empathy is predicted by social desirability. A main effect of empathy was not found for social desirability; therefore, there were no significant differences between reports of empathy and social desirability (see Table 24).

Table 24

*Univariate Analysis of Variance (ANOVA) for Empathy by Social Desirability*

Variable	Degrees of Freedom	Sum of Squares	Mean Square	F
Between Groups	2	.17	.08	0.31
Within Groups	627	167.69	.27	
Total	629	167.86		

**Research Question 3:** To what degree is bullying behavior (physical, verbal, social, and cyber) predicted by moral disengagement?

- H3a. *Levels of moral disengagement will positively correlate with traditional and cyber bullying.*
- H3b. *Moral disengagement will be most strongly correlated with physical bullying, and this correlation will decrease in strength with cyber, social, and verbal bullying respectively.*
- H3c. *Adolescents classified as both traditional and cyber bullies will have the highest overall levels of moral disengagement.*

### Moral Disengagement and Bullying

A Pearson product-moment correlation was run to determine the relationship between moral disengagement and all bullying variables. Results showed that there was a positive,

statistically significant relationship between moral disengagement and traditional bullying overall ( $r = .43$ ); along with verbal bullying ( $r = .39$ ); social bullying ( $r = .42$ ); physical bullying ( $r = .41$ ); and cyber bullying ( $r = .25$ ). In other words, those who responded as high in moral disengagement were more likely to report participating in all forms of bullying, including verbal, social, physical and cyber bullying than those who scored lower on moral disengagement. Furthermore, moral disengagement was most strongly positively correlated with social bullying, and this relationship decreased in strength with physical bullying, verbal bullying, and cyber bullying respectively (see Table 25).

Table 25  
*Correlations among Bullying Variables and Moral Disengagement*

	TB	VB	SB	PB	CB	MD
TB	_____					
VB	.91 ***	_____				
SB	.95 ***	.78 ***	_____			
PB	.94 ***	.76 ***	.86 ***	_____		
CB	.38 ***	.35 ***	.35 ***	.36 ***	_____	
MD	.43 ***	.39 ***	.42 ***	.41 ***	.25 ***	-.23 ***

\*\*\*  $p < .001$ ; TB = Traditional Bullying; VB = Verbal Bullying; SB = Social Bullying; PB = Physical Bullying; CB = Cyber Bullying; MD = Moral Disengagement

### Moral Disengagement and Bullying Groups

All participants were classified into one of four groups based on whether or not he or she indicated that they had participated in any form of bullying behavior, which included: traditional



bully (n = 254), cyber bully (n = 24), neither (traditional or cyber bully, n = 185), and both (traditional bully and cyber bully, n = 184). ANOVA was run to explore whether or not there were significant differences among groups regarding moral disengagement, and the null hypothesis of all means being equal was rejected,  $F(3, 643) = 20.39, p < .001$  (see Table 26).

Table 26

*Analysis of Variance (ANOVA) for Moral Disengagement and Bullying Groups*

Variable	Degrees of Freedom	Sum of Squares	Mean Square	F
Between Groups	3	4.49	1.50	20.39 ***
Within Groups	643	47.17	.08	
Total	646	51.66		

\*\*\*  $p < .001$  Note: Groups = Traditional Bully (n = 254), Cyber Bully (n = 24), Neither (Traditional or Cyber Bully, n = 185), and Both (Traditional Bully and Cyber Bully, n = 184)

To further explore differences among the groups, multiple comparisons using post hoc analysis (Tukey's HSD) was used to look at all pairs of bullying types to see which have statistically significant differences in regard to moral disengagement. Results showed statistically significant differences in the moral disengagement of the following groups: cyber bullies ( $M = 1.36, SD = .32$ ) and both (traditional and cyber bullies;  $M = 1.55, SD = .31$ ); non-bullies ( $M = 1.33, SD = .25$ ) and both; traditional ( $M = 1.43, SD = .24$ ) and both; and traditional and non-bullies (see Table 27). There were no statistically significant differences between cyber bullies and non-bullies, or traditional and cyber bullies regarding moral disengagement. In summary, adolescents classified as both traditional and cyber bullies reported the highest levels of moral disengagement, followed by traditional bullies, then cyber bullies, and those who reported participating in neither form of bullying had the lowest levels of moral disengagement.

Table 27

*Post-hoc Tukey's HSD for Moral Disengagement by Bullying Group*

<b>Bullying Type</b>	<b>Mean</b>	<b>Standard Deviation</b>	<b>Group Comparisons</b>	<b>Differences Between Groups</b>
Both	1.55	0.31		
Cyber	1.36	0.32		
Traditional	1.43	0.24		
Neither	1.33	0.25		
			Cyber-Both	-0.19 **
			Neither-Both	-0.22 ***
			Traditional-Both	-0.12 ***
			Neither-Cyber	-0.03
			Traditional-Cyber	0.06
			Traditional-Neither	0.09 **

\*\* $p < .01$ ; \*\*\* $p < .001$ 

**Research Question 4:** Does empathy significantly affect reports of bullying and moral disengagement after adjusting for social desirability?

- H4a. *After controlling for social desirability, empathy will significantly affect reports of moral disengagement with high levels of empathy decreasing moral disengagement.*
- H4b. *After controlling for social desirability, empathy will significantly affect reports of bullying with high levels of empathy decreasing engagement in all forms of bullying.*

#### **Empathy and Moral Disengagement after controlling for Social Desirability**

A univariate analysis of covariance (ANCOVA) was utilized to assess whether or not higher or lower levels of empathy affected the directional relationship of moral disengagement after adjusting for social desirability. An ANCOVA for moral disengagement given empathy as the between-subjects factor and social desirability as the covariate revealed a main effect of social desirability  $F(1, 619) = 75.03, p < .001, d = .11$ , empathy  $F(2, 619) = 21.42, p < .001, d = .06$ , and an interaction between social desirability and empathy  $F(2, 619) = 10.49, p < .001, d =$

.03 (see Table 28). Because the interaction effect is statistically significant, the slopes of the lines differ for the empathy groups. This means that the effect of social desirability on moral disengagement depends on the empathy group.

Table 28

*Univariate Analysis of Covariance (ANCOVA) for Moral Disengagement given Empathy Group with Social Desirability as the Covariate*

Variable	df	Type III Sum Sq.	Mean Square	F	Sig.	Effect Size
Corrected Model	5	9.15	1.83	27.77	.000	.18
Intercept	1	239.41	239.41	3630.49	.000	.85
Social Desirability	1	4.95	4.95	75.03 ***	.000	.11
Empathy	2	2.82	1.41	21.41 ***	.000	.06
SDxEmpathy	2	1.38	0.69	10.49 ***	.000	.03
Residuals	619	40.82	0.66			
Total	625	289.39				
Corrected Total	624	49.98				

\*\*\*  $p < .001$

### Empathy and Overall Bullying after controlling for Social Desirability

A univariate analysis of covariance (ANCOVA) was utilized to assess whether or not higher or lower levels of empathy affected the directional relationship of overall bullying after adjusting for social desirability. An ANCOVA for overall bullying given empathy as the between-subjects factor and social desirability as the covariate revealed a main effect of social desirability  $F(1, 619) = 116.16, p < .001, d = .16$ , and empathy  $F(2, 619) = 8.90, p < .001, d = .03$ ; and an interaction between social desirability and empathy  $F(2, 619) = 4.43, p < .001, d = .01$  (see Table 29). Because the interaction effect is statistically significant, the slopes of the

lines differ for the empathy groups. This means that the effect of social desirability on overall bullying depends on the empathy group.

Table 29

*Univariate Analysis of Covariance (ANCOVA) for Overall Bullying given Empathy Group with Social Desirability as the Covariate*

Variable	df	Type III Sum Sq.	Mean Square	F	Sig.	Effect Size
Corrected Model	5	18.09	3.62	28.57	.000	.19
Intercept	1	234.00	234.00	1847.80	.000	.75
Social Desirability	1	14.71	14.71	116.16 ***	.000	.16
Empathy	2	2.26	1.13	8.90 ***	.000	.03
SDxEmpathy	2	1.12	0.56	4.43 *	.001	.01
Residuals	619	78.39	0.13			
Total	625	330.48				
Corrected Total	624	96.48				

\*\*\*  $p < .001$ ; \*  $p < .05$

### Empathy and Physical Bullying after controlling for Social Desirability

A univariate analysis of covariance (ANCOVA) was utilized to assess whether or not higher or lower levels of empathy affected the directional relationship of physical bullying after adjusting for social desirability. An ANCOVA for physical bullying given empathy as the between-subjects factor and social desirability as the covariate revealed a main effect of social desirability  $F(1, 619) = 105.12, p < .001, d = .15$ , and empathy  $F(2, 619) = 7.11, p < .01, d = .02$ ; and an interaction between social desirability and empathy  $F(2, 619) = 3.35, p < .05, d = .01$  (see Table 30). Because the interaction effect is statistically significant, the slopes of the lines differ

for the empathy groups. This means that the effect of social desirability on physical bullying depends on the empathy group.

Table 30

*Univariate Analysis of Covariance (ANCOVA) for Physical Bullying given Empathy Group with Social Desirability as the Covariate*

Variable	df	Type III Sum Sq.	Mean Square	F	Sig.	Effect Size
Corrected Model	5	18.97	3.79	25.21	.000	.17
Intercept	1	245.49	245.49	1630.82	.000	.72
Social Desirability	1	15.82	15.82	105.12 ***	.000	.15
Empathy	2	2.14	1.07	7.11 **	.001	.02
SDxEmpathy	2	1.01	0.50	3.35 *	.036	.01
Residuals	619	93.18	0.15			
Total	625	357.64				
Corrected Total	624	112.15				

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

### Empathy and Verbal Bullying after controlling for Social Desirability

A univariate analysis of covariance (ANCOVA) was utilized to assess whether or not higher or lower levels of empathy affected the directional relationship of verbal bullying after adjusting for social desirability. An ANCOVA for verbal bullying given empathy as the between-subjects factor and social desirability as the covariate revealed a main effect of social desirability  $F(1, 619) = 83.68, p < .001, d = .12$ , and empathy  $F(2, 619) = 21.42, p < .001, d = .06$  (see Table 31). There was no significant interaction between social desirability and empathy. Because the interaction effect is not statistically significant, the slopes of the lines do not significantly differ for the empathy groups. However, the intercept of the line does vary by

empathy group, indicating a difference in the means for verbal bullying among groups after social desirability is accounted for.

Table 31

*Univariate Analysis of Covariance (ANCOVA) for Verbal Bullying given Empathy Group with Social Desirability as the Covariate*

Variable	df	Type III Sum Sq.	Mean Square	F	Sig.	Effect Size
Corrected Model	5	13.86	2.77	18.74	.000	.13
Intercept	1	220.64	220.64	1491.41	.000	.71
Social Desirability	1	12.38	12.38	83.68 ***	.000	.12
Empathy	2	0.91	0.46	3.08 *	.047	.01
SDxEmpathy	2	0.57	0.28	1.92	.147	.01
Residuals	619	91.57	0.15			
Total	625	326.07				
Corrected Total	624	105.43				

\*\*\*  $p < .001$ ; \*  $p < .05$

### Empathy and Social Bullying after controlling for Social Desirability

A univariate analysis of covariance (ANCOVA) was utilized to assess whether or not higher or lower levels of empathy affected the directional relationship of social bullying after adjusting for social desirability. An ANCOVA for social bullying given empathy as the between-subjects factor and social desirability as the covariate revealed a main effect of social desirability  $F(1, 619) = 106.08, p < .001, d = .15$ , and empathy  $F(2, 619) = 14.77, p < .001, d = .05$ ; and an interaction between social desirability and empathy  $F(2, 619) = 7.03, p < .001, d = .02$  (see Table 32). Because the interaction effect is statistically significant, the slopes of the

lines differ for the empathy groups. This means that the effect of social desirability on social bullying depends on the empathy group.

Table 32

*Univariate Analysis of Covariance (ANCOVA) for Social Bullying given Empathy Group with Social Desirability as the Covariate*

Variable	df	Type III Sum Sq.	Mean Square	F	Sig.	Effect Size
Corrected Model	5	22.74	4.55	29.93	.000	.19
Intercept	1	236.31	236.31	1555.54	.000	.72
Social Desirability	1	16.12	16.12	106.08 ***	.000	.15
Empathy	2	4.49	2.24	14.77 ***	.000	.05
SDxEmpathy	2	2.14	1.07	7.03 ***	.000	.02
Residuals	619	94.04	0.15			
Total	625	353.09				
Corrected Total	624	116.78				

\*\*\*  $p < .001$

### Empathy and Cyber Bullying after controlling for Social Desirability

A univariate analysis of covariance (ANCOVA) was utilized to assess whether or not higher or lower levels of empathy affected the directional relationship of cyber bullying after adjusting for social desirability. An ANCOVA for cyber bullying given empathy as the between-subjects factor and social desirability as the covariate revealed a main effect of social desirability  $F(1, 619) = 28.63, p < .001, d = .04$ , and empathy  $F(2, 619) = 4.86, p < .01, d = .02$ ; and an interaction between social desirability and empathy  $F(2, 619) = 3.33, p < .05, d = .01$  (see Table 33). Because the interaction effect is statistically significant, the slopes of the lines differ

for the empathy groups. This means that the effect of social desirability on social bullying depends on the empathy group.

Table 33

*Univariate Analysis of Covariance (ANCOVA) for Cyber Bullying given Empathy Group with Social Desirability as the Covariate*

Variable	df	Type III Sum Sq.	Mean Square	F	Sig.	Effect Size
Corrected Model	5	0.89	0.18	9.00	.000	.07
Intercept	1	111.32	111.32	5656.34	.000	.90
Social Desirability	1	0.56	0.56	28.63 ***	.000	.04
Empathy	2	0.19	0.10	4.86 **	.008	.02
SDxEmpathy	2	0.13	0.07	3.33 *	.036	.01
Residuals	619	12.18	0.02			
Total	625	124.39				
Corrected Total	624	13.07				

\*\*\*  $p < .001$ , \*\*  $p < .01$ ; \*  $p < .05$

**Research Question 5:** Which of the six predictors (moral disengagement, empathy, social desirability, gender, grade, and ethnicity) improve the regression equation to predict bullying behavior; and do empathy and social desirability serve as moderators of this relationship?

- H5a. *Empathy will negatively correlate with moral disengagement and engagement in bullying behavior; and have a moderating effect on the relationship between bullying behavior and moral disengagement.*
- H5b. *Social desirability will be negatively correlated with moral disengagement, positively correlated with empathy, and have a main effect on bullying behavior (which will be negatively correlated), and it will have a moderating effect on both moral disengagement and empathy.*
- H5c. *Once empathy, social desirability, and moral disengagement have been accounted for, each demographic/predictor variable will not significantly impact reports of bullying behavior.*



### Prediction and Moderation of Adolescent Bullying Behavior

Five separate hierarchical stepwise multiple linear regression analyses were used to determine which predictors significantly contribute to the model. A moderation analysis was conducted to assess the relationship between levels of each type of bullying and moral disengagement, with empathy and social desirability as the moderating variables. If the interaction between levels of bullying and empathy or social desirability significantly contributed to the model, it would be established that a moderating relationship does indeed exist. Data were entered into the hierarchical regression analysis utilizing the following steps for all five analyses:

- 1) Bullying predicted by moral disengagement
- 2) Model 1 plus empathy and the interaction term to test for moderation
- 3) Model 2 plus social desirability and the interaction terms to test for moderation
- 4) Model 3 plus gender
- 5) Model 4 plus grade
- 6) Model 5 plus ethnicity (race)

#### *Prediction and Moderation of Overall Bullying*

Hierarchical multiple linear regression analysis was used to test which variables significantly predicted overall bullying (including verbal, social, physical, and cyber). In the first model, moral disengagement accounted for 18% of the variance in overall bullying ( $R^2 = .18$ ,  $F(1, 611) = 130.1$ ,  $p < .001$ ). The second model added empathy and assessed the role of empathy as a moderator of moral disengagement; this addition accounted for another 1% of the variance ( $\Delta R^2 = .01$ ,  $F(3, 609) = 46.39$ ,  $p < .05$ ). The third model included social desirability and also assessed whether or not social desirability served as a moderator of empathy and moral disengagement; this addition accounted for another 11% of the variance ( $\Delta R^2 = .11$ ,  $F(7, 605) = 35.61$ ,  $p < .01$ ). Model 4 added gender, which explained an additional 1% of the variance ( $\Delta R^2 =$

.01,  $F(8, 604) = 31.9$ ,  $p < .05$ ); while models 5 and 6 added grade and ethnicity respectively and, in combination, explained an additional 1% of the variance, these additions were not statistically significant (see Table 34).

Therefore, the best model was model 4; which explains 30% of the variance. Overall, results indicate that social desirability moderates empathy and moral disengagement, as well as the relationship between empathy and moral disengagement. While the main effect of empathy was statistically significant, the moderating affect that it had on moral disengagement was even stronger; therefore, the relationship between empathy and moral disengagement is further moderated by social desirability.

Table 34  
*Hierarchical Multiple Linear Regression Analysis for ALL Bullying Variables*

Predictor	B	SE B	$\beta$	R <sup>2</sup>	$\Delta R^2$
Model 1				0.18	0.18
MD	0.58	0.05	0.42		
Model 2				0.19	0.01
MD	1.30	0.28	0.38 ***		
BES	0.29	0.12	-0.03 *		
MDxBES	-0.22	0.08	-0.08 **		
Model 3				0.29	0.11
MD	3.07	0.63	0.26 ***		
BES	0.92	0.30	-0.01 **		
SDS	5.67	1.73	-0.26 **		
MDxBES	-0.66	0.19	-0.03 ***		
MDxSDS	-4.37	1.13	-0.10 ***		
BESxSDS	-1.47	0.50	0.01 **		
MDxBESxSDS	1.05	0.34	0.09 **		
Model 4				0.30	0.01
MD	3.06	0.63	0.25 ***		
BES	0.94	0.30	0.01 **		
SDS	5.65	1.72	-0.27 **		
Male	0.06	0.03	0.08 *		
MDxBES	-0.65	0.19	-0.03 ***		
MDxSDS	-4.33	1.13	-0.10 ***		
BESxSDS	-1.45	0.50	0.01 **		
MDxBESxSDS	1.03	0.34	0.09 **		
Model 5				0.30	0.00
MD	3.05	0.63	0.25 ***		
BES	0.94	0.29	0.01 **		
SDS	5.64	1.72	-0.26 **		
Male	0.06	0.03	0.08 *		
Grade 7	-0.05	0.03	-0.07		
MDxBES	-0.66	0.19	-0.04 ***		
MDxSDS	-4.30	1.13	-0.10 ***		
BESxSDS	-1.45	0.50	0.00 **		
MDxBESxSDS	1.03	0.34	0.09 **		
Model 6				0.31	0.01
MD	3.14	0.63	0.24 ***		
BES	0.98	0.29	0.03 ***		
SDS	5.82	1.71	-0.26 ***		
Male	0.06	0.03	0.08 *		
Grade 7	-0.05	0.03	-0.06		
RaceAA	0.04	0.05	0.04		
RaceC	-0.05	0.05	-0.06		
RaceO	0.04	0.05	0.04		
MDxBES	-0.68	0.19	-0.04 ***		
MDxSDS	-4.45	1.12	-0.10 ***		
BESxSDS	-1.49	0.50	0.01 **		
MDxBESxSDS	1.06	0.34	0.09 **		

\*\*\*  $p < .001$ ; \*\*  $p < .01$ ; \*  $p < .05$ ; MD = Moral Disengagement; SDS = Social Desirability; BES = Empathy; Male = Gender, Grade 7 = 7<sup>th</sup> and 8<sup>th</sup> Grade; RaceAA = African American; RaceC = Caucasian; RaceO = Other/Mixed

### *Prediction and Moderation of Verbal Bullying*

Hierarchical multiple linear regression analysis was used to test which variables significantly predicted verbal bullying. In the first model, moral disengagement accounted for 14% of the variance in verbal bullying ( $R^2 = .14$ ,  $F(1, 611) = 100.3$ ,  $p < .001$ ). The second model added empathy and assessed the role of empathy as a moderator of moral disengagement; this addition accounted for another 1% of the variance ( $\Delta R^2 = .01$ ,  $F(3, 609) = 34.55$ ,  $p < .05$ ). The third model included social desirability and assessed whether or not social desirability served as a moderator of empathy and moral disengagement; this addition accounted for another 8% of the variance ( $\Delta R^2 = .08$ ,  $F(7, 605) = 24.71$ ,  $p < .01$ ). Model 4 and 5 added gender and grade respectively, which did not result in a change in variance explained. Lastly, model 6 added ethnicity and although this addition explained an additional 1% of the variance, this addition was not statistically significant (see Table 35).

Therefore, the best model was model 3; which explains 23% of the variance. Overall, results indicate that social desirability moderates empathy and moral disengagement, as well as the relationship between empathy and moral disengagement. While empathy and the interaction between empathy and moral disengagement are not significant, these effects do become significant when we include social desirability. Therefore, empathy, moral disengagement, and the relationship between the two variables are moderated by social desirability.

Table 35  
*Hierarchical Linear Regression Analysis for All VERBAL Bullying Variables*

Predictor	B	SE B	$\beta$	R <sup>2</sup>	$\Delta R^2$
Model 1				0.14	0.14
MD	0.54	0.05	0.38 ***		
Model 2				0.15	0.01
MD	1.01	0.30	0.36 ***		
BES	0.22	0.13	0.04		
MDxBES	-0.13	0.09	-0.05		
Model 3				0.22	0.08
MD	2.79	0.69	0.27 ***		
BES	0.94	0.32	0.06 **		
SDS	5.88	1.89	-0.22 **		
MDxBES	-0.58	0.21	-0.02 **		
MDxSDS	-4.08	1.24	-0.09 **		
BESxSDS	-1.52	0.55	-0.04 **		
MDxBESxSDS	0.98	0.37	0.08 **		
Model 4				0.22	0.00
MD	2.78	0.69	0.26 ***		
BES	0.95	0.32	0.07 **		
SDS	5.88	1.89	-0.22 **		
Male	0.03	0.03	0.04		
MDxBES	-0.58	0.21	-0.02 **		
MDxSDS	-4.06	1.24	-0.09 **		
BESxSDS	-1.51	0.55	-0.04 **		
MDxBESxSDS	0.97	0.37	0.08 *		
Model 5				0.22	0.00
MD	2.78	0.69	0.26 ***		
BES	0.95	0.32	0.07 **		
SDS	5.88	1.89	-0.22 **		
Male	0.03	0.03	0.04		
Grade 7	-0.00	0.03	-0.00		
MDxBES	-0.58	0.21	-0.02 **		
MDxSDS	-4.06	1.24	-0.09 **		
BESxSDS	-1.51	0.55	-0.04 **		
MDxBESxSDS	0.97	0.37	0.08 *		
Model 6				0.23	0.01
MD	2.85	0.69	0.26 ***		
BES	0.97	0.32	-0.08 **		
SDS	5.91	1.89	-0.23 **		
Male	0.03	0.03	0.04		
Grade 7	-0.00	0.03	-0.00		
RaceAA	0.03	0.06	0.03		
RaceC	-0.03	0.05	-0.03		
RaceO	0.08	0.06	0.08		
MDxBES	-0.59	0.21	-0.02 **		
MDxSDS	-4.15	1.24	-0.10 ***		
BESxSDS	-1.51	0.55	-0.03 **		
MDxBESxSDS	0.98	0.37	0.08 **		

\*\*\*  $p < .001$ ; \*\*  $p < .01$ ; \*  $p < .05$ ; MD = Moral Disengagement; SDS = Social Desirability; BES = Empathy; Male = Gender, Grade 7 = 7<sup>th</sup> and 8<sup>th</sup> Grade; RaceAA = African American; RaceC = Caucasian; RaceO = Other/Mixed

### *Prediction and Moderation of Social Bullying*

Hierarchical multiple linear regression analysis was used to test which variables significantly predicted social bullying. In the first model, moral disengagement accounted for 16% of the variance in social bullying ( $R^2 = .16$ ,  $F(1, 611) = 116.3$ ,  $p < .001$ ). The second model added empathy and assessed the role of empathy as a moderator of moral disengagement; this addition accounted for another 2% of the variance ( $\Delta R^2 = .02$ ,  $F(3, 609) = 44.03$ ,  $\beta = -.09$ ,  $p < .05$ ). The third model included social desirability and also assessed whether or not social desirability served as a moderator of empathy and moral disengagement; this addition accounted for another 10% of the variance ( $\Delta R^2 = .10$ ,  $F(7, 605) = 33.28$ ,  $p < .05$ ). Model 4 added gender, which explained an additional 1% of the variance ( $\Delta R^2 = .01$ ,  $F(8, 604) = 30.29$ ,  $p < .01$ ); while models 5 and 6 added grade and ethnicity respectively and, in combination, explained an additional 1% of the variance, these additions were not statistically significant (see Table 36).

Therefore, the best model was model 4; which explains 29% of the variance. Overall, results indicate that social desirability moderates empathy and moral disengagement, as well as the relationship between empathy and moral disengagement. While the main effect of empathy was statistically significant, the moderating affect that it had on moral disengagement was even more statistically significant; therefore, the relationship between empathy and moral disengagement is further moderated by social desirability.

**Table 36**  
*Hierarchical Linear Regression Analysis for All SOCIAL Bullying Variables*

Predictor	B	SE B	$\beta$	R <sup>2</sup>	$\Delta R^2$
Model 1				0.16	0.16
MD	0.61	0.06	0.40 ***		
Model 2				0.18	0.02
MD	1.39	0.31	0.34 ***		
BES	0.28	0.14	-0.09 *		
MDxBES	-0.24	0.09	-0.08 **		
Model 3				0.28	0.10
MD	2.85	0.70	0.23 ***		
BES	0.68	0.33	-0.07 *		
SDS	4.51	1.91	-0.26 *		
MDxBES	-0.60	0.21	-0.03 **		
MDxSDS	-4.04	1.25	-0.09 **		
BESxSDS	-1.14	0.56	0.06 *		
MDxBESxSDS	0.95	0.38	0.07 *		
Model 4				0.29	0.01
MD	2.84	0.69	0.21 ***		
BES	0.70	0.33	-0.05 *		
SDS	4.50	1.90	-0.26 *		
Male	0.08	0.03	0.10 **		
MDxBES	-0.59	0.21	-0.03 **		
MDxSDS	-3.99	1.25	-0.10 **		
BESxSDS	-1.12	0.55	0.05 *		
MDxBESxSDS	0.92	0.38	0.07 *		
Model 5				0.29	0.00
MD	2.82	0.69	0.21 ***		
BES	0.70	0.32	-0.05 *		
SDS	4.49	1.90	-0.25 *		
Male	0.09	0.03	0.10 **		
Grade 7	-0.05	0.03	-0.06		
MDxBES	-0.60	0.21	-0.03 **		
MDxSDS	-3.96	1.24	-0.10 **		
BESxSDS	-1.13	0.55	0.05 *		
MDxBESxSDS	0.92	0.38	0.07 *		
Model 6				0.30	0.01
MD	2.92	0.69	0.21 ***		
BES	0.75	0.32	-0.03 *		
SDS	4.68	1.89	-0.26 *		
Male	0.09	0.03	0.10 **		
Grade 7	-0.05	0.03	-0.06		
RaceAA	0.02	0.06	0.02		
RaceC	-0.07	0.05	-0.08		
RaceO	0.01	0.06	0.01		
MDxBES	-0.62	0.21	-0.03 **		
MDxSDS	-4.11	1.24	-0.10 ***		
BESxSDS	-1.16	0.55	0.05 *		
MDxBESxSDS	0.95	0.37	0.07 *		

\*\*\*  $p < .001$ ; \*\*  $p < .01$ ; \*  $p < .05$ ; MD = Moral Disengagement; SDS = Social Desirability; BES = Empathy; Male = Gender, Grade 7 = 7<sup>th</sup> and 8<sup>th</sup> Grade; RaceAA = African American; RaceC = Caucasian; RaceO = Other/Mixed

### *Prediction and Moderation of Physical Bullying*

Hierarchical multiple linear regression analysis was used to test which variables significantly predicted physical bullying. In the first model, moral disengagement accounted for 15% of the variance in physical bullying ( $R^2 = .15$ ,  $F(1, 611) = 111.5$ ,  $p < .001$ ). The second model added empathy and assessed the role of empathy as a moderator of moral disengagement; this addition accounted for another 2% of the variance ( $\Delta R^2 = .02$ ,  $F(3, 609) = 41.02$ ,  $p < .01$ ). The third model included social desirability and also assessed whether or not social desirability served as a moderator of empathy and moral disengagement; this addition accounted for another 10% of the variance ( $\Delta R^2 = .10$ ,  $F(7, 605) = 32.13$ ,  $p < .001$ ). Model 4 added gender, which explained an additional 1% of the variance ( $\Delta R^2 = .01$ ,  $F(8, 604) = 28.86$ ,  $p < .05$ ) and model 5 added grade, which explained another 1% of the variance ( $\Delta R^2 = .01$ ,  $F(9, 603) = 27.2$ ,  $p < .01$ ). While the addition of ethnicity in model 6 explained another 1% of the variance, this addition was not statistically significant (see Table 37).

Therefore, the best model was model 5; which explains 29% of the variance. Overall, results indicate that social desirability moderates empathy and moral disengagement, as well as the relationship between empathy and moral disengagement. While the main effect of empathy was statistically significant, the moderating affect that it had on moral disengagement was even stronger; therefore, the relationship between empathy and moral disengagement is further moderated by social desirability.



**Table 37**  
*Hierarchical Linear Regression Analysis for All PHYSICAL Bullying Variables*

Predictor	B	SE B	$\beta$	R <sup>2</sup>	$\Delta R^2$
Model 1				0.15	0.15
MD	0.59	0.06	0.39 ***		
Model 2				0.17	0.02
MD	1.49	0.31	0.34 ***		
BES	0.37	0.14	-0.03 **		
MDxBES	-0.27	0.09	-0.09 **		
Model 3				0.27	0.10
MD	3.57	0.69	0.23 ***		
BES	1.13	0.33	-0.01 ***		
SDS	6.59	1.90	-0.26 ***		
MDxBES	-0.81	0.21	-0.04 ***		
MDxSDS	-4.99	1.25	-0.09 ***		
BESxSDS	-1.74	0.55	0.01 **		
MDxBESxSDS	1.23	0.38	0.09 **		
Model 4				0.28	0.01
MD	3.55	0.69	0.22 ***		
BES	1.15	0.32	0.01 ***		
SDS	6.58	1.89	-0.26 ***		
Male	0.07	0.03	0.08 *		
MDxBES	-0.80	0.21	-0.05 ***		
MDxSDS	-4.95	1.24	-0.09 ***		
BESxSDS	-1.72	0.55	0.00 **		
MDxBESxSDS	1.20	0.37	0.09 **		
Model 5				0.29	0.01
MD	3.53	0.69	0.22 ***		
BES	1.17	0.32	0.02 ***		
SDS	6.57	1.88	-0.24 ***		
Male	0.07	0.03	0.08 *		
Grade 7	-0.10	0.03	-0.11 **		
MDxBES	-0.81	0.21	-0.05 ***		
MDxSDS	-4.90	1.23	-0.09 ***		
BESxSDS	-1.73	0.56	0.00 **		
MDxBESxSDS	1.20	0.37	0.09 **		
Model 6				0.30	0.01
MD	3.65	0.68	0.22 ***		
BES	1.22	0.32	0.03 ***		
SDS	6.87	1.87	-0.24 ***		
Male	0.07	0.03	0.08 *		
Grade 7	-0.09	0.03	-0.11 **		
RaceAA	0.07	0.06	0.07		
RaceC	-0.05	0.05	-0.06		
RaceO	0.01	0.06	0.01		
MDxBES	-0.83	0.21	-0.05 ***		
MDxSDS	-5.11	1.23	-0.09 ***		
BESxSDS	-1.80	0.55	0.00 **		
MDxBESxSDS	1.25	0.37	0.10 ***		

\*\*\*  $p < .001$ ; \*\*  $p < .01$ ; \*  $p < .05$ ; MD = Moral Disengagement; SDS = Social Desirability; BES = Empathy; Male = Gender, Grade 7 = 7<sup>th</sup> and 8<sup>th</sup> Grade; RaceAA = African American; RaceC = Caucasian; RaceO = Other/Mixed

### *Prediction and Moderation of Cyber Bullying*

Hierarchical multiple linear regression analysis was used to test which variables significantly predicted cyber bullying. In the first model, moral disengagement accounted for 6% of the variance in cyber bullying ( $R^2 = .06$ ,  $F(1, 611) = 39.74$ ,  $p < .001$ ). The second model added empathy and assessed the role of empathy as a moderator of moral disengagement; this addition accounted for another 1% of the variance ( $\Delta R^2 = .01$ ,  $F(3, 609) = 46.39$ ,  $p < .05$ ). The third model included social desirability and also assessed whether or not social desirability served as a moderator of empathy and moral disengagement; this addition accounted for another 6% of the variance ( $\Delta R^2 = .06$ ,  $F(7, 605) = 12.66$ ,  $p < .001$ ). Model 4 and 5 added gender and grade, which together added no change in variance; however, model 6 added ethnicity, which explained an additional 3% of the variance ( $\Delta R^2 = .03$ ,  $F(12, 600) = 9.30$ ,  $p < .05$ ) regarding African Americans specifically (see Table 38).

Therefore, the best model was model 6; which explains 16% of the variance. Overall, results indicate that social desirability moderates empathy and moral disengagement, as well as the relationship between empathy and moral disengagement. While the main effect of empathy was statistically significant, the moderating affect that it had on moral disengagement was even stronger; therefore, the relationship between empathy and moral disengagement is further moderated by social desirability.

Table 38  
*Hierarchical Linear Regression Analysis for CYBER Bullying*

Predictor	B	SE B	$\beta$	R <sup>2</sup>	$\Delta R^2$
Model 1				0.06	0.06
MD	0.13	0.02	0.25 ***		
Model 2				0.07	0.01
MD	0.40	0.11	0.20 ***		
BES	0.11	0.05	-0.03 *		
MDxBES	-0.08	0.03	-0.08 *		
Model 3				0.13	0.06
MD	1.24	0.26	0.14 ***		
BES	0.42	0.12	0.00 ***		
SDS	2.53	0.71	-0.12 ***		
MDxBES	-0.30	0.08	-0.03 ***		
MDxSDS	-1.90	0.46	-0.06 ***		
BESxSDS	-0.67	0.21	0.02 **		
MDxBESxSDS	0.49	0.14	0.11 ***		
Model 4				0.13	0.00
MD	1.24	0.26	0.13 ***		
BES	0.42	0.12	0.00 ***		
SDS	2.53	0.71	-0.12 ***		
Male	0.00	0.01	0.00		
MDxBES	-0.30	0.08	-0.04 ***		
MDxSDS	-1.90	0.46	-0.06 ***		
BESxSDS	-0.67	0.21	0.02 **		
MDxBESxSDS	0.49	0.14	0.11 ***		
Model 5				0.13	0.00
MD	1.24	0.26	0.14 ***		
BES	0.42	0.12	0.00 ***		
SDS	2.53	0.71	-0.12 ***		
Male	0.00	0.01	0.00		
Grade 7	0.01	0.01	0.03		
MDxBES	-0.30	0.08	-0.03 ***		
MDxSDS	-1.90	0.46	-0.06 ***		
BESxSDS	-0.67	0.21	0.02 **		
MDxBESxSDS	0.49	0.14	0.11 ***		
Model 6				0.16	0.03
MD	1.30	0.26	0.13 ***		
BES	0.45	0.12	0.02 ***		
SDS	2.69	0.70	-0.13 ***		
Male	-0.00	0.01	-0.00		
Grade 7	0.01	0.01	0.04		
RaceAA	0.05	0.02	0.13 *		
RaceC	-0.01	0.02	-0.05		
RaceO	0.02	0.02	0.05		
MDxBES	-0.32	0.08	-0.03 ***		
MDxSDS	-2.02	0.46	-0.07 ***		
BESxSDS	-0.71	0.20	0.02 ***		
MDxBESxSDS	0.52	0.14	0.12 ***		

\*\*\*  $p < .001$ ; \*\*  $p < .01$ ; \*  $p < .05$  MD = Moral Disengagement; SDS = Social Desirability; BES = Empathy; Male = Gender, Grade 7 = 7<sup>th</sup> and 8<sup>th</sup> Grade; RaceAA = African American; RaceC = Caucasian; RaceO = Other/Mixed

### *Empathy as a Moderator*

A moderation analysis was used to assess the relationship between levels of bullying and moral disengagement with empathy as the moderating variable. The goal was to determine whether or not, empathy or a lack thereof, would moderate the direction of bullying behavior and moral disengagement; meaning, the more empathy one has, the less likely he or she will morally disengage and vice versa. The results of the linear regression analysis indicated that the combination of these predictors (moral disengagement, empathy, and the interaction between moral disengagement and empathy) explained 19% of the variance ( $R^2 = .19$ ,  $F(3, 642) = 53.43$ ,  $p < .01$ ) for overall bullying, 19% of the variance for social bullying ( $R^2 = .19$ ,  $F(3, 642) = 50.71$ ,  $p < .001$ ); 18% of the variance for physical bullying ( $R^2 = .18$ ,  $F(3, 642) = 47.59$ ,  $p < .001$ ); and 8% of the variance for cyber bullying ( $R^2 = .08$ ,  $F(3, 642) = 17.66$ ,  $p < .01$ ).

In this model, empathy moderated the relationship between moral disengagement and bullying behavior overall ( $\beta = -.23$ ,  $p < .01$ ); as well as with social bullying ( $\beta = -.25$ ,  $p < .01$ ), physical bullying ( $\beta = -.29$ ,  $p < .001$ ), and cyber bullying ( $\beta = -.08$ ,  $p < .01$ ). Verbal bullying (with moral disengagement) was the only variable not significantly moderated by empathy ( $R^2 = .16$ ,  $F(3, 642) = 39.54$ ;  $\beta = -.13$ ,  $p = .123$ ), thereby not contributing significantly to the moderation model.

According to these results, empathy does not moderate the relationship between verbal bullying and moral disengagement; however, empathy does have a contrasting influence on the direction of the relationships between moral disengagement and all other bullying variables (physical, social, and cyber). This means, as empathy increases, moral disengagement and involvement in bullying behavior decreases and as empathy decreases, moral disengagement and involvement in bullying behavior increases. As stated previously, the interaction between moral

disengagement and empathy becomes statistically significant once social desirability is accounted for. The possible reasons for a lack of moderation regarding verbal bullying are explored in chapter 5.

### *Empathy Correlations*

Results indicated that empathy negatively correlates with moral disengagement ( $r = -.23$ ;  $p < .001$ ), traditional bullying ( $r = -.13$ ;  $p < .001$ ) and cyber bullying ( $r = -.10$ ;  $p < .01$ ). The same is true in the reverse; meaning, having little empathy, will likely increase the chances of someone morally disengaging and potentially participating in bullying behavior. Correlations among all study variables are presented above in Table 4.

## CHAPTER 5

### DISCUSSION

The purpose of the present study was to examine the cognitive schemas adolescents develop in relation to experiences with bullying behavior and victimization. The cognitive process of moral disengagement was hypothesized to contribute to the justification of bullying behavior, while empathy was hypothesized to moderate this relationship. Consideration was also made regarding the potential for response bias by adding a measure of social desirability to acknowledge the possibility of adolescents underreporting experiences with bullying behavior, victimization, and moral disengagement, and over reporting empathic traits. The addition of social desirability also helped to establish the moderating influence of empathy on the remaining variables after controlling for social desirability.

#### **Findings and Future Directions**

##### *Research Question 1:*

The first research question of the present study was postulated to determine whether bullying behavior, victimization, moral disengagement, empathy and social desirability differed by gender, grade, and/or ethnicity. Regarding bullying behavior specifically, an initial factorial MANOVA indicated that all 3 demographic variables were statistically significant. Follow up independent univariate ANOVA's were run for each demographic variable and all forms of bullying. In support of the present study's hypotheses, males reported significantly higher levels of physical and verbal bullying than females; however, contrary to the present study's hypotheses, males reported significantly higher levels of social bullying than females as well, which is a stark contrast to the majority of the research noted previously (e.g., Crick & Grotpeter,

1995; Kowalski & Limber, 2007; Pepler et al., 2008), which overwhelmingly notes females as more relationally/socially aggressive than males.

Contrary to the present study's hypotheses, grade differences were established for all forms of traditional bullying with 8<sup>th</sup> graders reporting significantly higher levels of physical, verbal, and social bullying behavior than 7<sup>th</sup> graders. The reason for this difference may be that middle school and early adolescence has commonly been acknowledged as the developmental period in which bullying peaks (Beale & Hall, 2007; Kowalski et al., 2008; Varjas et al., 2009; Williams & Guerra, 2007), however, middle school takes place over two to three years during a critical developmental period. Therefore, it may be more specifically, that this incline rises through (sometimes 6<sup>th</sup>) 7<sup>th</sup> to 8<sup>th</sup> grade where bullying ultimately reaches its peak. Longitudinal or empirical studies will likely be able to assess this more efficiently, but for the present study, bullying behavior is highest among 8<sup>th</sup> graders. As predicted, cyber bullying showed no statistically significant grade differences.

Contrary to the hypotheses made in the present study, differences in ethnicity were established as statistically significant with African American adolescents reporting significantly higher levels of physical and cyber bullying than did Caucasian adolescents. While the present study did not predict any differences among ethnicities regarding bullying behavior, there are two potential explanations for these differences, which can be ruled out. First, no significant differences among ethnicities regarding socially desirable responding and moral disengagement were established. Therefore, African American participants reporting higher levels of physical and cyber bullying than Caucasian participants cannot be explained by more or less honest response sets or differences in moral opinion. Secondly, because ethnicity differences were established regarding reports of empathy and we find that a lack of empathy is influential in

predicting bullying behavior, then it is possible that a potential explanation for differences in bullying can be explained, at least partially, to not utilizing similar levels of empathy. While a main effect of ethnicity was established for physical and cyber bullying, ethnicity decreased in significance for both forms of bullying once they were added to regression model thereby no longer contributing to the model to a significant degree. Therefore, these results should be interpreted with caution and instead understood as an implication that increasing awareness of the importance of empathy and teaching its implementation to a diverse demographic will more than likely help to decrease bullying behavior among all adolescents. Future research would benefit from expanding upon the important role empathy plays in preventing participation in bullying in order to establish and better construct anti-bullying programs tailored specifically to impact diverse populations.

Regarding victimization, an initial factorial MANOVA indicated that gender differences was the only significant variable, which supports the present study's hypotheses. Follow up independent univariate ANOVA showed female respondents as more likely to report social victimization than were male respondents, while male respondents were more likely to report physical victimization than were female respondents, which supports the present study's hypotheses. Contrary to the present study's hypotheses, male and female respondents answered with similar results (no significant differences) regarding verbal victimization meaning both male and female respondents report similar experiences with verbal victimization. As predicted, there were no significant grade or ethnicity differences regarding victimization.

ANOVA was used to determine if levels of moral disengagement showed statistically significant differences by each demographic variable. As predicted, gender differences were established with males reporting higher levels of moral disengagement than females. Contrary to



the present study's hypotheses, grade showed statistically significant differences with 8<sup>th</sup> graders reporting significantly higher levels of moral disengagement than 7<sup>th</sup> graders. Bandura et al. (1996) found similar findings after assessing 675 male and female students in grades 6 through 8 (ages 10-15). As predicted, there were no significant differences among ethnicities regarding moral disengagement.

ANOVA was used to determine if levels of empathy showed statistically significant differences by each demographic variable. As predicted in the present study's hypotheses, females reported significantly higher levels of empathy than males and there were no differences among 7<sup>th</sup> and 8<sup>th</sup> graders' reports of empathy. Contrary to the present study's hypotheses, however, differences between ethnicities were established with Caucasian respondents reporting significantly higher levels of empathy than African American respondents. Potential explanations for these grade and ethnicity differences were discussed previously, but with the direction regarding grade differences in reverse.

ANOVA was used to determine if levels of social desirability showed statistically significant differences by each demographic variable. In support of the present study's hypotheses, there were no significant differences between genders or ethnicity's regarding reports of social desirability. Contrary to the present study's hypotheses, grade differences were established with 7<sup>th</sup> graders reporting significantly higher levels of social desirability than 8<sup>th</sup> grade respondents. While it is possible that there is an increase in cynicism with age and a decrease in perceiving the world as a safe and caring place thereby leaving 8<sup>th</sup> graders with having less concern for appearing desirable in the eyes of society; a more likely reason 7<sup>th</sup> graders report higher social desirability than 8<sup>th</sup> graders may be because they are still in positions

needing to conform to the schools culture and are not yet as comfortable as the 8<sup>th</sup> graders in their environment, which leaves greater concern for appearing socially desirable.

*Research Question 2:*

The second research question of the present study was postulated to determine to what extent reports of social desirability affect reports of bullying, victimization, moral disengagement, and empathy using MANOVA/ANOVA methods. The purpose of including a measure of social desirability was to determine whether or not respondents were attempting to represent themselves in a socially favorable way, which is not uncommon with self-report questionnaires (van de Mortel, 2008), especially those assessing socially sensitive topics such as bullying and morality. Representing a socially desirable response could potentially interfere with the interpretation of average and individual differences.

In support of the present study's hypotheses, adolescents who reported high social desirability reported significantly lower rates on all levels of bullying and victimization, and moral disengagement than those who scored within the normal (medium/low) range of social desirability. This confirms that those who answer in a socially desirable manner are significantly less likely to report involvement in bullying as either the aggressor or victim and are less likely to report moral disengagement. Another way to view this finding is to consider that participants who are concerned with representing themselves in a socially desirable light are significantly more likely to underreport engagement in unacceptable behavior and its' cognitive justification than those who answer less favorably but more honestly.

In opposition to the present study's hypotheses, empathy does not vary by social desirability group; therefore, there were no significant differences between the two variables. Interestingly, these results suggest that respondents of the present study who were concerned

with appearing socially desirable underreported unfavorable behavior (i.e., bullying) and enduring harassment (i.e., victimization), and denied having adverse beliefs (i.e., moral disengagement); however, they did not over-report a considerably positive trait (i.e., empathy). This implies that adolescent's participating in the present study, may have viewed social desirability as a defense against or protection from appearing badly, but not as something useful regarding the elevation of positive traits. It is also possible that the questions regarding empathy were more abstract than the questions regarding moral disengagement and bullying behavior, which may have been more direct in its behavioral versus affective assessment.

*Research Question 3:*

The third research question of the present study was postulated to determine to what extent bullying behavior (physical, verbal, social, and cyber) was predicted by moral disengagement. Using a Pearson product-moment correlation results supported the present study's hypotheses and showed that there was a positive, statistically significant relationship between moral disengagement and all forms of traditional bullying (physical, verbal, and social) and cyber bullying. This means participants who scored high on moral disengagement were more likely to report participating in all forms of bullying than those who reported lower levels of moral disengagement, which corresponds with previous research (Hymel et al., 2005).

As predicted, moral disengagement and overall bullying behavior (traditional and cyber) are positively correlated. Furthermore, for the bullying subscales, moral disengagement was most strongly positively correlated with social bullying, and this relationship decreased in strength with physical bullying, verbal bullying, and cyber bullying, respectively. While this is contradictory to the order hypothesized in the present study, which theorized that the more overt methods of bullying (e.g., physical and verbal, Tomada & Schneider, 1997) would be most

strongly correlated with moral disengagement, the differences are only minimal, but still significant.

Overall, participants were more likely to justify bullying others in a social manner than all other methods of bullying. One potential explanation was addressed by Pepler et al. (2008) who established that there are differences in adolescent cognitions regarding the definitions of bullying in that physically or verbally aggressive behavior was attributed to bullying behavior, however, the concept of relational (social) aggression, was not as commonly acknowledged as bullying unless it was specifically defined as such. Therefore, the concept of social exclusion or spreading rumors/gossiping, was not as easily connected to actual perceived bullying than the more overt forms of bullying. The reasons for this may simply be that the clearly established rules learned from a young age of “don’t hit” (physical) and “don’t call people names” (verbal) are not as clearly defined when providing rules of socialization.

Perhaps physical and verbal forms of bullying overshadow the more relational and passive methods of social bullying, and are therefore considered to be more harmful. Human beings are most naturally social creatures and the covert, increasingly popular, but negative attention cyber bullying has gotten in recent years (Mason, 2008; Wade & Beran, 2011) likely has a stigma connected to it that many either actively avoid engaging in or deny involvement with. “Teasing” friends, family members, acquaintances, etc., likely has a more playful connotation connected to it, leaving many people able to morally justify the act of social exclusion with the simple phrase, “I was just kidding”, or “It was a joke” when two friends leave another out of the tree house, for example. This corresponds with a facet of moral disengagement: euphemistic language. Even the term “bully” has become a bullying word.

Cyber bullying had the lowest correlation coefficient regarding its relationship with moral disengagement, which was likely because such a high percentage of respondents scored within the lowest possible scoring range. Future research would benefit from having one measure of both traditional and cyber bullying, in order to have a more balanced measurement of overall bullying experiences. The present study did not include a measure of cyber victimization because there was no such measure known at the time of this study. The addition of cyber victimization as a variable of study would have certainly balanced the variables in the present study and provided an even greater understanding of bullying as a whole. Varjas et al. (2009) noted that there is little affiliated relevance or similarity when comparing cyber bullying and cyber victimization to traditional bullying and traditional victimization while Ybarra et al. (2007) argued that it is all an extension of the same behavior through different avenues. Future research would benefit from exploring these similarities and/or differences more thoroughly.

All participants were classified into one of four groups: traditional bully, cyber bully, neither (traditional or cyber bully), and both (traditional bully and cyber bully). ANOVA was run to explore whether or not there were significant differences among groups regarding moral disengagement. As predicted, results of Tukey's HSD showed adolescents classified as both traditional and cyber bullies reported the highest levels of moral disengagement, followed by traditional bullies, then cyber bullies, and those who reported participating in neither form of bullying had the lowest levels of moral disengagement.

#### *Research Question 4:*

The fourth research question of the present study was postulated to assess whether or not higher or lower levels of empathy affected the directional relationship of moral disengagement and bullying behavior (physical, verbal, social, and cyber) after adjusting for social desirability.

The purpose of this method was to ensure results obtained regarding empathy and its effect on moral disengagement and bullying behavior, maintained this effect despite the potential for respondents reporting in socially desirable ways. Using ANCOVA, social desirability was assessed as the covariate and empathy as the between subjects factor of moral disengagement and bullying behavior. In support of the present study's hypotheses, results showed the interaction effect as statistically significant for moral disengagement, physical bullying, social bullying, and cyber bullying. This means that the effect of social desirability depends on the empathy group of the participant.

There was no significant interaction between social desirability and empathy regarding verbal bullying. Because the interaction effect is not statistically significant, the effect of social desirability on verbal bullying does not depend on the empathy group of the participant. However, the main effect of empathy is statistically significant; indicating a difference in the means for verbal bullying among groups after social desirability is accounted for, which supports the original hypothesis.

#### *Research Question 5:*

The fifth and final research question of the present study was postulated to determine which of the six predictor variables (moral disengagement, empathy, social desirability, gender, grade, and ethnicity) predict bullying behavior; as well as to determine whether empathy and social desirability serve as moderators of this relationship. Hierarchical stepwise multiple linear regression analyses showed that social desirability moderates empathy and moral disengagement, as well as the relationship between empathy and moral disengagement.

While the main effect of empathy was statistically significant for physical, social, and cyber bullying, the moderating affect that it had on moral disengagement was even stronger;

therefore, the relationship between empathy and moral disengagement is further moderated by social desirability. However, while empathy and the interaction between empathy and moral disengagement are not significant for verbal bullying, these effects do become significant when we include social desirability. Therefore, empathy, moral disengagement, and the relationship between the two variables are moderated by social desirability.

A moderation analysis was used to assess the relationship between levels of bullying and moral disengagement with empathy as the moderating variable. The goal was to determine whether or not, empathy or a lack thereof, would moderate the direction of bullying behavior and moral disengagement; meaning, the more empathy one has, the less likely he or she will morally disengage and vice versa. Results confirmed the majority of the present study's hypotheses in that empathy negatively correlated with moral disengagement and bullying behavior overall, including physical, social, and cyber bullying. Furthermore, empathy moderated the relationship between moral disengagement and bullying behavior overall; as well as with social bullying, physical bullying, and cyber bullying. Verbal bullying (with moral disengagement) was the only variable not significantly moderated by empathy, thereby not contributing significantly to the moderation model.

According to these results, empathy does not moderate the relationship between verbal bullying and moral disengagement; however, empathy does have a contrasting influence on the direction of the relationships between moral disengagement and all other bullying variables (physical, social, and cyber). In support of the present study's hypotheses, this means, as empathy increases, moral disengagement and involvement in bullying behavior decreases and as empathy decreases, moral disengagement and involvement in bullying behavior increases. On a similar note, Bandura et al., (1996) assessed moral disengagement and aggressive behavior

amongst a middle school population. Prosocialness, guilt, and aggression proneness were the cognitive variables included in order to assess the influential role these variables have on moral disengagement and aggressive behavior. Unlike the present study, which utilized a moderation analysis, Bandura and colleagues (1996) used a mediation analysis. Results were comparable to those of the present study overall as moral disengagement and aggressive behavior were determined as being influenced through the levels of each cognitive variable. The researchers concluded that, “high moral disengagement reduced prosocialness and guilt reactions and promoted cognitive and affective reactions that are conducive to aggression” (p. 370; Bandura et al., 1996).

Therefore, the present study further validates past research on the positive relationship between bullying (i.e., aggression) and moral disengagement (e.g.; Bandura et al., 1996; Hymel et al., 2005) and adds empathy as a moderating variable. Furthermore, the present study contributed to research on adolescent bullying and moral cognition by assessing social desirability as playing a moderating role in buffering the relationship between bullying and moral disengagement while empathy hinders this relationship.

### **Limitations and Benefits of the Study**

The present study is not without its limitations. First, the cross-sectional nature of this research limits the abilities of making causative interpretations; however, it is critical to establish cross-sectional data as a useful foundation for determining relational connections before drawing causal conclusions. Longitudinal studies would help to overcome this limitation by assessing stability and change behaviorally and cognitively over time. Secondly, the present study utilized self-report questionnaires as its only method of data collection. Asking an adolescent to answer questions about his or her personal experiences and cognitions may



potentially lead to a misrepresentation in the data due to response bias (Loo & Thorpe, 2000). In consideration of this possibility, the present study added a measure of social desirability to control for this limitation, which proved to be a beneficial addition. Future study's would likely benefit from the inclusion of peer and teacher assessments to get a better understanding of the school climate.

It is possible that the relatively homogenous nature of the data collection had its limitations (Campbell & Stanley, 1963); specifically, the timeframe, location, and instruments used in the present study. For example, participants were asked to complete survey packets on a half day of school during one social studies class period, which was 35 minutes long. Although all participants appeared to complete their packets within the allotted timeframe, it is possible that some sped through his or her answers or felt rushed. Also, filling out questionnaires about personal opinions and experiences among a classroom of one's peers could have influenced some participants to answer in a manner different to what they normally would have, had they answered in a more private setting. The present study anticipated this possibility by ensuring all participants that they were to remain anonymous, that they were not being asked to provide any identifiable information, that only the researcher had access to the non-identifiable packets, and all were provided with envelopes he or she could seal upon completion.

The benefits of this type of data collection were also notable. The present studies' sample size and participation rate were substantial. In approximately 3 hours, the researcher was able to collect data from 676 participants. Collecting data on a half day of school was less invasive for participants and teachers because there was no interruption of a whole class period. It is also possible that collecting data on a half day resulted in slight differences in the participant's answers because they were in better moods due to the shorter class periods, and

therefore, answered more positively; or perhaps they were more distracted because they knew they would be home before noon, thereby answering in a more dismissive manner. This could be an interesting element to consider in future research.

The influence of ethnicity differences was underestimated in the present study's hypotheses. This is partially due to the anticipation of a less diverse population upon the initial proposal of this study. More accurate predictions made regarding differences among ethnicities, would have resulted in an expansion in the bullying research. The present study added a measure of victimization in order to assess the bullying experiences of participants as bullies, victims, neither, or both; however, victimization did not flow into the scope of the remaining research questions. Therefore, future research would benefit from adding more generalized variables in order to access all sides of the bullying spectrum as a group process (Gini et al., 2008; Salmivalli et al., 1996; Sutton & Smith, 1999). Furthermore, no pretest was utilized for the present study, which means that although the correlational variables may have been statistically significant, there are likely additional variables not considered in the present study that could potentially "become plausible rival hypotheses" (p. 65, Campbell & Stanley, 1963) or, at the very least, correlate to an even more significant degree.

The most notable limitation for the present study is the repeatedly skewed data set for the majority of the measures as seen from the distribution of scores tables in Chapter 4 (see Figures 6, 7, 9, and 10). While this is oftentimes expected in self-report data, especially assessments relying solely on Likert scales involving socially undesirable topics (van de Mortel, 2008; Loo & Thorpe, 2000), it is important to acknowledge the limitations of the present study's instruments and the various rating scales of these measures. All measures and subscales on bullying were skewed positively as was moral disengagement, which coincides with the research showing

people are less likely to endorse cognitions or behaviors involving socially undesirable topics (Loo & Thorpe, 2000; van de Mortel, 2008).

According to Friedman and Amoo (1999), the following factors may have played a role in the imbalance of scores and the lack of normally distributed data: a) forcing (limiting) a choice, b) unbalanced rating scales, and (c) order effects of the rating scale; which the authors mention tends to weigh more heavily on the left side (bias) of the scale as was frequently the case for the present study. However, as Lishner, Cooter, and Zald (2008) point out, measuring behavioral and psychological variables can be done in a variety of ways, but the experiential component is completely subjective and can only be assessed fairly through self-report. They suggest that, “the development and use of empirically derived rating scales may benefit affective science specifically, and the entire field of psychology more broadly, because such scales may provide more sensitive quantitative and qualitative information than traditional rating scales” (p. 190-191).

At the time of the original research proposal, one cohesive measure of all bullying variables was expected to be utilized, but this changed when the cyberbullying portion of the measure was excluded by the author. Therefore, a different type of scale was utilized for the present study and it is possible that this played a role in the low reporting rates of cyber bullying. While the traditional bullying subscales were rated on a 6-point Likert scale (never, sometimes, once and a while, once a week, several times a week, or every day), the CBQ was rated on a 3-point rating scale (never, sometimes, or often), which limited responses as respondents did not have the same flexibility in answering these questions. Given this, it is possible that someone who had once cyber bullied another person, would hesitate answering “sometimes” and choose instead to say “never” because “sometimes” may be too implicative of a repeat offense. Using

one cohesive instrument including all 4 of the bullying items measured in the present study would be an ideal attribute to the bullying research.

Overall, 31.5% of respondents participated in some form of cyber bullying (i.e., answering at least "sometimes" to at least one of the 16 questions), which is considerably lower than the 44% response rate reported by Calvete (2010). What was most interesting in this comparison, however, was the fact that both the present study and Calvete (2010) found the most highly endorsed item was number 13 (i.e., deliberately excluding someone from an online group) with similar response rates of 22.8% and 20.2%, respectively. It would be interesting to replicate this comparison to establish whether or not cyber bullying and relational/social aggression are similar forms of bullying just through different means.

The present study utilized an overall score for empathy; and although optional in its analysis, the BES allows for specifying and analyzing affective and cognitive empathy separately. For example, Pecukonis (1990) assessed both affective and cognitive empathy among a group of aggressive adolescent females under residential care. After receiving 9 hours of empathy training in both areas, there was only noted improvement for affective empathy and no increases of cognitive empathy. However, there was also support for the systemic relationship between the two forms of empathy, which validates the use of an overall score as was used in the present study. While looking at both forms of empathy individually was beyond the scope of this study, it is likely that this addition would have clarified even further to what degree empathy moderates bullying behavior and moral disengagement, which would also add to the literature on the effectiveness of empathy training in reducing aggressive behavior if cognitive empathy is, indeed, less influenced via training as Pecukonis (1990) discovered.

While the more extreme scores were the exception and not the rule, the present study's population was robust, and it is the potential for these extreme cases (of bullies and victims who have reached a breaking point), both statistically, theoretically, and realistically, that persistent attention has been paid to bullying and victimization research (e.g., Litwiller & Brausch, 2013). In fact, concern for the extreme kids is one of the main qualifications for the topic selection of the present study. School shootings and teen suicides are demonstrable evidence of the need for considering the relevance of extreme responses as they highlight the possibility that in some cases, bullying behavior may actually serve as an antecedent for these more extreme outcomes. Therefore, as is the case for most human behavioral research, extreme scores do not necessarily imply less importance; however, it is vital to acknowledge that these scores are not within the normal distribution, which is then advised to be treated and analyzed with caution so as to not be overly generalizable with the data set.

The most plausible explanation for the low rates of bullying and victimization among the present studies' population is the schools practice of promoting a Positive Behavioral Climate, which is discussed in more detail in the conclusion of this paper. Essentially, participants were likely given general guidelines and expectations of the schools climate as a whole; which is enforced throughout the school system via teachers, administrators, etc., and this likely took place prior to the administration of the questionnaires which may have therefore already created a school with a low incidence of bullying. Despite this, however, this study continues to highlight the fact that bullying continues to some degree regardless of the practices enforced to prevent it.

## **Implications and Conclusion**

The present study's findings have considerable theoretical, statistical, and practical implications for prospective research. Theoretically, results of the present study help to further our understanding of adolescent cognitive processes in numerous ways. Bandura's social learning theory (1986), posits that the utility of cognitive processes and mechanisms developed through vicarious observation and personal experience, influences one's perceptions and behavior; which is then hypothesized to create belief systems, ranging from basic thought to judgments and moral reasoning, and other processing mechanisms may create relations between social-information input and social behavior, which mediate social informational processes (Fontaine, 2008). The present study expanded on this theoretical framework by assessing adolescents' self-reported experiences with bullying and victimization, along with the assessment of the influential role empathy plays in moderating the relationship between bullying behavior and moral disengagement.

From a statistical standpoint, the present study contributed to the research on bullying behavior, victimization, and its associated cognitions (moral disengagement) by adding a moderating variable (empathy) to assess the influential relationship between these associations. Further, the addition of a measure of social desirability helped to better understand and clarify participants' viewpoints by allowing for the assessment of response bias. Future research would benefit from including measures of social desirability, especially in research specific to self-report, but it would also be beneficial to include other variables, such as acquiescence and/or leadership, which may impact the directional influence of scores via moderation and mediation analysis.

From a practical standpoint, the present study added to the research on bullying behavior and victimization by establishing connections between negative and positive influences and thought processes, which either promote or hinder behavior. First and foremost, the present study showed empathy as a protagonist in hindering engagement in bullying others. Secondly, moral disengagement helps to sustain the justification of bullying behavior and is found within this study to be a significant factor likely influencing the decision to bully others. Therefore, this gives insight into the importance of teaching children and adolescents to consider all forms of bullying as morally unacceptable and to show compassion for one another. The issue here, however, is defining who is responsible for determining and setting forth the guidelines of what is right and wrong, which is something that is likely debated frequently, but resolved rarely. This is not a simple feat; as there are numerous social influences attributing to cognitive and behavioral development, especially in regard to the development of morals and values (Bandura, 1986; Bandura et al., 1996a).

### *Bullying Education and Prevention*

One of the first steps in preventing bullying is raising awareness (Diamanduros et al., 2008), which is most broadly and ideally demonstrated at home and in school. Rather than focusing on bullying or victimization alone, the outreach has to be multifaceted by raising awareness of the detrimental concerns of engaging in bullying behavior, the consequential role one plays when witnessing or facilitating bullying incidents without further involvement, and the overwhelming affect bullying has on victims. As was discussed throughout this dissertation, modern technology has allowed for the expansion of bullying, which reaches a broader audience on the internet at a very rapid rate; however, the internet also allows for anti-bullying awareness and prevention programs to be discussed, researched, studied, and considered for implementation

in various settings and amongst a plethora of groups who are each affected by bullying in one way or another.

One of the most well-known, greatly researched, and effective anti-bullying programs is the Olweus Bullying Prevention Program (Limber, 2011; Olweus, 1993b; 1994; Olweus et al., 1999), which aims to decrease the frequency of bullying in schools, prevent its occurrence from continuing, and improve the overall social climate within the school (Limber, 2011; Olweus, 1994). This is achieved through, (a) the provision of an open and approachable staff for students to depend on if/when needed, (b) setting clear boundaries, (c) consistently utilizing nonviolent negative reinforcement, and (d) leading through example (Limber, 2011; Olweus, 1993b; 1994; Olweus et al., 1999). As noted by Limber (2011), this approach relies heavily on adults to uphold and enforce the standards of the program via training and detailed protocol which also includes parents and most recently, community involvement.

Despite the well-renowned success this program has had within school systems across the globe, there continues to be difficulty in decreasing the rates of bullying in middle schools (7<sup>th</sup> grade) and above (Salmivalli, Kaukiainen, & Voeten, 2005, cited in Limber 2011), which supports the findings of the present study in that reports of traditional bullying increased by grade. Limber (2011) suggests that the difficulty anti-bullying programs have in influencing adolescents may have to do with the transitional period most adolescents go through while adjusting from elementary, to middle, to high school. Even further, the present study collected data from a school in the middle of a transitional period. Because of a decrease in the student population, the district split up the middle schools, which were 6<sup>th</sup>, 7<sup>th</sup>, and 8<sup>th</sup> grade in 2012 and moved the 6<sup>th</sup> graders to what is now considered upper elementary with 5<sup>th</sup> graders in 2013. Seventh and eighth grade is now considered middle school, which means the 7<sup>th</sup> graders have not



yet had the opportunity to be an “upperclassman” as they would have if 6<sup>th</sup> graders were still at the school.

Following along the same theoretical framework as the present study, which emphasizes the importance of empathy as an inhibitor of bullying behavior, Şahin (2012) researched the effectiveness of empathy training among 6<sup>th</sup> grade Turkish students who were identified as bullies. Two groups were randomly selected as the control group who participated in weekly 30 minute peer discussions about the issues taking place in his or her everyday life, which took place over 11 weeks. Another two groups were randomly selected as the experimental group, which took place in weekly, 75 minute empathy training program sessions developed by the author. A follow-up study was conducted 60 days later. Results were promising as participants in the empathy training program significantly reduced his or her participation in bullying behavior along with a significant increase in empathic behavior, which continued at the follow-up study 2 months later. As anticipated, there were no notable changes among students in the control group.

Ross and Horner (2009) discussed the need to assess the antecedents and consequences of problematic behavior, along with the causal influence of bullying behavior in order to adequately reduce its occurrence. Based on the socially reinforcing nature of bullying behavior, the authors highlight the need to focus not only on the bully, but also on the peer network either actively or passively encouraging this behavior. Based on this, the authors developed a program called Bully Prevention in Positive Behavior Support (BP-PBS), which identifies the bullying incident, provides general guidelines and expectations for victim and bystander responses, and highlights the school wide responsibility of all people within the system including parents, teachers and administrators to promote this culture of beneficial social skills. Ultimately, the program was

deemed successful in reducing bullying incidents and increasing proper bystander and victim responses; and in an indirect way, the present study was a testament to the benefits of a program such as this, as the participating school utilizes the PBS prevention method, which seems to have done a rather fine job at keeping incidences of bullying from being a rampant issue.

The present study, along with the research performed by Pecukonis (1990) and Şahin (2012) highlight the benefit of providing at least some form of empathy training with the intention to prevent or inhibit engaging in bullying behavior in active and passive ways. Specifically, it is conceivable that the more empathy one has for people in general, the less likely they are to passively stand by and allow someone to be bullied. While there is no perfect solution, continued efforts are needed in finding programs that are effective, consistent and generalizable across diverse populations and environments. The present study promoted the continued exploration of the numerous variables, (a) contributing to the incidence of bullying behavior, (b) inhibiting or prohibiting its occurrence, (c) and moderating the degree of influence cognition has on behavior, which will assist in further developing programs intended to decrease bullying behavior and victimization.

**APPENDIX A: APPLICATION TO CONDUCT RESEARCH**1260  
Procedure B**Application to Conduct Research  
Farmington Public Schools**

Date: 12/11/11

- I. **Applicant's Name & Title:** Amy Zelidman, MA, LLP (Limited Licensed Psychologist)  
**Agency or Institute Affiliation:** Wayne State University, College of Education  
**Home Address:** 28487 Lake Park Drive, Farmington Hills, MI 48331  
**Phone:** 248-514-5354
- II. **Funding Agency:** None
- III. **Project Purpose:** To assess student responses to questionnaires evaluating physical, verbal, relational, and cyber bullying behavior, moral disengagement and empathy as a moderator in order to enhance awareness regarding the detrimental consequences of bullying behavior and to determine whether increases in empathy correlate with lower levels of bullying behavior and moral disengagement.
- IV. **Name and title of supervisor to whom you are responsible:** Dr. Stephen Hillman, Ph.D.  
**Has he/she granted approval for conducting this project?** Yes
- IV. **If class project, cite course name:** None - Dissertation for PhD
- VI. **Title of project:** EMPATHY AS A MODERATOR OF ADOLESCENT BULLYING BEHAVIOR AND MORAL DISENGAGEMENT
- Proposed beginning date:** 2/15/12 (consent)  
**Proposed ending date:** 2/28/12 (administration)
- VII. **General Objectives:**
- To further enhance research currently performed in enhancing the understanding of adolescents' experiences with all forms of bullying.
  - To assess gender and grade differences related to bullying experiences and moral disengagement.
  - To assess whether empathy plays a moderating role between moral disengagement and bullying behavior.
  - To assist the district in understanding the self-reported experiences and beliefs of students within the school system in order to expand on anti-bullying regulation and prevention.
- VIII. **Statement and Description of Problem: Include a brief review of previous research and theoretical basis for project, as well as theoretical and practical implications. (most citations removed)**

Aggression is a highly researched human behavior, which has many detrimental qualities negatively affecting all involved. Aggression can occur in many ways and in many different contexts. While aggression and bullying are oftentimes used interchangeably, bullying is a

subcategory of aggression and a social epidemic, which oftentimes takes place as a group process. Bullying is one of the most researched elements of aggressive behavior, which has been thoroughly and empirically investigated for the past few decades.

Adolescents appear to be the ideal candidates for participation in this study for several reasons. For example, Lovett & Sheffield (2007) conducted a critical review of affective empathy in children and adolescents and determined that research with adolescents, in comparison to children, is more likely to result in a negative relationship between empathy and aggression. The researchers also note, "Research that examines aggression and empathy...can use prior theory to test specific hypotheses" (p. 11). Even though a negative relationship is established between bullying and empathy, it is still important to assess other factors contributing to the bullying epidemic and the present study will assess moral disengagement as a potential predictor of bullying.

It is critical for any research on bullying behavior to take into account gender differences because females tend to be underrepresented as bullies and overrepresented as non-bullies, which is likely, in part, due to the differing definitions of bullying. More than likely, adolescents think of bullying as a physically or verbally aggressive behavior; however, the concept of relational aggression, which is typically associated with females, is not as commonly acknowledged unless specifically defined. Therefore, females may not consider their behavior as "bullying". The same definitional problem is likely true for cyber bullying as it is a new phenomenon, which is just beginning to establish rules and boundaries within the school and legal systems.

Assessing moral disengagement as a predictor of bullying behavior is supported by the work of Willott and Griffin (1999) who interviewed a sample of 66 adult males convicted of property damage. Because the crimes were economic in nature, the researchers noted a pattern of justification for criminal action through the insinuation that it was necessary to carry out these actions to survive and/or to provide for their families. Further justification occurred through the minimization of the negative effect the crime had on the victim because it was assumed that the victim was in better financial standing than the convict and therefore, bared little consequence. Coinciding with the present research, the above-mentioned study supports the notion that moral disengagement occurs when an individual finds it necessary to be without fault in justifying a behavior normally considered corrupt. Interestingly, while many individuals are able to find just cause for their immoral behavior, these same individuals would likely find the behavior entirely wrong if the same injustice were to happen to them. It's likely that no bully would understand and accept being bullied, or that any thief would morally rationalize being robbed.

In support of the present study's theoretical framework, Hymel and colleagues (2005) assessed moral disengagement and adolescent bullying amongst a population of 8th, 9th, and 10th grade Canadian students. Results indicated higher levels of moral disengagement as indicative of higher levels of bullying and those students who reported no engagement in bullying behavior as having the lowest levels of moral disengagement. It was also discovered that to a small degree, levels of moral disengagement decreased as those who engaged in bullying also experienced increased victimization. This further supports the notion of empathy as a moderator in that experiencing either directly or vicariously the emotional effects of victimization, likely inhibits moral disengagement and bullying behavior.

#### IX. **Hypotheses: (see attached statistical graph with research questions)**

H1.1: Levels of bullying will differ among male and female students in grade 5, 7, and 9.

H1.1a: Verbal, relational, and cyber bullying will increase from grade 5, peak at grade 7 and

decline at grade 9.

H1.1b: Physical bullying will decrease from grades 5, 7, and 9 respectively.

H1.1c: Males will report higher levels of physical and verbal bullying than females.

H1.1d: Females will report higher levels of relational and cyber bullying than males.

H1.2: Levels of MD will differ among male and female students.

H1.2a: Males will have higher level of MD than females

H1.2b: Grade level will not be related to MD.

H1.3: Levels of empathy will differ among male and female students.

H1.3a: Females will have higher levels of empathy than males.

H1.3b: Empathy will increase by grade level.

H2.1: High levels of MD will positively correlate with engagement in both traditional and cyber bullying.

H2.1a: Students who do not report engaging in bullying behavior will have the lowest levels of MD.

H2.1b: Students who are classified as both traditional and cyber bullies will have the highest overall levels of MD.

H2.1c: MD will be most strongly correlated with physical bullying, and this correlation will decrease in strength with cyber, relational, and verbal bullying respectively.

H3.1: Empathy will have a moderating effect on the relationship between bullying behavior and MD.

H3.1a: High levels of empathy will negatively correlate with MD and engagement in bullying behavior.

H3.1b: Low levels of empathy will positively correlate with high levels of MD and engagement in bullying behavior.

**X. Instruments: Include name of instrument, administration methods and time required. Please attach a sample of all instruments proposed for use with complete directions or adequate descriptions of procedures.**

Demographic Survey (1-2 minutes)

A demographic survey will be administered to gather information on students' age, grade, gender, and race.

Revised Adolescent Peer Relations Instrument-Bully (RAPRI-B) (approx. 5 minutes)

The RAPRI-B assesses student responses to questions regarding traditional (physical, verbal, social) and cyber (visual, text) bullying. There are 5 bullying subscales described as follows, a) physical: involvement in behaviors such as hitting and kicking, b) verbal: involvement in behaviors such as name-calling and teasing, c) social (i.e., relational): involvement in behaviors such as social exclusion and rumor spreading, d) visual (i.e., cyber visual): involvement in behaviors including sending inappropriate video and pictures of and/or to others maliciously, and e) text (i.e., cyber text): involvement in emailing, chatting, and texting about or to others maliciously.

The 31 bully factor items are preceded by the stem sentence "In the past year at this school I..." and each item is scored on a 6-point Likert scale (1 = Never, 2 = Sometimes, 3 =

Once or twice a month, 4 = Once a week, 5 = Several times a week, 6 = Everyday). Because of the changes occurring within the entire district in 2010-2011 the stem sentence in the present study will read as follows, “In the past year I...” and there are two reasons for this change. First, the district is in a transitional state of rearranging each middle school in the 2010-2011 school year. Before this, the district consisted of four middle schools, grades 6 through 8. Currently, the district consists of two middle schools, grades 7 and 8, and two upper elementary schools, grades 6 and 7. Therefore, having students reference “this school” could potentially cause unnecessary confusion because over the past year, many had likely changed schools. Secondly, referencing “at this school” implies the questioned bullying behavior as more limited than intended. The goal is for participants to reference bullying behavior inside and outside of school as well as in the real and virtual world.

#### Mechanisms of Moral Disengagement Scale (MMDS) (approx. 5 minutes)

The MMDS will be utilized to assess student responses to a 32 item questionnaire measuring the eight mechanisms of moral disengagement (MD): moral justification (e.g., “It is alright to fight to protect your friends”), euphemistic labeling (e.g., “To hit annoying classmates is just giving them ‘a lesson’”), advantageous comparison (e.g., “Stealing some money is not too serious compared to those who steal a lot of money”), distortion of consequences (e.g., “Teasing somebody does not really hurt them”), dehumanization (e.g., “Some people deserve to be treated like animals”), attribution of blame (e.g., “If people are careless where they leave their things, it is their own fault if they get stolen”), displacement of responsibility (e.g., “If kids fight and behave badly in school it is their teacher’s fault”), and diffusion of responsibility (e.g., “A kid in a gang should not be blamed for the trouble the gang causes”).

The 32 items pertain to the 8 mechanisms of moral disengagement with 4 questions per mechanism: 1) moral justification, 2) euphemistic language, 3) advantageous comparison, 4) displacement of responsibility, 5) diffusion of responsibility, 6) distorting consequences, 7) attribution of blame, and 8) dehumanization. Each of the eight mechanisms is assessed with four questions regarding differing ethical statements in relation to one’s environment such as school and community. Respondents indicated on a 3 point Likert scale his or her level of agreement for each statement with potential scores ranging from 32 to 96.

#### Basic Empathy Scale (BES) (approx. 5minutes)

The Basic Empathy Scale (BES) will be utilized to assess student responses to a 20 item self-report questionnaire assessing two different components of empathic responsiveness: Affective Empathy (AE) subscale (emotional congruence - 11 items,  $\alpha = .85$ ) and Cognitive Empathy (CE) subscale (understanding of another’s emotions – 9 items,  $\alpha = .79$ ). An example of an AE question is, “After being with a friend who is sad about something, I usually feel sad” and an example of a CE question is, “When someone is feeling ‘down’ I can usually understand how they feel”. Questions are scored on a 5-point Likert scale (1 = Strongly Disagree, 2 = Disagree, 3 = Neither Agree or Disagree, 4 = Agree, 5 = Strongly Agree). Eight of the negative items are scored in reverse and then all scored are summed for a total empathy score. Assessing cognitive and affective empathy separately is optional.

- XI. **Methodology: Describe in detail research design, data collection methods, time schedule, number of students or staff to be involved, method or criterion for selection of participants, data analysis procedures, and form of presenting data. Attach extra sheets if needed.**

This research is an empirical quantitative study, which will attempt to determine the correlational nature of the relationship between moral disengagement (predictor) and bullying behavior (outcome) along with the potential moderating role of empathy (moderator). A correlational research design is appropriate as it permits the measurement of several variables and their interrelationships simultaneously in a school setting. This proposed study may help determine to what degree moral disengagement is a predictor of bullying behavior and whether empathy plays a moderating role in this relationship. This proposed study aims to assist researchers and anti-bullying prevention and intervention programs in gaining a more thorough understanding of adolescent's cognitive processing.

The researcher will request parental opt out consent via listserv emails sent to parents of student's within each school with signatures of parents who would not like their child participating. Copies of the instruments will be made available to parents in the front office of each participating school.

Four instruments will be administered to all participants including a questionnaire on demographics, bullying behavior, moral disengagement, and empathy. The researcher will administer the questionnaires to students with a brief statement regarding the study. A definition of bullying will be defined.

**XII. Treatment: If treatment or service is rendered to students or staff, describe in detail all procedures as well as time schedule.**

This study does not involve the administration of any treatment to students or staff.

**XIII. Describe in detail the proposed involvement of local school personnel, students, and facilities. Include the protocols and procedures to train staff in survey administration, amount of time that will be required.**

The researcher and her confederates will administer the questionnaires and this can be done as the school determines depending on convenience. In other words, if the "focus" class is determined as the best option in order to not interrupt classroom teaching, the researcher could administer the items at that time, but this may have to occur over the course of two "focus" classes because of time limits. Should the researcher submit the questionnaires during regular class time, it is likely the entire study will be completed during that time. The only foreseen involvement required of teachers will be to allow the researcher and confederates to take the time from class to gather students' answers. No training of any kind will be necessary. A brief, but detailed explanation of the study and requested involvement will be orally presented to participating students. Informed student consent will be obtained along with answers from the questionnaires. The students will be asked to provide basic demographic information such as age, gender, grade and race. Students' names will be provided numbers in order to keep track of his or her answers and maintain confidentiality/anonymity.

**XIV. Presentation of findings to school system: Approximate date of submitting written report and form of final report.**

The researcher will provide a copy of her dissertation to Kristin Gekiere, Ph.D., Director of the "assessment and school improvement" department for Farmington Public Schools once the dissertation is complete. The researcher anticipates defending her dissertation in the late spring of 2012.

**XV. Cite how the project's findings will be of practical use to the school system.**

This research is of particular significance in aiding the educational system in gaining a better understanding of bullying behavior and its' negative effect on students. The detrimental consequences experienced by victims and aggressors of behavior are likely to affect the school environment as well. Further, should empathy be proven as a moderator of moral disengagement and bullying behavior, a focus on increasing empathy amongst students is justified.

**XVI. Explain how the project is relevant to the District's eight student-learning outcomes: Collaborative Team Member, Effective Communicator, Healthy Individual, Quality Producer, Thoughtful Problem Solver, Lifelong Learner, Knowledgeable Thinker, Responsible Citizen.**

Information regarding bullying behavior and its' negative effects on adolescent well-being, will be provided to all participating students. This information will include ways in which students are able to implement the District's eight student-learning outcomes in their daily lives regarding any and all forms of bullying behavior. This information will likely assist the District in educating youths on becoming productive members of society. This project is relevant to the District's eight student-learning outcomes in the following ways:

1. **Collaborative Team Member** - Participating students will provide information regarding their personal experiences with bullying behavior of which will contribute greatly to further understanding its' occurrence and negative effects. The provided information will contribute to a group representation of student experiences, but from differing standpoints. While students' individual representations will be requested and collected, they will work collaboratively as a team in assisting the researcher in gaining a thorough perspective of the groups' outlook as a whole. Therefore, participating adolescents will be distinguished as representative of the adolescent population as a whole.

In regards to the present study, it is hoped that students will recognize their responsibility in partaking in and/or witnessing bullying behavior as a collaborative team member, while also considering the ways in which said participation or a lack thereof may negatively affect not only themselves, but their friends, peers, the community, and society as well. It is stated in the District's students-learning outcomes that, "Collaboration...builds a sense of community to offset the impersonal forces of modern society that cause isolation and feelings of alienation". This statement represents the importance of accepting the global influence of modern communicative tools as expanding societal responsibilities as responsible individuals and collaborative team members. Specifically related to bullying, adolescents must comprehend and acknowledge the significance of maintaining the same respect for others in both the real and virtual world.

2. **Effective Communicator** – All participating students will be able to communicate information regarding their personal experiences with bullying behavior. The current study will allow students to engage in a highly advantageous and critical research project in which effective communication is essential. The students' ability to convey openly and efficiently also allows for the expression of personal viewpoints and perceptions. The students' contributions to the present bullying research are better understood through their effective communication skills because human interaction is an essential quality of all individuals corresponding electronically and otherwise.

The outcomes state that, "the ability to communicate takes on new importance in the emerging age of information". Today, adolescents are asked to speak on issues related not only to real world experiences, but to virtual experiences as well. The doors of communication have



opened to a whole new world with novel opportunities to freely correspond with numerous others with an “expanded array of social boundaries”. The concept of cyber bullying fully entails the ability to communicate and learning effective practices will likely help in its’ prevention.

**3. *Healthy Individual*** – It is stated in the outcomes that, “a healthy individual pursues a variety of interests and maintains balance among them”. This statement has important implications regarding the focus of the current study because the Internet and other modern forms of technology have drastically increased the ability to explore information on just about any topic of interest. Regarding the importance of maintaining positive emotional health and well-being, the current study acknowledges the crucial aspect of teaching youngsters avoidance and prevention techniques regarding bullying behavior as well as understanding the detriments of justifying immoral behavior such as bullying and the benefits of empathizing with peers.

Bullying has been linked to many detrimental consequences such as increased depression, stress, and anxiety, along with lowered self-esteem; all of which can take a toll on both emotional and physical health. The concept of self-regulation is a necessary element of human development and the current research will explore and emphasize its’ significance regarding bullying behavior. “The depersonalization of a mass technological society” is an outcome stated as one factor, which endangers individual health and is the theoretical basis behind explanations of bullying; referred to in the present research as the disinhibition effect and moral disengagement.

**4. *Knowledgeable Thinker*** - It is stated that “knowledge consists of powerful ideas that enable them to assimilate new information”. This implies the importance of recognizing the impact of effective critical thinking. Steinberg (2004) points to the fact that self-regulation is a difficult task for adolescents to achieve and generally does not reach full maturity and proficiency until they reach adulthood. Biologically speaking, some adolescents may be able to behave in a more disinhibited fashion “due to an underdeveloped prefrontal cortex, which subsequently affects their reasoning and ethical decision making” (Mason, 2008, p.329). Given this, it is assumed that adolescents behave in disinhibited ways due to immaturity and delayed development.

Advancements in technology demand individuals to think in more complex and multifaceted ways, which is fundamental in all research pertaining to electronic communication. Therefore, an immature self-regulatory system and the pursuit of sensory pleasure help to further explain why some children and adolescents resort to bullying others in both traditional and electronic ways. The present study will help researchers better understand the experiences of adolescent bullying behavior and will emphasize the importance of promoting critical thinking.

**5. *Life-Long Learner*** – Adolescence is the developmental stage when youngsters begin to extend what they learn as children and implement new knowledge obtained through observation, vicarious motivation, and personal experience. Technological advances have increased the ability of individuals to learn in new and multi-faceted ways. The Internet has increased the ability to pursue knowledge because of the vast array of information it provides. While learning is seemingly advantageous, it can also have a negative effect. An example pertaining to the present research project is the fact that bullying behavior is oftentimes a learned behavior, which is either positively or negatively reinforced and bullying behavior is justified through cognitive dissonance. Based on this, the Internet has expanded the ability to bully others and many learn quickly that their negative behavior may go unpunished, which increases the likelihood of the behavior continuing. Ideally, bullying behavior decreases in adulthood, but this is not always the case.

Therefore, the aim of the current study is to increase our knowledge of adolescent experiences with bullying behavior in order to assist in its prevention and further our understanding of who learns this behavior along with examining whether bullies utilize moral disengagement more than those who do not bully. Furthermore, this study aims to establish

empathy as a moderator of the aforementioned variables. Should today's youths gain a beneficial and knowledgeable outlook on the ways of which they view themselves and learn to behave in socially acceptable ways, it is likely that this information will continue to positively influence their learning experiences well into adulthood. Ideally, being teased, bullied, or tormented in any way will have little to no impact on the way one views themselves and this research will hopefully assist in the overall education of bullying prevention. If done successfully, this education will continue throughout the lifespan.

**6. Quality Producer** – Standards, values, morals, ethics, culture...are all qualities necessary in becoming a quality producer. Ideally, individuals apply the above-stated qualities to all aspects of life and in positive, useful ways. In terms of the current research, all individuals are exposed to many different ways in which others apply their standards; some effectively and some detrimentally. Those who have little concern for the welfare of others and take on the role of bullying and demeaning are likely to not produce quality results. On the other hand, individuals who maintain respect for others and benefit in quality ways through all modes of communication, electronically and otherwise, are likely to produce standards considered beneficial.

The present study aims to assist in the betterment of youth's social interaction, especially in maintaining quality, respectful, and beneficial relationships with an emphasis on the avoidance of harassing or tormenting others. It is crucial for the educational, health, and governmental systems to provide clear and concise instruction and examples of how best to maintain rewarding and quality relationships. Those who engage in bullying may not have the necessary standards of respect for others. This research will support efforts in improving standards set through the education system and society as a whole. Should this be done successfully with today's youths, said standards will likely continue through generations. It is stated in the outcomes that, "the esteem of individuals and the confidence of the nation are damaged by diminished expectations and a retreat from excellence". Given this, it is critical to employ a comprehensible example of how best to produce excellence as individuals. As the times continue to change, so do the ways in which standards and values evolve.

**7. Thoughtful Problem Solver** – All participants within the present study will assist in solving a problem, which is becoming more and more prevalent, especially in the adolescent community. They will assist in establishing a foundation, which will highlight the adolescent experience relevant to bullying. Many adolescents are not made aware of how best to resolve issues and implement poor problem-solving skills as a result of this faulty way of thinking. In regards to bullying behavior, aggressors likely respond to negative feelings towards others and utilize these tools as flawed expressions and acknowledgements of said feelings. On the other hand, victims of bullying are at risk of developing psychological or emotional detriments and may be unable or unknowing of suitable ways to cope with and resolve the problem.

Ideally, adolescents understand proper problem-solving techniques, which assist in coping with and managing difficult situations. Those who are unable to cope effectively and resolve personal conflict are candidates for programs established within the school system and/or the community, which teach youngsters new and appropriate ways to handle and adjust to complicated changes. This applies to the current study's approach in the sense that all adolescents will benefit from learning approaches to solving bullying problems effectively (i.e., empathy). The present study will conclude with a thorough citing of recent research applicable to bullying prevention and education programs, which address issues specific to the promotion and education of effective problem-solving strategies.

**8. Responsible Citizen** – One of the main legislative issues and limitations related to traditional and cyber bullying is the First Amendment's assertion of 'freedom of speech'. There is an obvious risk of violating this right when one verbalizes a feeling, opinion, or thought concerning

another individual either in person or electronically and case law is restricted. Either way, United States citizens are constitutionally within their right to be protected in freely speaking their minds. In addition, schools are oftentimes in jeopardy of going against the constitutional rights of students who verbalize and express negative thoughts or threats against others, whether orally or by electronic means, because this is commonly done outside of the school. Regardless of this restriction, there is little question that cyber and traditional bullying frequently does, in fact, affect school performance; an obvious concern for all educational systems.

Regardless of the right one has to openly communicate their feelings and opinions, it is critical to enforce a duty for all to maintain personal responsibility in terms of respecting the dignity, feelings, views, and shared rights of others. Furthermore, adolescents must be made aware of their civil obligation to value the traditions and customs of other cultures while correspondingly upholding their own. The current study will address this responsibility with conclusions drawn upon the educational, legal, and social systems involvement with bullying. Participation in this study will benefit students in assisting research on bullying issues, a problem which affects not only the individual, but also their peers, school, community, and society as a whole.

I agree to provide the Farmington Schools with the results of this project, do a presentation on the significance of the results, if requested, conceal the identity of participants in the study, and permit the District to co-copyright, if the District so desires.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

Submit four copies of this application, instrument(s), and your qualifications to administer and interpret the instrument(s) to the Administrator for School Improvement and Accreditation.

**Kristin Gekiere, Ph.D., Director  
Assessment and School Improvement  
Farmington Public Schools  
33000 Thomas Street  
Farmington, MI 48336**

Reference: 20 USCA 6316, 20 USCA 6318 (No Child Left Behind Act) Administrative Procedure for Policy #1260

**APPENDIX B: DISTRICT PERMISSION TO PERFORM STUDY**



Assessment and School Improvement

Kristin Gekiere, Ph.D., Director

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February 13, 2012

Wayne State University  
College of Education

Re: Amy Zelidman  
Application to Conduct Research in Farmington Public Schools

To Whom It May Concern:

The Application to Conduct Research has been approved by the Research Approval Committee. Please consider this letter as acceptance and approval to conduct research:

To assess student responses to questionnaires evaluating physical, verbal, relational, and cyber bullying behavior, moral disengagement and empathy as a moderator in order to enhance awareness regarding the detrimental consequences bullying behavior and determine whether increases in empathy correlate with lower bullying behavior and moral disengagement.

Please contact Allen Archer, Principal of O.E. Dunkel Middle School to notify him of your work and timelines. You will need to follow district policy regarding the survey administration. Given the content of your surveys, you will need to notify the parents of the survey administration and parents will have to sign a waiver of consent if they do not wish for his or her student to participate in the survey. You will also need to provide copies of the surveys in the office for parents to view. We will be administering a climate survey to all students mid April.

If you have any further questions, please contact me.

Sincerely,

A handwritten signature in cursive script that reads "Kristin Gekiere".

Kristin Gekiere, Ph.D.,  
Director of Assessment and School Improvement

Cc: Allen Archer, Ken Sanders, Steve Vercellino

**APPENDIX C: NOTIFICATION TO THE PRINCIPAL**

February 25, 2012

Re: Notification of Dissertation Research

To: Principal Allen Archer,

My name is Amy Zelidman, FPS alumnus, and current Doctoral candidate with Wayne State University. I am writing to inform you that permission was granted by the district's Director of Assessment and School Improvement, Dr. Gekiere, to allow the administration of questionnaires to your students for the completion of my dissertation research, titled:

Empathy as a Moderator of Adolescent Bullying Behavior and Moral Disengagement

I am hoping to administer these questionnaires sometime toward the end of April. Attached is the information sheet I will send to parents notifying them of the study with an option to 'opt out' his or her child from participation. I will leave the questionnaires in the front office of both schools for parents to review and ask that they return the signed slip to the front office in order to have a list of those students who will not be participating. All students whose parents do not sign the waiver will be asked to complete a packet of questionnaires, which should take no longer than 30 minutes to administer and complete. This process allows complete anonymity, as all students who participate will not be identified in any way.

As you and I previously discussed, I will be utilizing the cafeteria for the administration of the questionnaires, but I am open to whatever procedure you deem appropriate if this decision has since changed. We also discussed utilizing the listserv email addresses of parents in order to inform them of the study. I would be happy to answer any further questions or concerns you may have and can be contacted at 248-514-5354 or via email at amyzelidman@gmail.com. I look forward to conducting this research in your school and thank you kindly for your cooperation.

Thank you,

Amy Zelidman, MA, LLP

## APPENDIX D: PARENTAL RESEARCH INFORMATION SHEET

### Title of Study:

*Empathy as a Moderator of Adolescent Bullying Behavior and Moral Disengagement*

### Purpose:

You are being asked to allow your child to be in a doctoral research study at his or her school that is being conducted by Amy Zelidman from Wayne State University's Department of Education (and FPS alumnus) to examine perceptions and experiences with bullying, moral beliefs, and empathy. Your child has been selected because they are a student at O. E. Dunkel Middle School.

### Study Procedures:

If you choose to allow your child to assist in this study, they will be asked to complete a set of questionnaires, which should take no more than 20 minutes. The surveys will consist of general demographic data including age/grade, gender, and race/ethnicity along with 6 questionnaires regarding your child's experiences with (physical, verbal, relational/social, and cyber) bullying behavior and his or her perceptions/beliefs about immoral behavior, and empathy. Should you or your child choose to withdraw from participation at any time, this may be done without consequence. The questionnaires will be available in the school's front office for your review.

### Benefits:

There is no direct benefit to your child specifically, however, the potential benefit of his or her participation may help by providing researchers, educators, and policy makers with the opportunity to reevaluate and/or improve upon anti-bullying programs.

### Risks/Costs/Compensation:

This research poses no foreseeable risk to any of the participants in the study. There are no costs to you or your child to participate in this study. You or your child will not be paid for taking part in this study.

### Confidentiality:

All information collected about your child during the course of this study will be kept confidential to the extent permitted by law. All information collected about your child during the course of this study will be kept without any identifiers. Your child will only be asked to sign the assent form agreeing to participate and only the investigator will have access to your child's answers.

**Voluntary Participation /Withdrawal:**

Your child's participation in this study is voluntary. You are free to withdraw your child at any time. Your decision about enrolling your child in the study will not change any present or future relationships with Wayne State University or its affiliates, your child's school, your child's teacher, your child's grades or other services you or your child are entitled to receive.

**Questions:**

If you have any questions about this study now or in the future, you may contact Amy Zelidman at (248) 688-0941. If you have questions or concerns about your rights as a research participant, the Chair of the Institutional Review Board can be contacted at (313) 577-1628. If you are unable to contact the research staff, or if you want to talk to someone other than the research staff, you may also call (313) 577-1628 to ask questions or voice concerns or complaints.

**Participation:**

If you agree to allow your child to participate in this study, nothing further is requested and you do not need to fill out the form below. However, if you do NOT wish to have your child participate in the study, you may fill out the form below and return it to the front office of your child's school by October 24. You may also contact the principal investigator (PI), Amy Zelidman by phone (248) 688-0941 or email: amyzelidman@gmail.com if you have any further questions.

I do not allow my child _____ to participate in this research study.	
Name	
_____	
Printed Name of Parent	
_____	
Signature of Parent	_____
	Date

Data collection will take place on October 29, which is a half day of school. Copies of the questionnaires will be available in the front office for your review. Please return this form no later than October 24 to the school's front office only if you do NOT wish for your child to participate in this research study:

## APPENDIX E: STUDENT RESEARCH INFORMATION SHEET

**Title of Study:** Empathy as a Moderator of Adolescent Bullying Behavior and Moral Disengagement

**Principal Investigator (PI):** Amy Zelidman, WSU Education Department - (248) 688-0941

### Purpose:

You are being asked to be in a research study that will explore issues related to your thoughts on bullying, morals, and empathy. This study is being conducted with all students at O. E. Dunckel Middle School.

### Study Procedures:

If you agree to take part in this study, you will be asked to fill out questionnaires related to bullying behavior, morals, and empathy. You have the right not to participate in this study and it will have no impact on your academic standing. The questionnaires will take approximately 20 minutes to complete during one class period.

### Benefits:

As a participant in this research study, there will be no direct benefit for you; however, information from this study may benefit other people now or in the future.

### Risks:

There are no known risks at this time to participation in this study.

### Costs:

There will be no costs to you for participation in this research study.

### Compensation:

You will not be paid for taking part in this study.

### Confidentiality:

All information collected about you during the course of this study will be kept anonymous with no way to identify you with your answers.

### Voluntary Participation/Withdrawal:

Taking part in this study is voluntary. You are free to not answer any questions or withdraw at any time. Your decision will not affect your academic standing.



**Questions:**

If you have any questions about this study now or in the future, you may contact Amy Zelidman at the following phone number 248-514-5354. If you have questions or concerns about your rights as a research participant, the Chair of the Human Investigation Committee can be contacted at (313) 577-1628. If you are unable to contact the research staff, or if you want to talk to someone other than the research staff, you may also call (313) 577-1628 to ask questions or voice concerns or complaints.

**Participation:**

By completing the surveys you are agreeing to participate in this study.

**APPENDIX F: DIRECTIONS FOR ADMINISTRATION**

“The purpose of this survey is to learn about your experiences with bullying and how you feel about certain moral dilemmas (like what you think is okay and not okay) and empathy, which is the ability to experience and understand the feelings of someone else. Bullying is defined as a form of aggression that is intentional, repeated, and involves an imbalance of power between the people involved. Bullying can be physical (like shoving or hitting), verbal (like name-calling or yelling), relational (like intentionally leaving someone out) and cyber (like leaving negative comments on someone’s web page or texting someone a rumor you heard).”

“Please do not write your name anywhere on the survey. This is an anonymous survey and teachers or parents will not know your answers. Read each question carefully and try not to leave any questions blank. If you have any questions, please feel free to ask me. Thank you for your participation. Please begin now and turn in the packet to me when you are done.”

### APPENDIX G: DEMOGRAPHIC SURVEY

**Instructions:** Below are a few questions about your age, gender, and ethnicity. Using the answers below, please circle the answer that best describes you.

1. What grade are you currently in?	7	8	
2. Are you male or female?	Female		Male
3. What is your race/ethnicity?	African American	Asian	Caucasian
	Hispanic	Native American	Other

**APPENDIX H: (APRI-B)**

**Instructions:** Below is a series of statements about the experiences you may have had with your peers over the past year. Please place an “X” next to each statement about how often you did or did not experience each one.

In the past year I...	Never	Sometimes	Once or twice a month	Once a week	Several times a week	Everyday
1. Teased a student by saying mean things to them						
2. Pushed or shoved a student						
3. Made rude remarks at a student						
4. Got my friends to turn against a student						
5. Made jokes about a student						
6. Bumped/crashed into a student on purpose as they walked by						
7. Picked on a student by swearing at them or calling them names						
8. Told my friends things about a student to get them into trouble						
9. Got into a physical fight with a student because I didn't like them						
10. Said mean things about someone's looks they didn't like						
11. Got other students to start a rumor about a student						
12. Slapped or punched a student						
13. Got other students to ignore a student						
14. Made fun of a student by calling them names						
15. Threw something at a student to hit them on purpose						
16. Threatened to physically hurt or harm a student						
17. Left someone out of activities or games on purpose						
18. Kept a student away from me by giving them mean looks						

### APPENDIX I: APRI-T

**Instructions:** Below is a series of statements about the experiences you may have had with your friends or peers over the past year. Please place an “X” next to each statement about how often you did or did not experience each one.

In the past year I...	Never	Sometimes	Once or twice a month	Once a week	Several times a week	Everyday
1. I was teased by students saying mean things to me						
2. I was pushed or shoved						
3. A student wouldn't be friends with me because other people didn't like me						
4. A student made rude remarks at me						
5. I was hit or kicked hard						
6. A student ignored me when they were with their friends						
7. Jokes were made up about me						
8. Students crashed into me on purpose as they walked by						
9. A student got their friends to turn against me						
10. My property was damaged on purpose						
11. Things were said about my looks I didn't like						
12. I wasn't invited to a student's place because other people didn't like me						
13. I was ridiculed by students saying things to me						
14. A student got other students to start a rumor about me						
15. Something was thrown at me to hit me						
16. I was threatened to be physically hurt or harmed						
17. I was left out of activities or games on purpose						
18. I was called names I didn't like						

**APPENDIX J: (BES)**

**Instructions:** Below is a series of statements about the experiences you may have had with your peers over the past year. Please place an “X” next to each statement about how often you did or did not experience each one.

	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neither Agree or Disagree</b>	<b>Agree</b>	<b>Strongly Agree</b>
1. My friend's emotions don't affect me much					
2. After being with a friend who is sad about something, I usually feel sad					
3. I can understand my friend's happiness when she/he does well at something					
4. I get frightened when I watch characters in a good scary movie					
5. I get caught up in other people's feelings easily					
6. I find it hard to know when my friends are frightened					
7. I don't become sad when I see other people crying					
8. Other people's feelings don't bother me at all					
9. When someone is feeling 'down' I can usually understand how they feel					
10. I can usually work out when my friends are scared					
11. I often become sad when watching sad things on TV or in films					
12. I can often understand how people are feeling even before they tell me					
13. Seeing a person who has been angered has no effect on my feelings					
14. I can usually figure out when people are cheerful					
15. I tend to feel scared when I am with friends who are afraid					
16. I can usually realize quickly when a friend is angry					
17. I often get swept up in my friend's feelings					
18. My friend's unhappiness doesn't make me feel anything					
19. I am not usually aware of my friend's feelings					
20. I have trouble figuring out when my friends are happy.					

**APPENDIX K: CBQ**

**Instructions:** Below is a series of statements about the experiences you may have had with your peers over the past year. Please place an “X” next to each statement about how often you did or did not experience each one.

In the past year I have...	Never	Sometimes	Often
1. Sent threatening or insulting messages to someone by email			
2. Sent threatening or insulting text messages to someone			
3. Posted humiliating images/pictures of a classmate on the Internet			
4. Sent links of humiliating images/pictures of someone to other people to see			
5. Wrote embarrassing jokes, rumors, gossip, or comments about a classmate on the Internet.			
6. Sent links with rumors, gossip, etc., of a classmate or an acquaintance to other people to read			
7. Got someone’s password and sent email messages to others using this person’s name, which could have gotten the person in trouble or embarrassed them.			
8. Took pictures or made a video on my cell phone while a group of people teased or humiliated someone by forcing them to do something embarrassing			
9. Sent the pictures or video to other people			
10. Recorded a video or took pictures with my cell phone of someone being hit or punched by another person			
11. Sent these recorded videos or pictures to other people			
12. Broadcasted or distributed other peoples secrets or personal information on the Internet that could be damaging or embarrassing			
13. Deliberately excluded, blocked, or deleted someone from an online group (Facebook, Twitter, IM, etc.)			
14. Repeatedly sent intimidating or threatening messages on the Internet or on my cell phone			
15. Recorded a video or took a photo with my cell phone of classmates engaged in some form of sexual behavior (making out).			
16. Sent these images or videos to other people			

**APPENDIX L: (MMDS)**

**Instructions:** Below is a series of general statements about your beliefs or opinions on different problems or dilemmas you may or may not have experienced. Please place an "X" next to each statement about whether you agree, disagree or neither agree or disagree about each statement.

	Agree	Neither Agree or Disagree	Disagree
1. It is alright to fight to protect your friends			
2. Slapping and shoving someone is just a way of joking			
3. Damaging property is no big deal when you consider that others are beating people up or worse			
4. A kid in a gang should not be blamed for the trouble the gang causes			
5. If kids are living under bad conditions they cannot be blamed for behaving aggressively			
6. It is okay to tell small lies because they don't really do any harm			
7. Some people deserve to be treated like animals			
8. If kids fight and misbehave in school, it is their teacher's fault			
9. It is alright to beat someone who bad mouths your family			
10. To hit obnoxious or annoying classmates is just giving them "a lesson."			
11. Stealing some money is not too serious compared to those who steal a lot of money			
12. A kid who only suggests breaking rules should not be blamed if other kids go ahead and do it			
13. If kids are not disciplined they should not be blamed for misbehaving			
14. Children do not mind being teased because it shows interest in them			
15. It is okay to treat somebody badly who behaved like a "worm."			
16. If people are careless where they leave their things it is their own fault if it gets stolen			
17. It is alright to fight when your group's honor is threatened			
18. Taking someone's bicycle without their permission is just "borrowing it."			
19. It is okay to insult a classmate because beating him/her is worse			



20. If a group decides together to do something harmful it is unfair to blame a single kid in the group for it.			
21. Kids cannot be blamed for using bad words when all their friends do it			
22. Teasing someone does not really hurt them			
23. Someone who is obnoxious or annoying does not deserve to be treated like a human being			
24. Kids who get mistreated usually do things to deserve it			
25. It is alright to lie to keep your friends out of trouble			
26. It is not a bad thing to "get high" once in a while			
27. Compared to the illegal things people do, taking something from a store without paying for it is not very serious			
28. It is unfair to blame a child who had only a small part in the harm caused by a group			
29. Kids cannot be blamed for misbehaving if their friends pressured them to do it			
30. Insults among children do not hurt anyone			
31. Some people have to be treated roughly because they lack feelings that can be hurt			
32. Children are not at fault for misbehaving if their parents pressure them too much			

**APPENDIX M: SDS (sf)**

**Instructions:** Below is a series of general statements about your beliefs about yourself. Please place an “X” next to each statement about whether you agree, disagree, or neither agree or disagree about each statement.

	True	False
1. It is sometimes hard for me to go on with my work if I am not encouraged		
2. I sometimes feel resentful when I don't get my way		
3. On a few occasions, I have given up something because I thought too little of my ability		
4. There have been times when I felt like rebelling against people of authority even though I knew they were right		
5. No matter who I'm talking to, I'm always a good listener		
6. There have been occasions when I have taken advantage of someone		
7. I'm always willing to admit it when I make a mistake		
8. I sometimes try to get even, rather than forgive and forget		
9. I am always courteous, even to people who are disagreeable		
10. I have never been irritated when people expressed ideas very different from my own		
11. There have been times when I was quite jealous of the good fortune of others		
12. I am sometimes irritated by people who ask favors of me		
13. I have never deliberately said something that hurt someone's feelings		


## APPENDIX N: IRB APPROVAL



IRB Administration Office  
87 East Canfield, Second Floor  
Detroit, Michigan 48201  
Phone: (313) 577-1628  
FAX: (313) 993-7122  
<http://irb.wayne.edu>

## NOTICE OF EXPEDITED APPROVAL

To: Amy Zelidman  
College of Education

From: Dr. Scott Millis   
Chairperson, Behavioral Institutional Review Board (B3)

Date: May 25, 2012

RE: IRB #: 049012B3E  
Protocol Title: Empathy as a Moderator of Adolescent Bullying Behavior and Moral Disengagement  
Funding Source:  
Protocol #: 1205010876

Expiration Date: May 24, 2013

Risk Level / Category: 45 CFR 46.404 - Research not involving greater than minimal risk

The above-referenced protocol and items listed below (if applicable) were **APPROVED** following *Expedited Review Category (#7)\** by the Chairperson/designee for the Wayne State University Institutional Review Board (B3) for the period of 05/25/2012 through 05/24/2013. This approval does not replace any departmental or other approvals that may be required.

- Revised Protocol Summary Form (received in the IRB Office 05/17/2012)
- Protocol (received in the IRB Office 04/26/2012)
- Receipt of letter of support from Farmington Public Schools (dated 02/13/2012)
- The request for a waiver of the requirement for written documentation of informed consent has been granted according to 45 CFR 46.117(1)(2). Justification for this request has been provided by the PI in the Protocol Summary Form. The waiver satisfies the following criteria: (i) The only record linking the participant and the research would be the consent document, (ii) the principal risk would be potential harm resulting from a breach of confidentiality, (iii) each participant will be asked whether he or she wants documentation linking the participant with the research, and the participant's wishes will govern, (iv) the consent process is appropriate, (v) when used requested by the participants consent documentation will be appropriate, (vi) the research is not subject to FDA regulations, and (vii) an information sheet disclosing the required and appropriate additional elements of consent disclosure will be provided to participants not requesting documentation of consent.
- Parental Information Sheet (dated 05/13/2012)
- Behavioral Documentation of Adolescent Assent Form for ages 12-14 (dated 05/13/2012)
- Data collection tools

- \* Federal regulations require that all research be reviewed at least annually. You may receive a "Continuation Renewal Reminder" approximately two months prior to the expiration date; however, it is the Principal Investigator's responsibility to obtain review and continued approval **before** the expiration date. Data collected during a period of lapsed approval is unapproved research and can never be reported or published as research data.
- All changes or amendments to the above-referenced protocol require review and approval by the IRB **BEFORE** implementation.
- Adverse Reactions/Unexpected Events (AR/UE) must be submitted on the appropriate form within the timeframe specified in the IRB Administration Office Policy (<http://www.irb.wayne.edu/policies-human-research.php>).

## NOTE:

1. Upon notification of an impending regulatory site visit, hold notification, and/or external audit the IRB Administration Office must be contacted immediately.

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**ABSTRACT****EMPATHY AS A MODERATOR OF ADOLESCENT BULLYING BEHAVIOR AND MORAL DISENGAGEMENT AFTER CONTROLLING FOR SOCIAL DESIRABILITY**

by

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May 2014

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The purpose of this study was to assess the moderating influence empathy has on the associations between adolescent bullying behavior and moral disengagement after controlling for social desirability (e.g., response bias). 676 students in 7th and 8th grade from a suburban middle school in Southeast Michigan participated in this study in the fall of 2012.

Results showed male respondents were more likely than female respondents to (a) report engaging in all forms of traditional bullying behavior overall, including physical, verbal, and social bullying and (b) report higher rates of physical victimization and moral disengagement. Female respondents were more likely to (a) report social victimization than male respondents and (b) report higher rates of empathic responses. Eighth graders were more likely than 7th graders to (a) report engaging in all forms of traditional bullying behavior overall, including physical, verbal, and social bullying and (b) reported higher rates of moral disengagement; while 7th graders reported higher levels of social desirability than 8th graders. A main effect for ethnicity was established in reports of physical and cyber bullying, along with reports of empathy; however, ethnicity decreased in significance for both forms of bullying once they were

added to the regression model, thereby no longer contributing to the model to a significant degree. Participants who responded in a socially desirable manner were significantly less likely to (a) report engaging in all forms of bullying and victimization and (b) report moral disengagement beliefs, in comparison to those reporting less socially desirable responses. Those who responded as high in moral disengagement were more likely to report participating in all forms of bullying, including verbal, social, physical and cyber bullying compared to those who scored lower on moral disengagement. Adolescents classified as both traditional and cyber bullies reported the highest levels of moral disengagement and those who reported participating in neither form of bullying had the lowest levels of moral disengagement.

The effects of social desirability on moral disengagement and all methods of bullying behavior depend on the empathy group (low, medium, high) of participants. While the main effect of empathy was statistically significant regarding overall bullying, the moderating effect that it had on moral disengagement was even stronger; therefore, the relationship between empathy and moral disengagement is further moderated by social desirability. Aside from verbal bullying, empathy does have a contrasting influence on the direction of the relationships between moral disengagement and the remaining bullying variables (physical, social, and cyber). This means, as empathy increases, moral disengagement and involvement in bullying behavior decreases, and as empathy decreases, moral disengagement and involvement in bullying behavior increases. The potential roles these variables play in present and future cognitive and behavioral research is substantial.



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