

RELATIONSHIP BETWEEN THE PROCESSES OF MORAL DISENGAGEMENT AND  
YOUTH PERCEPTIONS OF CYBERBULLYING BEHAVIORS DURING THEIR FINAL  
SEMESTER OF HIGH SCHOOL

By

HOLLY TURNER MOSES

A DISSERTATION PRESENTED TO THE GRADUATE SCHOOL  
OF THE UNIVERSITY OF FLORIDA IN PARTIAL FULFILLMENT  
OF THE REQUIREMENTS FOR THE DEGREE OF  
DOCTOR OF PHILOSOPHY

UNIVERSITY OF FLORIDA

2013

© 2013 Holly Turner Moses

To my husband—without his encouragement, support, patience, and most of all, unwavering love, this dream would not have been realized

## ACKNOWLEDGMENTS

So many people endured this 5-year journey with me. To say that I was “blessed” by the outpouring of love and support from family, friends, and colleagues would be an understatement. I will attempt to pay tribute to those individuals who helped me to “keep swimming” throughout this process.

First, I must thank my mom, and the long lineage of strong females she (and I) were born from. No goal was made clearer to me, as a child, than the fact that I was going to college. Little did we know that I would graduate a Gator three times, and also become the first “doctor” in our (immediate) family. I thank Mom and Dad for caring so deeply about my educational aspirations; and for providing emotional, spiritual and financial support along the way.

As the last of four girls, I must thank my sisters, BJ, Wendy, and Amy, for demonstrating the payoff for hard work and perseverance. They all served as excellent role models to me and shaped me in more ways than I can count. I love my “Ya-Yas” so very much!

The following ladies in my life feel like sisters: Samantha, Sara, Alexa, and Catie. I do not know what I would do without them. We are cosmically connected, and I could not have achieved this milestone without their love, support, and encouragement. I love them all very much, and I am eternally grateful for their friendship.

I thank Pam and Sarai, my mothers-in-law, as well as Erin and Allison, my sisters-in-law, for their love and support. They often asked how school was going, inquired about my research, and told me everything would work out. I am grateful for their prayers and encouragement throughout this process.

I also owe great thanks to my PhD friends: Monica Webb, Julia Varnes, Taryn Buckley, Gungeet Joshi, Naz Erenguc, Julie Mertin, Karina Hensberry, Katrina Short, and Rhonda Williams. This group of amazing scholars provided stress relief and emotional support whenever needed, and undoubtedly made this process manageable. I love that I earned this degree with these ladies, and truly thank each of them for the support they provided.

I thank my committee members (Drs. Dorene Ross, Alyson Adams, R. Morgan Pigg, Rosemary Barnett, and Jann MacInnes) for their patience, encouragement, and unwavering support. I appreciate the unique gifts and special talents each of them shared with me. I am eternally grateful for the attention shown to me, time devoted to me, and sage advice shared with me.

I also acknowledge my precious son, Turner. Many have referred to me as a super hero in disguise because I balanced a full-time job and doctoral program, while keeping up with a toddler. The truth is that Turner was my sunshine at the end of the day. No matter how tired, stressed out, or discouraged I was, Turner instantly brightened my day. I love Turner Lee Philip to the moon and back!

Finally, I would be remiss if I did not acknowledge the myriad contributions made by my husband and soul mate, Brian J. Moses. I asked him to bear the social, financial, and emotional burden of living with a part-time doctoral student determined to maintain a full-time job. In return, he made my life easier and less stressful. Simply put, he made this doctoral degree possible. I love Brian more than words could ever say, and I feel deeply blessed to have such an amazing partner to enjoy life with.

## TABLE OF CONTENTS

	<u>page</u>
ACKNOWLEDGMENTS .....	4
LIST OF TABLES .....	9
LIST OF FIGURES .....	11
ABSTRACT .....	12
CHAPTER	
1 INTRODUCTION .....	14
Problem .....	15
Rationale.....	15
Research Questions .....	17
Delimitations .....	17
Limitations.....	18
Assumptions .....	19
Definition of Terms.....	19
Summary .....	20
2 LITERATURE REVIEW .....	22
Youth Violence and Bullying in the United States .....	22
Cyberbullying .....	26
Definition .....	28
Repeated communication .....	29
Intended harm or discomfort .....	30
Definition Adopted for my Study .....	30
Impact of Cyberbullying on Youth.....	31
Health and academic concerns.....	31
Aggressive behaviors and violence.....	32
Suicide .....	33
Prevalence of Cyberbullying.....	34
Cyberbullying and Traditional Bullying .....	37
Theory of Moral Disengagement.....	40
Cognitive Restructuring .....	42
Minimizing Agency .....	43
Disregarding/Distorting Negative Consequences .....	45
Blaming/Dehumanizing the Victim.....	45
Moral Disengagement and Cyberbullying .....	47
Moral Disengagement and Bullying.....	47

	Moral Disengagement and Comparable Cyberbullying Study 1 .....	49
	Moral Disengagement and Comparable Cyberbullying Study 2 .....	53
	Conclusions for Consideration and Study Rationale .....	56
	Theory of Moral Disengagement .....	57
	Study Subjects .....	57
	Instrument Development .....	59
	Summary .....	59
3	METHODOLOGY .....	63
	Research Design .....	64
	Research Variables .....	64
	Measurements: Instrument Development Process .....	65
	Literature review .....	65
	Identify concepts and conceptual framework.....	68
	Development of Preliminary Measures.....	68
	Review by Expert Panel .....	70
	Cognitive Interviews .....	72
	Pilot Test .....	74
	Formal investigation .....	79
	Summary .....	80
4	RESULTS .....	83
	Instrument.....	83
	Pilot Test .....	84
	Final Study .....	86
	Demographics.....	87
	Research Question 1: .....	90
	Research Question 2: .....	92
	Research Question 3: .....	94
	Research Question 4: .....	97
	Research Question 5: .....	99
	Summary .....	100
5	SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS.....	116
	Summary and Discussion .....	117
	Cyberbullying and Moral Disengagement.....	117
	Acceptability for cyberbullying and cyberbullying behaviors .....	119
	Seriousness for cyberbullying behaviors.....	121
	Acceptability for cyberbullying based on victim characteristics .....	124
	Seriousness for cyberbullying based on victim characteristics.....	126
	Justification for cyberbullying .....	128
	General Findings from the MD Scales.....	129
	Prevalence of Cyberbullying.....	133
	Cyberbullying Observers .....	135

Implications.....	135
Implications for Research.....	136
Implications for Health Educators.....	137
Implications for School Officials.....	139
Final Thoughts.....	140

APPENDIX

A COGNITIVE INTERVIEW CONSENT.....	149
B COGNITIVE INTERVIEW GUIDE.....	151
C STUDENT EMAIL CONTACT: COGNITIVE INTERVIEW.....	153
D PILOT SURVEY CONSENT.....	154
E PILOT SURVEY INSTRUMENT.....	156
F STUDENT EMAIL CONTACT: PILOT STUDY.....	168
G FINAL STUDY SURVEY CONSENT.....	171
H FINAL SURVEY INSTRUMENT.....	173
I STUDENT EMAIL CONTACT: FINAL STUDY.....	185
LIST OF REFERENCES.....	189
BIOGRAPHICAL SKETCH.....	197

## LIST OF TABLES

<u>Table</u>	<u>page</u>
4-1 Processes of Moral Disengagement sub scale reliability scores .....	102
4-2 Processes of Moral Disengagement sub scale inferential statistics.....	102
4-3 Age of survey participants .....	102
4-4 Race breakdown for female survey participants and total population.....	103
4-5 Race breakdown for male survey participants and total population.....	103
4-6 Participant sexual orientation.....	104
4-7 Type of high school attended.....	104
4-8 Participant high school popularity level.....	104
4-9 Correlations between the four processes of moral disengagement, acceptability for cyberbullying, and acceptability for cyberbullying behaviors...	105
4-10 Regression coefficients for the four processes of moral disengagement and acceptability for cyberbullying.....	105
4-11 Regression coefficients for moral disengagement and acceptability for cyberbullying behaviors (collapsed).....	105
4-12 Regression coefficients for the four processes of moral disengagement and acceptability for cyberbullying behaviors (individually) .....	106
4-13 Correlations between the four processes of moral disengagement and level of seriousness regarding cyberbullying behaviors .....	107
4-14 Regression coefficients for moral disengagement and level of seriousness regarding cyberbullying behaviors (collapsed).....	108
4-15 Regression coefficients for moral disengagement and level of seriousness regarding cyberbullying behaviors (individually) .....	108
4-16 Correlations between the four processes of moral disengagement and acceptability for cyberbullying based on victim characteristics .....	110
4-17 Regression coefficients for moral disengagement and acceptability for cyberbullying based on victim characteristics (collapsed) .....	110
4-18 Regression coefficients for moral disengagement and acceptability for cyberbullying based on victim characteristics (individually) .....	111

4-19	Correlations between the four processes of moral disengagement and level of seriousness regarding cyberbullying based on victim characteristics.....	112
4-20	Regression coefficients for moral disengagement and level of seriousness regarding cyberbullying based on victim characteristics (collapsed) .....	113
4-21	Regression coefficients for moral disengagement and level of seriousness regarding cyberbullying based on victim characteristics (individually) .....	113
4-22	Correlations between the processes of moral disengagement and justification for cyberbullying .....	115
4-23	Regression coefficients for moral disengagement and justification for cyberbullying.....	115
5-1	Acceptability of cyberbullying .....	143
5-2	Acceptability and cyberbullying behaviors (percentage).....	143
5-3	Seriousness and cyberbullying behaviors (percentage) .....	144
5-4	Acceptability and victim characteristics (percentage) .....	144
5-5	Seriousness and victim characteristics (percentage).....	145
5-6	Justification for cyberbullying.....	145
5-7	MD1 cognitive restructuring frequency data (percentages) .....	146
5-8	MD2 minimizing agency frequency data (percentages).....	146
5-9	MD3 distortion of negative consequences frequency data (percentages) .....	147
5-10	MD4 blaming or dehumanizing the victim frequency data (percentages) .....	147
5-11	Inferential statistics for the MD scales .....	148
5-12	Cyberbullying among participants during their last semester of high school (percentages) .....	148

## LIST OF FIGURES

<u>Figure</u>	<u>page</u>
2-1 Theory of moral disengagement.....	62
3-1 Instrument development process.....	82

Abstract of Dissertation Presented to the Graduate School  
of the University of Florida in Partial Fulfillment of the  
Requirements for the Degree of Doctor of Philosophy

RELATIONSHIP BETWEEN THE PROCESSES OF MORAL DISENGAGEMENT AND  
YOUTH PERCEPTIONS OF CYBERBULLYING BEHAVIORS DURING THEIR FINAL  
SEMESTER OF HIGH SCHOOL

By

Holly Turner Moses

December 2013

Chair: Dorene D. Ross  
Major: Curriculum and Instruction

My study examined the relationship between the processes of moral disengagement and students' perception of cyberbullying during their last semester of high school. The theory of Moral Disengagement (MD) was applied to explore the correlation between the constructs. A modified version of Krause's 2002 instrument development process was applied to create a behavior-specific instrument assessing student perceptions of cyberbullying behaviors and their experiences with electronic media. The final instrument, *Student Experiences with Electronic Media and Perceptions of Cyberbullying Behaviors*, included 23 questions, and was administered online to the target population.

My study used a correlational research design to describe the statistical association among multiple variables. Pearson correlation coefficients were calculated to examine the relationship between dependent and independent variables. Most of the correlations were positive and significant, and ranged from moderately weak to weak, indicating linear associations between dependent variables and the processes of MD.

Linear regression analyses were conducted for each research question to better describe the relationship between dependent variables and the processes of MD. Significant regression equations were found, indicating significant results for each research question. Study results suggested that students justify cyberbullying, specific cyberbullying behaviors, and cyberbullying based on certain victim characteristics using the processes of MD. While MD1, cognitive restructuring, was used consistently by students to justify cyberbullying, MD3, distortion of negative consequences, and MD4, blaming/dehumanizing the victim were also used by students. MD2, minimizing agency, was the only process of MD not significantly associated with students' cyberbullying perceptions.

Study results confirmed that cyberbullying is a real issue among high school students, as participants' reported a high degree of involvement in cyberbullying as the perpetrator, victim, and observer. Because this study was the first of its kind, future studies are needed to address cyberbullying and the theory of MD. By engaging in more research on the theory of moral disengagement, advances in this area of cyberbullying research can inform existing intervention and prevention efforts, and influence future school initiatives to combat cyber victimization.

## CHAPTER 1 INTRODUCTION

Bullying is a pervasive and serious problem in today's schools. While some conflict and harassment are typical with peer relationships, bullying presents a serious danger to adolescent well-being, social functioning, and overall healthy youth development (Nansel et al., 2001). Numerous negative health and academic concerns result from bullying involvement (Dake, Price & Telljohann, 2003), and this form of peer aggression is considered a common precursor for more-serious violent behaviors, such as weapon carrying, frequent fighting, and injuries resulting from fighting (Nansel, Overpeck, Haynie, Ruan, & Scheidt, 2003; Kim, Leventhal, Koh, Hubbard, & Boyce, 2006). Researchers describe bullying using several categories: physical, verbal, and relational (Smith & Slonje, 2010). Typically, physical and verbal bullying occurs face-to-face and in a direct manner (i.e., hitting a peer; calling a peer a bad name). Relational bullying more often occurs in an indirect manner (i.e., spreading rumors about a peer).

In recent years a new category of bullying has surfaced in which the peer aggression occurs through various forms of electronic media (Smith & Slonje, 2010). This form of peer aggression is called cyberbullying, or electronic aggression, and it is quickly becoming a serious concern among children and adolescents. Society has experienced exponential growth in electronic and computer-based communication since the turn of the 21<sup>st</sup> century. This growth has led to development of new communication media and has changed the way individuals and groups socially interact (Mishna, Cook, Gadalla, Daciuk, & Solomon, 2010). Youth, in particular, have become technologically savvy and often lead the way in adapting new technologies to everyday use (Agatson, Kowalski & Limber, 2007). Unfortunately, this expansion of electronic and computer-

based communication has also led to youth cyberbullying involvement across the United States (Englander & Muldowney, 2007).

### **Problem**

Cyberbullying, a form of peer victimization committed by one individual, or a group of individuals through electronic or digital media, includes the intention to communicate aggressive messages for the purpose of inflicting harm on others (Tokunaga, 2010). While types of cyberbullying are numerous, most actions involve computers and cellular phones (Patchin & Hinduja, 2006). A 2007 Massachusetts Aggression Reduction Center (MARC) survey of undergraduate students found that 24% of survey respondents reported cyberbullying, and 40% identified themselves as victims of cyberbullying (Englander & Muldowney, 2007).

Many negative health and academic concerns result from cyberbullying involvement, including poor academic performance, school dropout, physical violence, and psychological impairment (Kowalski, Limber, & Agatston, 2012; Tokunaga, 2010; Willard, 2006). While some consequences can be subtle in nature, extreme cases of cyberbullying have the potential to cause physical danger or life threatening situations. Suicide, the third leading cause of death for Americans ages 10 to 24 (The Centers for Disease Control and Prevention, 2012), represents one such consequence of youth involvement in cyberbullying. The fact that cyberbullying thrives in the “always wired” youth population (Kiriakidis & Kavoura, 2010, p. 86) underscores the importance of increased research on this form of youth violence.

### **Rationale**

Media awareness of cyberbullying and the bulk of cyberbullying research is less than ten years old (Smith & Slonje, 2010). Because this phenomenon is so new,

relatively little is known about some aspects of cyberbullying. Dooley, Pyzalski, & Cross (2009) identified three areas of cyberbullying literature needing further research: (1) the motivations and goals of those who cyberbully, (2) the long-term impact of being cyberbullied, and (3) the extent of differences between cyberbullying and traditional bullying (p. 187). A few studies explored the motivations of those who engage in traditional bullying using Bandura's (1991) theory of moral disengagement. In fact, several studies demonstrated a strong link between adolescent bullying behaviors and elevated moral disengagement scores (Hymel, Rocke-Henderson, & Bonanno, 2005; Obermann, 2011; Pornari & Wood, 2010; Salmivalli & Voeten, 2004), indicating that moral disengagement is an important aspect to consider when explaining the reasoning behind peer aggression (Perren & Gutzwiller-Helfenfinger, 2012). Unfortunately, research examining the relationship between youth cyberbullying and the processes of moral disengagement is scarce. In fact, only two studies explored this relationship; one study reported a relationship between moral disengagement and cyberbullying, while the other did not. These limited findings support the need for additional research to explore the relationship of youth cyberbullying engagement and the theory of moral disengagement.

My study aimed to explore the relationship between youth cyberbullying behaviors and the theory of moral disengagement. More specifically, my study aimed to find out whether college freshman, looking back at cyberbullying incidents that occurred during their final semester of high school, justified the aggressive behavior(s) through the processes of moral disengagement. Because my study is the first of its kind, results may indicate how adolescents rationalize engagement in behaviors that cause harm to

others. Understanding how youth interpret cyberbullying based on specific types of cyberbullying behaviors and victim characteristics, as well as how youth score with reference to the processes of moral disengagement can provide insight about how and/or why youth might change their perception regarding a behavior normally considered immoral, to a perception that the behavior is acceptable. Additionally, such valuable insight will provide information regarding how to reduce and eliminate cyberbullying behaviors. My study's results may have implications for surveillance, interventions, social norm campaigns, and possibly policy development at the local or school level. For this reason, the primary audience for my study includes parents, teachers, school administrators, researchers, scholars, and community members devoted to the fight against cyber victimization.

### **Research Questions**

1. Are higher levels of acceptability for cyberbullying behaviors related to higher levels of moral disengagement?
2. Are lower levels of seriousness for cyberbullying behaviors related to higher levels of moral disengagement?
3. Are higher levels of acceptability for cyberbullying based on victim characteristics related to higher levels of moral disengagement?
4. Are lower levels of seriousness for cyberbullying based on victim characteristics related to higher levels of moral disengagement?
5. Are higher levels of justification for cyberbullying among students who report cyberbullying others related to higher levels of moral disengagement?

### **Delimitations**

1. My study was conducted at a large University in the Southeastern quadrant of the United States.
2. Participants included college freshman, 18 to 20 years old who volunteered for the study.

3. Participants included college freshman who graduated from high school within the 6 months preceding the survey.
4. Data were collected through online survey software.
5. Study variables were measured using the validated and pilot tested survey: *Student Experiences with Electronic Media and Perceptions of Cyberbullying Behaviors*.
6. Data were self-reported by participants.
7. Demographic data were self-reported by participants.
8. The study used a correlational research design to describe the statistical association among multiple variables.

### **Limitations**

1. The large University purposively selected for my study may not have represented all freshman students in the Southeastern United States, nor the United States.
2. The use of a college freshman population may affect the diversity of the sample (e.g., race, socio-economic status). Additionally, this population eliminates the inclusion of former high school students not currently enrolled in college.
3. The college freshman population, although less than 6 months outside of high school, may experience difficulty remembering cyberbullying experiences prior to college.
4. The use of online survey software may have recruited a sample that over- or underrepresented critical participant characteristics (Perren & Gutzwiller-Helfenfinger, 2012).
5. Study variables were measured using a newly developed instrument, designed specifically for my study. While validity was tested and accounted for, reliability is unknown.
6. Participant responses may not have been candid or may have been based on inaccurate perceptions.
7. Demographic questions may not have captured all pertinent information about participants, and/or may have limited participants' response options.
8. The correlational research design can only report the relationship among the variables, and results from my study can only be used as a means for describing the relationship between the cyberbullying and moral disengagement variables.

## Assumptions

1. The Southeastern University selected for my study was considered adequately representative of all freshman students enrolled at highly selective higher education institutions in the United States.
2. Participants who volunteered for the study were considered adequately representative of all freshman students in the United States who experienced cyberbullying, in some capacity, during their final semester of high school. Additionally, college freshman participants were considered representative of the entire United States, despite the elimination of former high school students who were not enrolled in college at the time of the survey.
3. The college freshman population, less than 6 months outside of high school, would not experience difficulty remembering cyberbullying experiences prior to college.
4. The use of online survey software recruited a sample of all newly admitted freshman, and did not exclude any members of the target population.
5. The instrument developed for my study adequately addressed the constructs associated with the purpose of my study.
6. Participants responded with adequate levels of honesty and perception for the purpose of my study.
7. Demographic questions captured all pertinent information about participants, and did not limit participants' response options.
8. The correlational research design described the statistical association among multiple variables. If there was a positive relationship between variables, justification for further research to explore the relationship was confirmed and supported.

## Definition of Terms

1. **Bullying:** A person is bullied when he or she is exposed, repeatedly and over time, to negative actions on the part of one or more other persons, and he or she has difficulty defending himself or herself" (Olweus, 1993, p. 9).
2. **Cyberbullying:** An act in which someone repeatedly harasses, mistreats, picks on, or makes fun of another person using various forms of electronic media. Note: the behavior or action is considered to occur repeatedly when it occurs more than once or when it is viewed or forwarded more than once or by more than one person.

3. **Electronic media:** Any device or equipment (such as cell phones, computers, and tablets) that provide access to various communication tools (i.e., social media sites, text messages, online chat, email, and websites).
4. **Picking on:** The act of harassing, mistreating, or making fun of another person.
5. **Theory of Moral Disengagement:** This theory developed by Bandura (1999) describes the process by which individuals engage in the cognitive restructuring of harmful, immoral behavior into a harmless or worthy behavior, minimizing the individual's agentic role, disregarding or distorting the negative impact of the harmful behavior, or blaming/dehumanizing those who are victimized.
6. **Cognitive restructuring:** The process of morally justifying a harmful behavior by cognitively changing the behavior into one that is personally and socially acceptable; making the harmful behavior more respectable by altering the name or description of the harmful act using less derogatory language; or, by exploiting the victim, or the group in which they belong, thereby changing the harmful act into one with a high ethical purpose (Bandura, 1999).
7. **Minimizing one's agentic role:** Cognitive strategies that displace responsibility for harmful acts by minimizing or obscuring one's personal responsibility (Hymel, Rocke-Henderson & Bonanno, 2005).
8. **Disregarding/distorting the negative impact of harmful behavior:** The process of distancing oneself from the harmful act altogether, or focusing on the positive outcomes, as opposed to the negative outcomes associated with this behavior (Hymel, Rocke-Henderson & Bonanno, 2005).
9. **Blaming and dehumanizing the victim:** A cognitive strategy in which the perpetrator cognitively creates a distorted view of the person he/she is mistreating, thereby making it easier to cause harm to the individual (Bandura, 1999).

### Summary

Cyberbullying, one form of peer victimization, negatively affects youth and disrupts healthy psychosocial development. Many negative health and academic concerns result from cyberbullying involvement, including poor academic performance, school dropout, physical violence, psychological impairment, and suicide (Hinduja & Patchin, 2010; Kowalski, Limber, & Agatston, 2012; Tokunaga, 2010; Willard, 2006). Preventing cyberbullying and helping youth overcome the harmful psychosocial effects associated with cyberbullying represent important goals for parents, teachers, counselors, and

researchers. Exploring the reasons why youth engage in cyberbullying behaviors using the Theory of Moral Disengagement can provide critical information for cyberbullying prevention. Chapter 2 summarizes the professional literature describing bullying and cyberbullying associated with adolescents (primarily in the U.S.), and introduces the Theory of Moral Disengagement and the role it could play in cyberbullying prevention. A brief description of the research study concludes Chapter 2.

Chapter 3 details the methodology of the research study. My study utilized a correlational research design to describe the statistical association between multiple variables. Currently, an instrument that specifically explores high school students' perceptions of cyberbullying behaviors in relation to the theory of moral disengagement is not available. Thus, the *Survey of Student Experiences with Electronic Media and Perceptions of Cyberbullying Behaviors* was developed using Krause's (2002) nine-step comprehensive strategy for developing closed-ended survey items. Each step is discussed throughout Chapter 3, and results from the pilot survey will also be presented.

Chapter 4 focuses on the results from the final study. A description of the analysis tests run, as well as statistical findings will be discussed. Further discussion of the results will be presented in Chapter 5, as well as concluding thoughts about the research study. Additionally, study implications as related to the cyberbullying research field will be discussed. Final discussion of this chapter will focus on researcher-suggested steps for future research on cyberbullying, including recommendations for cyberbullying prevention as it relates to schools, families and community members.

## CHAPTER 2 LITERATURE REVIEW

### **Youth Violence and Bullying in the United States**

On December 2, 2010, Healthy People 2020 was launched with the vision of creating a society in which all people live long, healthy lives. This 10-year agenda was established to improve the Nation's health (HHS, Healthy People 2020, 2011) and includes four overarching goals: (1) Attain high-quality, longer lives free of preventable disease, disability, injury, and premature death; (2) Achieve health equity, eliminate disparities, and improve the health of all groups; (3) Create social and physical environments that promote good health for all; and, (4) Promote quality of life, healthy development, and healthy behaviors across all life stages. Three of these goals target injury and violence prevention, a health issue that moves beyond the individuals directly involved and affects society as a whole. Youth violence—a major public health concern around the World—is one of the leading health indicators of Healthy People 2020; and one of the violence-prevention objectives of particular concern among schools and communities is the need to reduce bullying among adolescents.

Bullying is a pervasive and serious problem in today's schools. Defined as a subset of aggressive behaviors and actions intended to cause harm or discomfort to a peer (Olweus, 2010), bullying presents a serious danger to adolescent well-being and social functioning, and a danger to overall healthy youth development (Nansel et al., 2001). Additionally, bullying was cited as a common precursor for more-serious violent behaviors, such as weapon carrying, frequent fighting, and injuries resulting from fighting (Nansel, Overpeck, Haynie, Ruan, & Scheidt, 2003; Kim, Leventhal, Hubbard, & Boyce, 2006). In a systematic review and meta-analysis of studies measuring possible

links between school bullying and criminal offending later in life, Ttofi, Farrington, Losel, and Loeber (2011) found that the probability of offending (up to 11 years later) was much higher for school bullies than for non-involved students (p. 21). Additionally, Ttofy et al. concluded that school bullying is a unique childhood risk factor for later offending, and bullying others increases the probability of adverse outcomes later in life for the bully (p. 21).

According to Olweus (1993), considered the pioneer in bullying research, “a person is bullied when he or she is exposed, repeatedly and over time, to negative actions on the part of one or more other persons, and he or she has difficulty defending himself or herself” (p. 9). Kim, Leventhal, Hubbard, and Boyce (2006, p. 1035) described bullying as a “constellation of behaviors” characterized as (1) aggressive behavior that involves unwanted, negative actions; (2) a pattern of behavior repeated over time; and, (3) an imbalance of power or strength. Many researchers believe all three characteristics must be present for an incident to be considered bullying, although some critics feel differently.

The first characteristic of bullying behavior includes intentional, aggressive behaviors that are unwanted; negative actions that impact the victim. These negative actions include attempted and actual injury or discomfort directed at a specific person, or target. These actions include aggression committed in the following forms: verbal (teasing, name-calling); physical (hitting, kicking, and shoving); or psychological/social (deliberately and maliciously excluding people, spreading rumors). Bullying behaviors can be direct or indirect. Direct bullying would include engaging in verbal aggression toward the targeted person. Indirect bullying would include spreading rumors about the

targeted person. The difference is that direct bullying is carried out directly toward the victim, and indirect bullying is directed at the victim through a third party (Dooley, Pyszalski, & Cross, 2009).

Repetition is another characteristic of bullying. According to Olweus (1993), bullying is not a one-time incident; rather, it includes repeated behaviors over time. While some argue that bullying can happen one time, Olweus posited that a one-time incident should be considered peer aggression. Additionally, Olweus (1993) identified two critical factors that separate bullying from peer aggression: bullying comprises repeated acts of intentional harm; and the relationship between a bully and victim consists of an imbalance of power, where the bully holds the power. If an altercation between peers happens once, and there has not been a history of aggression between the two persons or groups, the act is categorized as peer aggression; not bullying. Conversely, if two persons or groups of people are in an altercation, and one side has previously picked on (whether physically, verbally, or psychologically) the other side, this incident would likely be considered bullying. Regardless of one's stance on repetition as a characteristic of bullying, it is important to recognize that even when serious incidents occur only one time, they must receive immediate attention and intervention to prevent future incidents from occurring (Olweus, 2010).

As stated previously, when two persons or groups of people engage in an altercation and one side has previously picked on (whether physically, verbally, or psychologically) the other side, this incident would likely be considered bullying. However, a power imbalance is required for the incident to officially be categorized as bullying. According to Olweus (2010), bullying only occurs when one youth (bully)

exerts more power over the weaker youth (victim). Bullying centers around this power imbalance; and the bully is perceived as more powerful and exerts power over the powerless victim. Note that the power imbalance may be based on perception, rather than reality. Thus, the bully is perceived by him/herself, or others, as having more power. Often, power equates to body size and level of peer influence; however, it can also include access to embarrassing information and/or popularity level ("What is Bullying," 2013). The power, regardless of its form, is used by the bully to control or harm others. This characteristic can be used to identify risk factors for individuals who might engage in bullying behaviors and individuals who may fall victim to bullying acts, and is critically important for prevention efforts.

The national Youth Risk Behavior Survey (YRBS), administered every two years by the Centers for Disease Control and Prevention (CDC), monitors priority health risk behaviors that contribute to leading causes of death, disability, and social problems among youth and young adults in the United States. During the 2009 YRBS reporting period, 19% of U.S. adolescents in Grades 9 through 12 reported being bullied on school property during the twelve months before taking the survey (Centers for Disease Control and Prevention (CDC, 2011). In 2011, this number increased to 20.1% (CDC, 2011). Although small in percentage, this increase in the prevalence of bullying among high school-aged youth further supports the need for development and implementation of evidence-based prevention curricula and programs in America's schools.

The School Crime Supplement to the National Crime Victimization Survey (Robers, Zhang, Truman, & Snyder, 2011) collects data on students ages 12 to 18 years old and their reports of being bullied at school. In 2009, roughly 28% of students ages

12 to 18 years old reported being bullied at school during the school year. Of those students who reported being bullied at school, 19% reported being subjected to forms of verbal bullying; 29% reported being a victim of various types of psychological or social bullying; and 12% reported acts of physical bullying committed against them.

Overall, the rates of bullying at school were relatively evenly split between female and male students (29% of female students reported being bullied at school; 27% of male students reported being bullied at school). When comparing the types of bullying acts reported by students, in most cases, males and females were evenly divided. However, females were more likely to report being subjected to rumors, and being excluded from activities on purpose. Males were more likely to report acts of physical bullying being committed against them, and being coerced to engage in activities that they did not want to participate in. Despite the few slight differences between male and female students' reported experiences with bullying, bullying is a widespread issue affecting both male and female students in relatively equal numbers. Thus, bullying prevention curricula and programs must target both males and females, and must provide resources that address all types of bullying.

### **Cyberbullying**

At the turn of the 21<sup>st</sup> century, a new type of bullying emerged as a threat to the health, well-being and safety of youth—cyberbullying. This form of aggression involves the use of electronic communication media to bully others (Li, 2007). Electronic communication media include cell phones, video cameras, e-mails, and web pages, and they are used to post or send hurtful, harassing or embarrassing messages to another person (Ybarra & Mitchell, 2004). With the constant and rapid development of new technology, the number of youth with access to computers, cell phones, and the

numerous software and applications associated with these electronic devices has increased significantly (Li, 2007). According to the Pew Research Center, 95% of all youth between 12 and 17 years old are now online, and 80% of online youth are users of social media sites (Lenhart et al., 2011). However, youth knowledge of and confidence with using various technologies, as well as the access they have to technology (many times without adult supervision) can lead to dangerous, high-risk behaviors (Agatson et al., 2007).

Although cyberbullying can occur among all types of electronic media, computers and cell phones represent the two primary forms of technology used by youth to cyberbully their peers (Patchin & Hinduja, 2006). The most common behaviors resulting from misuse of the computer and cell phone (Smith et al., 2008; Tettegah, Betout, & Taylor, 2006) include sending cruel and threatening messages, creating websites that ridicule others, posting pictures or videos of peers that cause shame or embarrassment, breaking into someone's email account to send cruel or threatening messages to others, and forwarding sensitive information about a peer to others. Additionally, the seven most frequently cited categories of cyberbullying (Smith, Mahdavi, Carvalho, & Tippet, 2006) include text message bullying, picture or video clip bullying (via mobile phone cameras), phone call bullying, email bullying, chat-room bullying, bullying through instant messaging, and bullying via websites, such as Facebook or MySpace.

According to Englander and Muldowney (2007), cyberbullying is a direct result of the increased online social life in which youth now engage, and this phenomenon has become a significant threat among youth and a growing area of concern for all members of society. The frequency of youth cyberbullying participation increases as new

technology media emerge (Lenhart et al., 2011); thus, as technology options expand, prevalence rates for cyberbullying will increase (Kiriakidis & Kavoura, 2010). Although researchers have documented traditional forms of bullying as more common than cyberbullying (Williams & Guerra, 2007), longitudinal data on cyberbullying suggest that cyberbullying is becoming increasingly common. In 2000, researchers reported that 6% of internet users between 10 and 17 years old claimed to have been the victim of online harassment (defined as threats or other offensive behavior, excluding sexual solicitation sent or posted online) (Wolak, Mitchell, & Finkelhor, 2007). Just five years later this same population reported a 50% increase for targeted online harassment (Wolak, Mitchell, & Finkelhor, 2007). Additionally, in a 2007 Massachusetts Aggression Reduction Center (MARC) survey, 24% of undergraduate students who completed the survey reported cyberbullying, and 40% identified themselves as a victim of cyberbullying (Englander & Muldowney, 2007). “These numbers suggest that cyberbullying may be more common than traditional bullying” (Englander & Muldowney, 2007, p. 84).

### **Definition**

The definition of cyberbullying varies greatly and is highly debated among researchers. Many cyberbullying definitions have considerable crossover with Olweus’s (1993) definition for traditional bullying: “a person is bullied when he or she is exposed, repeatedly and over time, to negative actions on the part of one or more other persons, and he or she has difficulty defending himself or herself” (p. 9). In a meta-synthesis by Tokunaga (2010), existing cyberbullying definitions from quantitative research dating back to 2000 were examined in an attempt to develop one standard, integrative definition. Tokunaga (2010) examined nine definitions, many derived from definitions of

traditional bullying, and found only one commonality. Each definition identified cyberbullying as an aggressive, hostile, or harmful act exhibited by the bully using an electronic device. However, definitions differed in the description of those involved in the victimization (i.e., groups or individuals); and differed in requirements for the behavior to be deliberate, willful, and repeated over time.

Despite inconsistencies among cyberbullying definitions, Tokunaga (2010) constructed a definition for cyberbullying in an attempt to pave the way for development of valid cyberbullying measures, and to provide an easier way to make cross-study comparisons. Tokunaga (2010) proposed the following definition for cyberbullying: “any behavior performed through electronic or digital media by individuals or groups that repeatedly communicates hostile or aggressive messages intended to inflict harm or discomfort on others” (p. 278). He included two addendums: the identity of the cyberbully may or may not be known, and cyberbullying most often occurs outside of school.

### **Repeated communication**

Repetition (more than once) is a primary characteristic of traditional bullying. However, with cyberbullying, repetition can mean something very different. While it is certainly possible a young person is cyberbullied multiple times by the same person, the act or behavior could be repeated without direct contribution of the cyberbully (Smith & Slonje, 2010). For example, if someone is physically bullied, the victim has been physically harmed multiple times. However, if a young person receives a hurtful text message, the act can be repeated the number of times it is read by the victim. Thus, although the cyberbully may send the message one time, if the victim reads it more than once, the cyberbullying has been repeated. This is further compounded if a message,

picture, and/or video is forwarded or published online for all to see. The number of views and/or number of hits received individually count as repeated offenses. The ability of a message to be viewed multiple times and by a seemingly endless number of people creates an enormous impact on the victim. And a single cyberbullying communication message, which can be viewed multiple times and by numerous people, can create more distress for the victim than if the person was physically assaulted several times. With bullying, the magnitude of the situation is often assessed by the number of repeated incidents; however, with cyberbullying, the use of repetition to determine the seriousness of an offense may be less reliable (Smith & Slonje, 2010).

### **Intended harm or discomfort**

Another characteristic shared by traditional bullying and cyberbullying is for the act to intentionally cause harm to the victim. In traditional bullying situations, intentional harm involves a willful act, committed by the perpetrator, in which physical, social or emotional harm is the intention. In cyberbullying situations, the perpetrators similarly wish to inflict harm on their targeted victim. Perpetrators involved in traditional bullying and cyberbullying both intend to “execute a series of calculated behaviors to cause [the victim] distress (Tokunaga, 2010, p. 278). However, note that the intended harm or discomfort refers to the victim’s perception of intended harm. Thus, whether a behavior intends to inflict harm is determined by the target of the alleged cyber victimization (Patchin & Hinduja, 2012).

### **Definition Adopted for my Study**

Tokunaga’s (2010) argument for adopting this cyberbullying definition is logical and compelling. And, having the same definition used across studies is critical for cross-study comparisons. However, the definition proposed by Tokunaga was created

for researchers. If high school students were asked to use Tokunaga's definition to respond to survey questions, they might experience difficulty comprehending what is and is not cyberbullying behavior. For the purposes of my research study, the following cyberbullying definition was adopted: cyberbullying is when someone repeatedly harasses, mistreats, picks on, or makes fun of another person using various forms of electronic media. This definition was developed with feedback from experts in the field, to provide a more user-friendly definition for college freshman, and to increase comprehension of the magnitude of cyberbullying behaviors. Additionally, several descriptors were used to better identify the range of cyberbullying behaviors (i.e., harasses, mistreats, picks on, or makes fun), as opposed to summarizing cyberbullying behaviors as "hostile or aggressive messages intended to inflict harm or discomfort" (Tokunaga, 2010). Additionally, a special notation was added to the definition to provide clarification for the term "repeatedly," which was suggested during the cognitive interview stage of the survey development process. The notation stated: the behavior or action is considered to occur repeatedly when it occurs more than once, or when it is viewed or forwarded more than once, or by more than one person.

## **Impact of Cyberbullying on Youth**

### **Health and academic concerns**

Cyber victimization has caused considerable concern across the nation as a result of youth reports of health and psychological harm due to targeted cyberbullying (Tokunaga, 2010). According to *America's Children: Key Indicators of Well-Being* (2009), "violence affects the quality of life of young people who experience, witness, or feel threatened by [violence]" (Federal Interagency Forum on Child and Family Statistics, 2009, p.33). Additionally, cyberbullied victims reported suffering from low

self-esteem and high levels of depression (Ybarra, Mitchell, Wolak, & Finkelhor, 2006), and one-fourth claimed that their home life had suffered as a result of being cyberbullied (Patchin & Hinduja, 2006). In relation to academics, victims of cyberbullying reported sudden decreases in academic grades (Beran & Li, 2007), no longer feeling safe while at school (Varjas, Henrich, & Meyers, 2009), and increased school absentee rates (Katzner, Fetschenhauer, & Belschak, 2009). Additionally, cyberbullied victims reported increased rates of school detention and suspension punishments, engagement in truant behaviors, and a greater likelihood for being bullied on school property (Ybarra, Diener-West, & Leaf 2007).

Cyberbullies also reported suffering from several psychological and social problems. According to Ybarra and Mitchell (2007) and Hinduja and Patchin (2007), cyberbullies reported an increased participation in aggressive thoughts and behaviors, including refusing to follow rules, associating with delinquent peers, and substance abuse. Interestingly, cyberbullies also reported a greater likelihood for being the target of bullying, as compared to their non-bullied peers (Ybarra & Mitchell, 2007). In addition, cyberbullies reported experiencing poorer relationships with, and limited monitoring from their parents/caregivers, a characteristic shared by cyber victims (Ybarra, Diener-West, & Leaf, 2007; Ybarra & Mitchell, 2004; Ybarra, Espelage, & Mitchell, 2007). This critical finding, shared among cyberbullies and victims is of the utmost importance in future cyberbullying research.

### **Aggressive behaviors and violence**

Short-term and long-term engagement in aggression and/or violence is one important and dangerous effect of cyberbullying. A study by Huesmann (2007) reported that exposure to electronic media violence increases the risk of young people and

adults engaging in aggressive behaviors. This increase in aggressive behaviors was found for both short-term and long-term effects. According to Huesmann (2007), aggressive behavior is defined as “an act that is intended to injure or irritate another person” (p. S7). Based on this definition, there is considerable overlap between cyberbullying and aggressive behaviors, especially those aggressive behaviors committed through the use of electronic media. Therefore, the same negative effects associated with exposure to electronic media violence, might also affect individuals exposed to cyberbullying.

Huesmann (2007) made it clear in his report that most youth involved in aggressive behaviors do not develop into aggressive adults. However, it is certainly possible for early exposure to acts of aggression to lead to adult issues with aggression. Additionally, and perhaps most alarming is evidence that the best single predictor of violent behavior in older adolescents and throughout adulthood is aggressive behavior during childhood (Huesmann, 2007). “Thus anything that promotes aggressive behavior in young children statistically is a risk factor for violent behavior in adults as well” (Huesmann, 2007, p. S7). These findings emphasize the need for longitudinal research on cyberbullying, aggression, and violence throughout childhood and adulthood. And, in the short run, these findings provide a strong rationale for interventions designed to prevent cyberbullying during the school-age years.

## **Suicide**

Suicide, the second leading cause of death for people ages 15 to 24 in the U.S. (Hoyert & Xu, 2012), is another serious issue connected with cyberbullying. Prior research on traditional forms of bullying established strong research-based links among bullied youth; youth who bully others; and an increased risk for suicidal thoughts,

attempts, and completed suicides (Hinduja & Patchin, 2010; van der Wal, de Wit, & Hirasing, 2003). Although consistent evidence supports the relationship between suicidal behaviors and bullying, it is unknown whether suicidal behaviors vary among the different roles. Rigby and Slee (1999) reported a stronger suicidal association for victims, as compared to perpetrators; however, Hawker and Boulton (2000) reported a stronger suicidal association for perpetrators, as compared to victims.

Of interest to my study are findings supporting the increased risk of suicidal behaviors among youth involved in cyberbullying. Among a random sample of 2,000 middle school-aged youth who experienced traditional bullying and/or cyberbullying, as either an offender or a victim, Hinduja & Patchin (2010) reported that victims of cyberbullying were almost twice as likely to have attempted suicide compared to youth who had not experienced cyberbullying. Also, victimization was more strongly related to suicidal thoughts and behaviors than offending was. Furthermore, cyberbullied youth were 1.9 times more likely, and traditional bullied youth were 1.7 times more likely, to have attempted suicide than were those who had not experienced either form of bullying (Hinduja & Patchin, 2010). While it is unknown whether cyberbullying involvement leads to a higher likelihood of youth engaging in suicidal behaviors, as compared to young people involved in traditional bullying, the statistics presented by Hinduja and Patchin (2010), as well as the psychological and physical problems that result from cyberbullying underscore the serious threats and potentially deadly result of this form of peer victimization.

### **Prevalence of Cyberbullying**

Because research on this topic is relatively new, and because researchers have adopted different measures, it is difficult to report prevalence rates for cyberbullying.

The limited comparability between current cyberbullying research reports is largely due to the varying definitions. Some researchers adopted a broad definition, while others adopted a more-limited definition (Williams & Guerra, 2007). Additionally, the time period in which study participants are asked to report cyberbullying has varied greatly. The research to date has reported cyberbullying experiences among study participants during the last month, during the present school year, and within the past year. The age of study participants has also varied greatly (6th to 8th graders, 9th to 12th graders, 10- to 15-year-olds, and 10- to 17-year-olds).

Because of inconsistencies in definitions of cyberbullying, and vast differences among methodologies used in research studies, David-Ferdon and Hertz (2009) said the “best and most accurate way to describe the prevalence of electronic aggression is by presenting ranges that include the findings from all of the panelists’ studies” (David-Ferdon & Hertz, 2009, p. 4). However, the ranges are quite broad. Research reported the percentage of young people subjected to cyberbullying to range from 9 to 35%; and the percentage of young people who engage in cyberbullying others (i.e., the perpetrators) ranges from 4 to 21% (Williams & Guerra, 2007; Ybarra, West & Leaf, 2007; Kowalski & Limber, 2007). Across studies, researchers show between 7 to 14% of young people reporting being both a victim and a perpetrator of electronic aggression (Ybarra, West & Leaf, 2007; Kowalski & Limber, 2007).

The national Youth Risk Behavior Survey (YRBS) explored youth involvement in cyberbullying (referred to as electronic bullying) for the first time in 2011. Among a nationally representative sample of youth in Grades 9 to 12, 16% reported being bullied electronically, including through e-mail, chat rooms, instant messaging, Web sites, or

texting during the 12 months before the survey (YRBSS, 2011). Among females, this number increased to 22.1% (n= 6,980) having been electronically bullied in the 12 months before the survey, whereas 10.8% of males (n= 6,846) reported having been electronically bullied during the same time frame (YRBSS, 2011). Data are significant as they report electronic bullying as more common among female high school students at more than double the rate of male high school students. Because the 2011 YRBS was the first time electronic bullying was included in the survey, comparison data will not be available to document this trend until 2013 results are released. Nevertheless, this finding is critical for researchers and educators, regarding prevention programming.

The School Crime Supplement to the National Crime Victimization Survey surveyed students ages 12 to 18 regarding their involvement with cyberbullying. In 2009, roughly 6% of students ages 12 to 18 reported being cyberbullied during the school year (Robers, Zhang, Truman, & Snyder, 2011). Of those students who reported being cyberbullied during the school year, 3% reported being subject to harassing text messages, 2% reported that another student had posted hurtful information about them on the Internet, and 2% reported that they had been subject to a harassing instant message (Robers, Zhang, Truman, & Snyder, 2011). Students also reported being subjected to harassing e-mails, online exclusion, and being harassed while gaming at a rate of 1% each (Robers, Zhang, Truman, & Snyder, 2011). Overall, female students reported being cyber-bullied at higher percentages than male students for each type of cyberbullying, except harassment while gaming and being excluded online. Interestingly, a greater number of female students (38%) than male students (23%) reported notifying an adult after being cyberbullied. The data, although not statistically

significant, are an important finding for researchers and should be further explored. Additionally, all students should be encouraged to report cyberbullying incidents to a trusted adult, but perhaps a greater emphasis should be placed on encouraging male students to report cyberbullying incidents.

When comparing the frequency of cyberbullying during the school year, Robers, Zhang, Truman, and Snyder (2011) reported that of the students aged 12 to 18 who reported being cyberbullied in 2009, 67% reported incidents occurring once or twice in the school year. However, 17% reported incidents occurring once or twice a month, and 10% reported having been cyberbullied once or twice a week. Six percent of students reported incidents of cyberbullying committed against them almost every day. While two-thirds of the students reported incidents occurring once or twice in the school year, it is important to note the danger associated with a single cyberbullying incident. As previously discussed, an isolated cyberbullying incident can have an enormous impact based on the number of people who view and/or share the information (text, picture, video, etc.). Thus, whether a cyberbullying incident occurs once during a school year or once a day, the effect these incidents have on the targeted student can be equally damaging.

### **Cyberbullying and Traditional Bullying**

Like traditional bullying, cyberbullying involves the intent to inflict harm, as well as engaging in behaviors to cause physical or psychological distress to a peer or peers (Tokunaga, 2010). However, cyberbullying differs from traditional bullying because of the public nature of the victimization (Kowalski, Limber, & Agatson, 2012). Because of the virtual environment of cyber victimization, cyberbullying can exist in the school environment and also follow victims into their homes (Patchin & Hinduja, 2006).

Cyberbullying limits the ability of a young person to escape the victimization because the cyberbully can reach his/her target at any time or place (Patchin & Hinduja, 2006; Slonje & Smith, 2008; Bauman, 2010). And, although youth have the ability to block senders or choose to stop using the electronic media and/or social media in which the cyberbullying is occurring, the reality is that most youth want free access to these devices and social media outlets and consider limited access (or no access) to be a form of punishment (Bauman, 2010). Thus, the inability of youth to escape cyberbullying exponentially increases the effects of cyberbullying on a victim (Tokunaga, 2010).

Another distinguishing characteristic of cyberbullying is the breadth of the potential audience (Slonje & Smith, 2008). Cyberbullies have access to multiple forms of electronic media to reach a “potentially infinite audience” in a short amount of time (Bauman, 2010, p. 805). Additionally, because cyberbullying is a virtual experience lacking face-to-face interaction, cyberbullies have the potential to remain invisible to their victims (Slonje & Smith, 2008). The harmful effects associated with cyberbullying are further compounded by the anonymity offered by electronic media (Slonje & Smith, 2008; Tokunaga, 2010). In fact, Englander and Muldowney (2007) described cyberbullying as an “opportunistic” offense, because it causes harm without a physical encounter, requires little planning, and, because of its potential anonymity it also reduces the likelihood that the perpetrator will get caught (p. 84). Additionally, in a research study by Patchin and Hinduja (2006), 37% of the surveyed adolescents indicated they had said things to a peer through electronic media that they normally would not have said in person.

According to Tokunaga (2010), youth who would normally not engage in traditional bullying behaviors elect to participate in cyberbullying because of the anonymity provided by electronic media. As previously discussed, power is a critical component of a bullying incident, and for the bully, power is the confidence allowing him/her to exert force over the target. Perhaps because of the possibility for anonymity, individuals of equal or lesser power than their target can choose to engage in cyberbullying. The perceived anonymity “seems to reduce social inhibitions for some youth” (Bauman, 2010, p. 805) by providing a protective shield that (seemingly) blocks the bully’s identity from the target. In short, a young person whose physical size or popularity status might normally inhibit his/her participation in traditional bullying is not similarly restricted from engaging in cyberbullying (Bauman, 2010).

Clearly, the primary differences between traditional bullying and cyberbullying are in the electronic media through which the victimization occurs (Tokunaga, 2010). Additionally, the virtual and electronic nature of this type of victimization dramatically changes the face of bullying. The unique characteristics of cyberbullying magnify the potential for harm, and make this form of youth aggression more severe than traditional bullying (Campbell, 2005; Bauman, 2010). Understanding the cyberbullying processes, and the role of those who observe the victimization silently (bystanders) should be a primary focus for future research. An exploration of whether youth rely on the processes of moral disengagement to engage in immoral behaviors will provide educators and researchers with critical information related to cyberbullying prevention. Such information would aid the development of interventions designed to specifically target cyberbully behaviors, and would help break down the processes of moral

disengagement in which youth engage. Investigating the relationship among cyberbully behaviors, the processes of moral disengagement, and decision-making related to cyberbullying can help researchers, schools, students, parents, and community members effectively combat this dangerous and potentially deadly form of youth violence.

### **Theory of Moral Disengagement**

The theory of moral disengagement was conceptualized by Albert Bandura in 1991. This theory stemmed from Bandura's many years of research focused on social cognitive theory, and resulted from Bandura's (1999) belief that "the disengagement of moral self-sanctions from inhumane conduct [was] a growing human problem at both individual and collective levels" (p. 193). In social cognitive theory, moral reasoning is connected to actions through self-regulated mechanisms stemming from the moral standards and self-sanctions by which moral agency is applied (Bandura, 1986). The self-regulated mechanisms provide motivation and cognitive regulation of moral conduct.

The conduct of young people is "largely regulated by external dictates and social sanctions," and in the course of socialization, moral standards are adopted to guide moral conduct (Bandura, 1999, p. 193). Thus, in the self-regulatory process, young people monitor their conduct, evaluate it based on their personal moral standards, and regulate their actions by the consequences they apply to themselves. Young people cognitively choose to engage in things that align with their personal moral standards, and which bring them satisfaction while building their self-worth (Bandura, 1999). Likewise, they avoid behaving in ways that are in conflict with their personal moral standards; as such behaviors would elicit feelings of personal disappointment and guilt.

When young people encounter situations that challenge their personal moral standards, they must decide how to exercise personal moral agency. According to Bandura (1999), young people can choose to refrain from engaging in behaviors that violate their personal moral standards (inhibitive moral agency); or, young people can decide to avoid engagement in negative behaviors, while also choosing to engage in positive behaviors (proactive moral agency). Choosing to exercise moral agency in an inhibitive and proactive manner represents one example of how young people can choose to behave humanely. However, “moral standards do not operate invariantly as internal regulators of conduct, [and these] self-regulatory mechanisms do not come into play unless they are activated” (Bandura, 1999, p. 194). Many external variables exist that can cause youth to cognitively choose to disengage (or turn off) their personal moral standards, and the reasoning behind such disengagement varies.

Moral disengagement is the sociocognitive process through which an ordinary person can commit a harmful act against someone, when the act is normally considered by that person to be immoral or unethical. Among youth who bully others (and those who participate as a bystander), the ability to engage in harmful acts of victimization lies in the ability of the bully to selectively activate and disengage personal moral controls. Normally, internal moral controls elicit feelings of guilt or shame during the self-regulatory process, to keep an individual’s behavior in line with personal standards. However, in the *Handbook of Moral Behavior and Development* (1991), Bandura described four points in the self-regulatory process at which internal moral control can be turned off, leading to harmful or damaging behaviors. The four self-regulatory processes of moral disengagement include (a) cognitive restructuring, (b) minimizing

one's agentic role, (c) disregarding/distorting the negative impact of harmful behavior, and (d) blaming and dehumanizing the victim. Figure 2-1 shows the four processes of moral disengagement.

### **Cognitive Restructuring**

The most common method for the cognitive restructuring of immoral conduct is moral justification. Moral justification is the process by which an individual justifies his or her harmful behaviors toward others. Most often, the individual views this otherwise terrible and wrongful action as an act of upholding moral purpose under the specific circumstances. During this process, an individual justifies harmful actions with a rationale that makes the actions personally and socially acceptable. War is a perfect example of the process of moral justification. During war, opposing forces both view themselves as moral agents, and view their quest to kill the enemy as a heroic action. Killing the enemy is considered a moral act because of the justification process associated with the military actions.

Euphemistic labeling is another example of a tactic used by people in the cognitive restructuring of immoral conduct. Euphemistic labeling relies on the many ways language can shape patterns of thought about certain actions. More specifically, euphemistic labeling works to make a harmful behavior respectable, and to reduce one's personal responsibility for the behavior. This is accomplished by altering the name and/or description of the harmful act, using less derogatory language. According to Bandura (1999) an otherwise harmful, immoral act can cognitively change in appearance when called something totally different. For example, referring to "lies" as "different versions of the truth," and "cheating" as "strategy" creates a cognitive shift in the perception of what is morally and ethically acceptable. By changing the word(s)

used to describe an action, one can cognitively alter the perception of that specific behavior or action.

Advantageous comparison is another strategy used to make immoral actions look justified. According to Bandura (1999), the way behavior is viewed depends on what it is compared against. “By exploiting the contrast principle, reprehensible acts can be made righteous” (Bandura, 1999, p. 196). Terrorism is a good example of advantageous comparison. Terrorists consider themselves martyrs, and consider their behaviors righteous. While terrorists and their targets both engage in negative actions against one another, terrorists only view the injustices inflicted on their group as immoral and unethical. Advantageous comparison, along with moral justification and euphemistic labeling represent the most powerful set of psychological mechanisms for disengaging moral control (Bandura, 1999). By cognitively restructuring harmful acts with a high ethical purpose, one’s self-censure is eliminated, and self-approval is enacted. This process is problematic, as interventions must target the negative behavior in a manner that alters the individual’s perception about what is considered ethical, despite negative thoughts or beliefs about a person and/or their background.

### **Minimizing Agency**

Minimizing one’s agency refers to cognitive strategies that displace responsibility for harmful acts by minimizing or obscuring one’s personal responsibility (Hymel, Rocke-Henderson & Bonanno, 2005). According to Bandura (1999), moral control is most effective when people acknowledge the harm caused by their actions. Thus, when youth minimize their agentive role in a harmful act, they essentially eliminate personal responsibility. Typically, this process occurs when youth view their actions as an order from a higher authority. Thus, because they do not view themselves as responsible for

their actions, self-condemnation is not activated (Bandura, 1991). Prison execution is one example of displacement of responsibility. The prison guard responsible for administering the lethal agent that eventually ends a prisoner's life does not associate the action with murder. The guard is simply carrying out orders from the U.S. legal system.

Moral control is also threatened when one's role in harming someone is reduced or even eliminated by diffusing/displacing the responsibility associated with the harmful behavior. Diffusion of responsibility can be further perpetuated when working in a group or on a team. When everyone has contributed to a harmful behavior or action, no one feels personally responsible, and responsibility is diffused onto someone else in the group. Thus, people may feel more inclined to act cruelly under group responsibility as their personal accountability is decreased. Unfortunately, the more removed people are from the consequences of their actions, the easier it is for them to cause harm to another individual (Bandura, 1999).

Among youth, diffusion of responsibility can be particularly concerning in the fight against bullying during adolescence. Throughout the school-age years, youth change physically and psychologically with age. Relationships with family members and friends also change. During the early elementary years, youth have a higher concern for their relationships with parents and other family members (Telljohann, Symons, Pateman, & Seabert, 2012). However, as children move into adolescence, they show greater concern for friend relationships than family relationships. Consequently, peer pressure can become a major issue for some adolescents as they struggle with developing personal codes of morals and ethics (Telljohann et al., 2012). If youth are struggling

with developing their personal code of ethics, and if they are easily persuaded by members of their peer group, then the diffusion of responsibility process is an important concern for researchers. Additionally, this process of moral disengagement has the potential for explaining the cognitive processes associated with peers who bully.

### **Disregarding/Distorting Negative Consequences**

The process of disregarding or misrepresenting the harmful consequences associated with a behavior committed against another individual weakens the perpetrator's moral system by distorting the actions (Bandura, 1991). This process of moral disengagement either works to distance the perpetrator from the harmful act altogether, or cognitively allows the person to focus on the positive as opposed to negative outcomes associated with this behavior (Hymel, Rocke-Henderson, & Bonanno, 2005). Bandura (1999) explained it well: "as long as the harmful results of one's conduct are ignored, minimized, distorted, or disbelieved, there is little reason for self-censure to be activated" (p. 199). Thus, it is easier for a perpetrator to cause harm to another individual when the effects cannot be seen. Cyberbullying creates the perfect opportunity for the process of moral disengagement. A cyberbully can send or post harmful messages and pictures without actually seeing the victim's reaction. Thus, the bully's internal moral control is essentially shut off from the hurtful reaction and harmful effects of the victim.

### **Blaming/Dehumanizing the Victim**

The final moral disengagement process involves dehumanization, or blaming the victim. This process involves the perpetrators' view—a distorted view—of the person they are mistreating (Bandura, 1999). It is difficult for individuals to harm another human being without suffering personal distress and self-condemnation (Bandura,

1999), unless they engage in the process of mentally removing the human qualities of the victim (Bandura, 1991). This process of dehumanization also removes the “common humanity” shared by victim and perpetrator (Bandura, 1999, p. 200). Thus, the victim is now viewed as less than human, making it easier to cause harm to this individual. Slavery during the 18<sup>th</sup> and 19<sup>th</sup> centuries in the United States is a prime example of dehumanization. Slaves were dehumanized, and considered less than human. As a result, it was acceptable for white persons to commit a number of abusive and deadly actions against blacks.

As previously discussed, adolescence is a time when young people place greater value on their friendships, as opposed to family relationships (Telljohann et al., 2012). Additionally, the function and importance of the peer group changes dramatically during adolescence. Adolescents typically spend an increased amount of time with friends during this developmental period, as they turn to their peers for social support and to discuss problems, feelings, and fears (Espelage, Holt, & Henkel, 2003). However, this reliance on peers for social support can be coupled with increasing pressures to attain social status (Corsaro & Eder, 1990; Eder, 1985), and has been connected with increased bullying (Espelage, Holt, & Henkel, 2003). After all, it is during adolescence that peer groups are formed; making issues surrounding peer acceptance and popularity both important and noticeable (Espelage, Holt, & Henkel, 2003). More research is needed on the connection between peer social status and bullying. An exploration of whether adolescents use the process of dehumanization to justify bullying will also add to the literature concerning bullying prevention efforts.

## **Moral Disengagement and Cyberbullying**

Researchers have argued that bullies have deficits regarding their morality (Hymel, Schonert-Reichl, Bonanno, Vaillancourt, & Henderson, 2010). As such, the theory of moral disengagement has the potential to explain the processes by which an individual morally disengages from what is normally considered harmful behavior, in order to intentionally cause harm to another person. As previously stated, typically, internal moral controls elicit feelings of guilt or shame during the self-regulatory process, to keep an individual's behavior in line with personal standards. However, when an individual undergoes one of the four processes of moral disengagement, his or her internal moral controls can be shut off. And, when the individual's moral control is shut off, the ability to engage in harmful behaviors without personal guilt is permitted. Research findings show a positive relationship among moral disengagement, antisocial behavior, and aggression in children and adolescents (Bandura, Barbaranelli, Vittorio-Caprara, & Pastorelli, 1996; Yadava, Sharma, & Gandhi, 2001). Therefore, it is essential to explore the roles of the four self-regulatory processes of moral disengagement (cognitive restructuring, minimizing one's agentic role, disregarding/distorting the negative impact of harmful behavior, and blaming and dehumanizing the victim) within the cyberbullying phenomenon.

### **Moral Disengagement and Bullying**

A few studies have examined the relationship between youth traditional bullying and the processes of moral disengagement. Researchers who conducted studies in Italy reported bullies have higher moral disengagement scores than their respective peers, and also reported that these youth were more likely to use the moral justification and dehumanization processes to justify their behaviors (Bacchini, Amodeo, Ciardi,

Valerio, & Vitelli, 1998). A cross-sectional study exploring traditional bullying among upper-elementary and middle-school students in Italy and Spain confirmed these earlier research findings (Menesini et al., 2003). Students in Menesini and colleagues' study reported higher moral disengagement scores for minimizing, ignoring and misconstruing the consequences associated with the negative actions.

The four processes of moral disengagement were also examined by Hymel, Rocke-Henderson, and Bonanno (2005) using Canadian students in Grades 8-10. Again, bullies reported higher levels of moral disengagement, and victims reported the lowest. However, in Hymel, Rocke-Henderson, & Bonanno's (2005) study, the results identified cognitive restructuring and the attribution of blame as the moral disengagement processes most strongly associated with bullying. Gini (2006) conducted a similar study among Italian elementary students and found that bullies had higher moral disengagement scores than did victims and bystanders. However, Gini (2006) brought to light an important finding and critical consideration for future research: exploring moral disengagement scores for all participant roles. Gini (2006) referred to previous research highlighting bullying as a group phenomenon, as 85% of bullying incidents involve peers (Craig, Pepler, & Atlas, 2000). The role of bystanders in the reinforcement of bullying is important to consider in future research, including exploration into this group of students' moral disengagement scores.

To date, little research has examined the relationship between youth cyberbullying and the processes of moral disengagement. In fact, only two published studies pertain to cyberbullying and its relationship to the theory of moral disengagement. Neither study was conducted in the United States, and neither focused exclusively on high

school-aged youth. Nevertheless, these studies, reviewed below, represent an important foundation for future research examining the role of moral disengagement in cyberbullying among American high school students.

### **Moral Disengagement and Comparable Cyberbullying Study 1**

Pornari and Wood (2010) examined the relationship between moral disengagement in traditional and cyber aggression among school children in the United Kingdom. Their primary research aim was to identify shared and unique cognitive factors of the two types of peer aggression. A total of 339 middle school students (Grades 7-9) were surveyed using two questionnaires. Demographics reported included students' self-reported gender, year of birth, school year, and ethnicity (Pornari & Wood, 2010).

The Peer Aggression/Victimization Questionnaire consisted of 26 questions to measure traditional aggression/victimization, as well as cyber aggression/victimization among the sample. Items measuring traditional aggression/victimization were adapted from Bjorkqvist's Direct and Indirect Aggression Scale. Items measuring cyber aggression/victimization were constructed for their study. Students were asked to report how often they were aggressor or victim of various behaviors (related to traditional and cyber aggression) during the past 6 months. Response options were organized using a 5-point Likert Scale (Never to Very Often), and students were also asked to identify how often the behavior occurred (1 to 3, 4 to 8, 9 to 12, or 12+ times) during the 6-month reporting period (Pornari & Wood, 2010).

Additionally, a 40-item questionnaire assessing moral disengagement (32 items), hostile attribution bias (4 items), and outcome experiences (4 items) was administered (Pornari & Wood, 2010). This questionnaire comprised all the items of the Mechanisms

of Moral Disengagement Scale by Bandura et al. (1996), which includes scenario-type questions for each of the 4 categories of moral disengagement. Eight additional items were added to the questionnaire, which explored hostile attribution bias and outcome experiences. These items were based on the How I Think Scale by Barriga and Gibbs (1996).

The questionnaires were distributed to the students in a classroom. The researcher was present to ensure students worked individually; approximate completion time was between 30 and 40 minutes (Pornari & Wood, 2010). After completing the questionnaires, students were debriefed on the purpose of the study and expected outcomes. Researchers reiterated the anonymity and confidentiality of participants' responses, as well as their right as participants to withdraw from the study. Researchers also provided a written debrief for participants to take home, including a support-line phone number for students who experienced emotional distress after the study (Pornari & Wood, 2010).

As predicted, moral disengagement related positively with traditional aggression, thus students who engaged in more frequent or severe peer aggression were characterized by more aggressive behavior. These students also reported more justifications for making a harmful act seem less harmful (Pornari & Wood, 2010). These findings were expected by the researchers, as they aligned with results from earlier studies showing high levels of moral disengagement in school bullies (Bandura et al., 1996; Barriga & Gibbs, 1996; Gini, 2006; Hymel, Rocke-Henderson, & Bonanno, 2005; Menesini et al., 2003; Yadava, Sharma, & Gandhi, 2001).

Results also indicated a positive correlation between moral disengagement and cyber aggression. However, the positive correlation was smaller as compared with traditional aggression. The authors offered several possible reasons for these findings. First, they thought students might not consider cyber aggression to be as serious as traditional aggression. They also felt that the “distance” between victim and aggressor prevented negative feelings (such as guilt, shame and self-condemnation), thereby reducing the chance of empathizing with the victim (Pornari & Wood, 2010). Thus, cyber aggression might not demand the same level of rationalization or justification. Additionally, because students associate the use of technology with entertainment, the authors said perhaps the students viewed cyber aggression as another form of entertainment, without realizing its severity. This hypothesis was supported in a study by Raskauskas and Stoltz (2007) where 36% of the 16 Internet bullies interviewed reported engaging in internet bullying for fun.

One notable finding from Pornari & Wood’s study revolved around age differences between those involved in incidences of traditional and cyber aggression. Among the surveyed students, 55% reported having been cyber victimized at least once in the 6 months preceding the survey (Pornari & Wood, 2010). Additionally, 31% reported having been a cyber-aggressor at least once. Interestingly, these rates were higher than any previously reported in the research in the United Kingdom (Smith et al., 2006); however, findings cannot directly compare because of the varying age ranges of samples in earlier research. Regardless, Pornari and Wood posited that because physical aggression declines as children age, cyber aggression may serve as an alternative for young people. Furthermore, the higher prevalence rates documented in

their study warned that cyber aggression is a frequent occurrence among youth and will continue to be a threat to this population as technology advances (Pornari & Wood, 2010). This finding supports the need for future research examining cyberbullying and moral disengagement among high school students, a population with greater access to various forms of technology and social media.

Pornari and Wood highlighted several limitations to their study design, including the use of a relatively homogenous sample group (primarily one ethnic group and all students from the same school). They suggested that future research should attempt to replicate their study with a larger, more heterogeneous sample. They also cited their use of just three different aspects of cyber aggression and victimization as problematic. The narrow exploration of cyber aggression and victimization aligned with the study's aim; but student involvement with cyberbullying was limited to only three types of cyber aggression (Pornari & Wood, 2010). Regardless, the association found between moral disengagement and cyber aggression and victimization in their study provided a strong rationale for more exploration of different cyber aggression in future research (Pornari & Wood, 2010).

Additionally, the focus of their study was peer aggression, and a distinction was not made between direct and indirect forms of aggression, nor among different participant roles (Pornari & Wood, 2010). Future research examining participant roles (i.e., the bully, the victim, and the bystander) "could provide insight into the differential contribution of various justification/rationalization mechanisms in different modes and roles in peer-directed aggression" (Pornari & Wood, 2010, p. 91). Clearly, the authors highlighted an area of cyberbullying research in need of further exploration.

## **Moral Disengagement and Comparable Cyberbullying Study 2**

More recently, Perren and Gutzwiller-Helfenfinger (2012) investigated whether various aspects of morality predicted traditional bullying and cyberbullying behavior among German-speaking students between the ages of 12 and 19 (Perren & Gutzwiller-Helfenfinger, 2012). The authors hypothesized correlations between both forms of peer aggression and moral disengagement, as documented in previous research. However, they also sought to determine whether correlations exist among age, the two forms of peer aggression, and gender.

Students were asked to complete an online questionnaire during a 3-hour time period (outside school hours) through a social networking site (NetQ) available to students between the ages of 12 and 21; thus participants represented a self-selected sample of students who appeared to actively participate on the NetQ website (Perren & Gutzwiller-Helfenfinger, 2012).

Participants were asked to report the frequency with which they had been involved with traditional and cyberbullying during the three months preceding the survey. The authors' assessed frequency using eleven behavior-based questions (six traditional bullying; five cyberbullying). Participants responded using a Likert-type scale ranging from 1 (never) to 5 (almost every day). Before answering these questions, the definition for bullying was provided to participants (Perren & Gutzwiller-Helfenfinger, 2012).

To assess for morality indicators, Perren and Gutzwiller-Helfenfinger (2012) used Perren's (2011) production measure. Participants responded to aggression scenarios that detailed a student being hurt by another student. One scenario focused on peer exclusion, while the other described a humiliation scenario (Perren & Gutzwiller-Helfenfinger, 2012). Both scenarios were followed with questions focused on the

participant's moral rule, emotional evaluation of the victim, moral evaluation of the emotional evaluation of the victim, and moral evaluation regarding the participant as the perpetrator (Perren & Gutzwiller-Helfenfinger, 2012). Moral justification was assessed based on participants' written responses to the "why" component of the above listed questions.

Moral emotions (i.e., remorse) were assessed using participants' self-reports of feelings of remorse or guilt regarding cyberbullying scenarios (n=12). Participants responded using a 5-point Likert scale ranging from 1 (not at all) to 5 (extremely) (Perren & Gutzwiller-Helfenfinger, 2012). Additionally, moral values were assessed using the Ideal Self Value Ratings scale (Pratt, Hunsberger, Pancer, & Alisat, 2003). Participants (n=6) reported the extent to which they felt each scenario was important to them personally.

As found in previous research, Perren and Gutzwiller-Helfenfinger reported a strong correlation between traditional bullying and cyberbullying: participants who reported involvement in traditional bullying were also more likely to report involvement with cyberbullying (Smith & Slonje, 2010). Additionally, all measures of morality positively and strongly correlated with both traditional bullying and cyberbullying (Perren & Gutzwiller-Helfenfinger, 2012). Interestingly, lower commitment to moral values predicted higher levels of traditional bullying, and lower feelings of remorse predicted higher levels of cyberbullying (Perren & Gutzwiller-Helfenfinger, 2012). Thus, self-reported traditional bullies indicated a decreased commitment to personal moral values; whereas self-reported cyberbullies indicated decreased feelings of remorse for hurtful behaviors committed toward others.

With respect to moral disengagement and cyberbullying, higher levels of moral disengagement did not predict levels of cyberbullying as strongly as they predicted traditional bullying (Perren & Gutzwiller-Helfenfinger, 2012). Findings of Pornari and Wood (2010) are in direct conflict with findings reported by Perren and Gutzwiller-Helfenfinger. Perhaps, inconsistencies between the results of these two similar studies can be attributed to measurement differences. However, discrepancies between the findings support the need for future research and exploration of cyberbullying and moral disengagement.

Perren and Gutzwiller-Helfenfinger highlighted one primary limitation to their study design: the use of an online survey. Although supports exist for administering this type of survey online (after all, one topic of interest involves peer aggression occurring in an online environment), the authors worried that the sample included an “over- or underrepresentation of critical participant characteristics” (Perren & Gutzwiller-Helfenfinger, 2012, p. 205). In fact, Birnbaum (2004) said collecting online data cannot be assumed to represent random samples of any particular population. The authors suggested using randomization among a specified population as a possible remedy to this limitation.

Regarding study strengths, the authors identified several. One highlighted strength was the age of targeted participants (adolescence). However, the study’s results did not indicate a relationship between age of participant (ranged from 12 to 19) and moral disengagement, or involvement in either type of bullying. It was suggested that future studies explore developmental/age trends among the adolescent population to further examine possible relationships.

Perhaps the most important strength of Perren and Gutzwiller-Helfenfinger's study, as described by the authors, was the use of scenarios to measure adolescents' moral justifications. Past research exclusively relied on self-report questionnaires to explain the relationship between types of bullying and moral disengagement. Perren and Gutzwiller-Helfenfinger (2012) adopted a scenario approach in which participants indicated their "hypothetical cognitions and emotions" regarding various traditional bullying and cyberbullying situations (p. 206). The authors cited their rationale for using this format as a more effective way to uncover participants' feelings regarding the scenarios, and they discovered an area of cyberbullying research that needs further exploration.

### **Conclusions for Consideration and Study Rationale**

The virtual and electronic nature of cyberbullying dramatically changes the face of peer aggression. Therefore, an understanding of the processes by which youth engage in cyberbullying is an important focus for future research on cyberbullying. The theory of moral disengagement, conceptualized by Bandura (1991), was developed based on concerns that individuals were allowing themselves to engage in behaviors that violated their personal moral codes (Bandura, 1999). Bandura (1999) also reported that moral disengagement occurs within a social context, and social circumstances in particular can weaken an internal self-regulatory mechanism (i.e., conscience that prevents engagement in bad behaviors). Furthermore, Bauman (2010) posited that youth socialization in a technological world may be a social context that promotes moral disengagement (p. 808).

Based on past research examining the theory of moral disengagement and its possible relationship with both cyberbullying and bullying, specific methodological

decisions were made for my study. Specifically, the theoretical construct used to guide my study, the population of interest for my study, and the instrument developed for my study were careful decisions made from prior research suggestions and/or limitations. A brief explanation for each decision is provided below, followed by a description of the study.

### **Theory of Moral Disengagement**

Previous studies indicate a relationship between bullying and moral disengagement. Findings from published research exploring the relationship between cyberbullying and moral disengagement are conflicted. Of the two published studies that examined the relationship between cyberbullying and moral disengagement, Pornari and Wood (2010) reported a relationship between the variables, while Perren and Gutzwiller-Helfenfinger (2012) did not. However, youth involved in cyberbullying are also more likely to be involved in traditional forms of bullying (Raskauskas & Stoltz, 2007). Additionally, Perren and Gutzwiller-Helfenfinger (2012) suggested that youth involved in cyberbullying have lower levels of morality than youth involved in traditional bullying, based on findings published by Gradinger, Strohmeir, and Spiel (2009), which reported more severe patterns of maladjustment among youth involved with cyberbullying. Clearly, support for more research to examine the possible relationship between cyberbullying and moral disengagement is warranted. As a result, the Theory of Moral Disengagement (Bandura, 1991) was selected as the theoretical framework for my study.

### **Study Subjects**

Generalizations from Pornari and Wood (2010), and Perren and Gutzwiller-Helfenfinger (2012) are difficult to support, because of the limited volume of literature

available, and also because both studies were conducted outside the U.S. The literature related to cyberbullying and moral disengagement is limited to just two published studies, and neither targeted population represented American adolescents. Previously cited statistics highlight the dangers associated with this form of peer aggression, and prevalence rates indicate a need for researchers to further explore this topic. In fact, the 2007 Pew Internet and American Life Project reported 35 to 40% of U.S. adolescents admitted to cyberbullying a peer. These statistics suggest cyberbullying may be more common than once thought, and this form of peer aggression may represent the dominant form of bullying behavior among children and adolescents (Englander, Mills & McCoy, 2009, p. 217). Research focused on cyberbullying and moral disengagement represents an important next step for cyberbullying research among adolescents in the U.S.

A relationship between age and cyberbullying involvement has also been documented. Pornari and Wood (2010) posited that because physical aggression declines as children age, cyberbullying may serve as an alternative form of peer-to-peer aggression for adolescents. Furthermore, the high prevalence rates documented by Pornari and Wood (2010) suggest that cyberbullying will continue to grow as a threat to young people as technology advances. This finding supports the need for future research examining cyberbullying and moral disengagement among older adolescents, a population with greater access to various forms of technology and social media.

The Massachusetts Aggression Reduction Center (MARC) was developed as a result of high-profile cyberbullying cases that surfaced in Massachusetts in 2005 and 2006 (Englander, Mills, & McCoy, 2009). The center was called to conduct research on

cyberbullying among young people, to gain a larger perspective for why youth chose to move peer aggression online. The MARC researchers chose to study college freshmen and considered this population “ideal subjects, as they are only very recently removed from High School, where their online tribulations [were presumed to still be] fresh in their minds” (Englander, Mills, & McCoy, 2009, 215). As an added bonus, parental consent was not required, because of the age of college freshmen. As a result, college freshmen would also serve as the target population of my study.

### **Instrument Development**

Although several instruments have been developed to explore the relationship of moral disengagement to both bullying and cyberbullying, few of the instruments were developed for American adolescents, and none of the instruments were specifically designed to explore high school students’ perceptions of cyberbullying behaviors in relation to the theory of moral disengagement. As a result, an instrument needed to be developed to answer the research questions for my study. Krause’s (2002) nine-step comprehensive strategy for developing closed-ended survey items was used to guide the instrument-development process for Survey of Student Experiences with Electronic Media and Perceptions of Cyberbullying Behaviors. My instrument, although influenced by previous research, is the first to explore college freshmen’s perceptions of cyberbullying, upon looking back at cyberbullying incidents during their last semester of high school, in relation to the theory of moral disengagement.

### **Summary**

An exploration for why youth rely on the processes of moral disengagement to engage in immoral behaviors has the potential to provide educators and researchers with critical information related to cyberbullying prevention. Such information could aid

the development of interventions designed to specifically target cyberbullying behaviors. The aim of my study is to examine the relationship between youth cyberbullying behaviors and the theory of moral disengagement. More specifically, my study aimed to determine whether college freshmen, upon looking back at cyberbullying incidents that occurred during their final semester of high school, ethically justified the aggressive behavior(s) through the processes of moral disengagement based on victim characteristics and type of cyberbullying behavior. Additionally, inquiries regarding students' perception of these behaviors as related to seriousness and acceptability were explored. The following research questions guided my study:

1. Are higher levels of acceptability for cyberbullying behaviors related to higher levels of moral disengagement?
2. Are lower levels of seriousness for cyberbullying behaviors related to higher levels of moral disengagement?
3. Are higher levels of acceptability for cyberbullying based on victim characteristics related to higher levels of moral disengagement?
4. Are lower levels of seriousness for cyberbullying based on victim characteristics related to higher levels of moral disengagement?
5. Are higher levels of justification for cyberbullying among students who report cyberbullying others related to higher levels of moral disengagement?

Consistent with Bandura's (1999) theory of moral disengagement, it is hypothesized that higher levels of moral disengagement will relate to increased acceptability for and lower perceptions of the seriousness associated with cyberbullying behaviors among the target population. If youth report higher levels of moral disengagement, then it would seem plausible that they would likely indicate greater acceptability for cyberbullying behaviors. Additionally, these same youth would seemingly be more apt to report lowered levels of seriousness associated with

cyberbullying behaviors. When examining the reason for increased acceptability of cyberbullying behaviors, it is hypothesized that youth will report greater acceptability for cyberbullying based on certain victim characteristics. Likewise, it is hypothesized that youth will report reduced levels of seriousness associated with cyberbullying based on certain victim characteristics. Lastly, if youth report greater acceptability and lowered levels of seriousness for cyberbullying behaviors based on certain victim characteristics, it is also hypothesized that youth reporting higher levels of moral disengagement will also indicate having justified cyberbullying among students who reported that they cyberbullied others during their final semester of high school.

Chapter 3 offers a thorough description of the methodology. More specifically, the development of the Survey of Student Experiences with Electronic Media and Perceptions of Cyberbullying Behaviors using Krause's (2002) nine-step comprehensive strategy is detailed. Additionally, results from the pilot survey will also be presented.

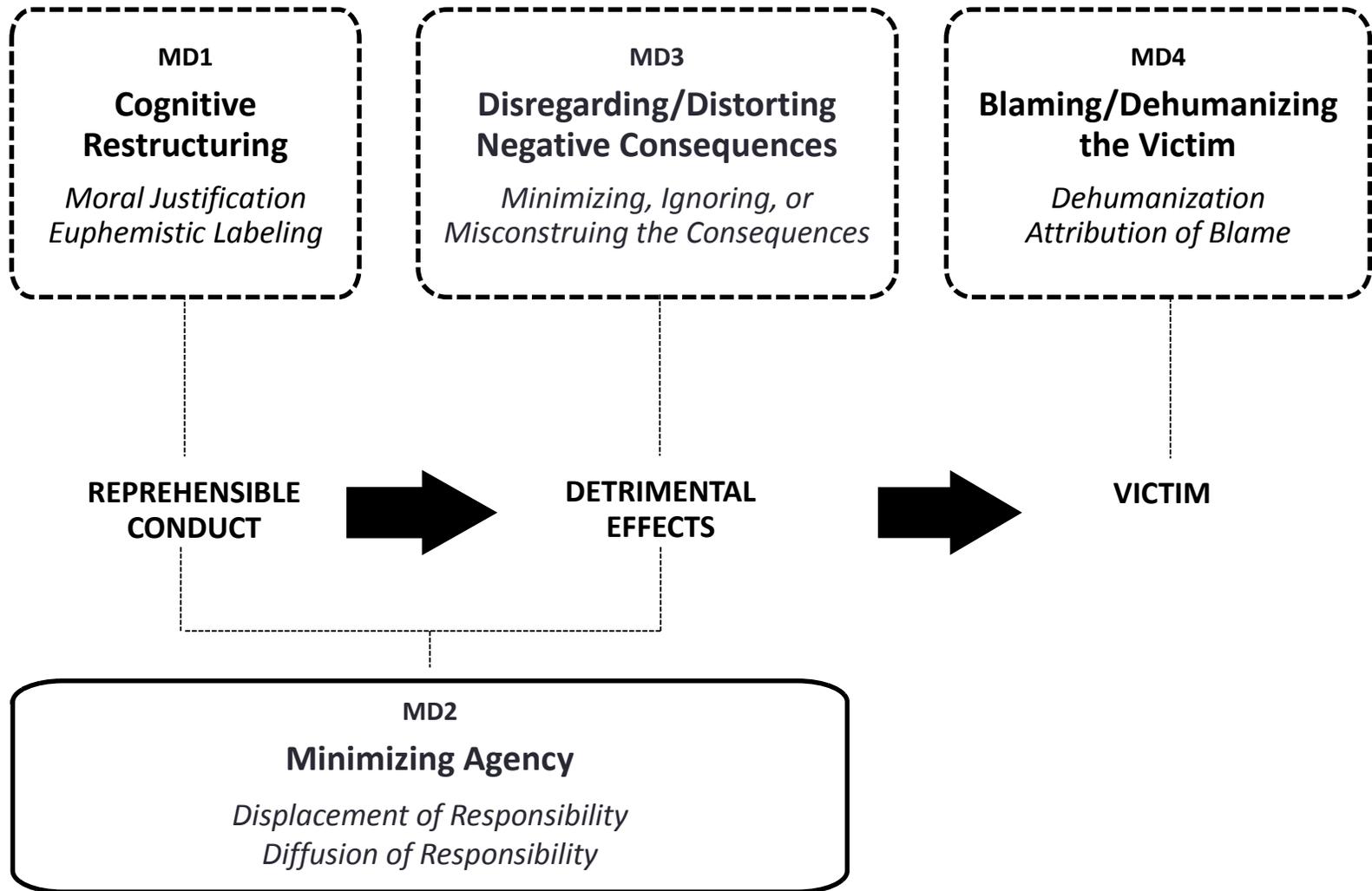


Figure 2-1. Theory of moral disengagement

## CHAPTER 3 METHODOLOGY

Youth involved in cyberbullying experience negative health and academic concerns, and are at greater risk for dropping out of high school (David-Ferdon & Hertz, 2009; David-Ferdon & Hertz, 2007; Ybarra, Mitchell, Wolak, & Finkelhor, 2006). Such negative effects contribute to higher levels of risk behavior, including exposure to and involvement with violence into adulthood, as well as poor health and diminished quality of life throughout adulthood (David-Ferdon & Hertz, 2009; David-Ferdon & Hertz, 2007; Ybarra, Mitchell, Wolak, & Finkelhor, 2006). To date, the content used in cyberbullying prevention programs has not focused on why youth engage in peer aggression using electronic media. Additionally, research concerning why youth choose to engage in cyberbullying is limited, although a few studies have explored the relationship between cyberbullying and moral disengagement, and the results have been promising. Further exploration of the relationship between cyberbullying and the theory of moral disengagement is necessary, and can provide knowledge to inform existing school interventions targeting cyberbullying prevention (Ponari & Wood, 2010), and can assist in developing appropriately designed prevention and intervention activities to meet the needs of different adolescents (David-Ferdon & Hertz, 2009). To add to this important body of literature, my study explored whether college freshman, upon looking back at cyberbullying incidents that occurred during their final semester of high school, ethically justified the aggressive behavior(s) through the processes of moral disengagement, based on victim characteristics and type of cyberbullying behavior.

## **Research Design**

My study used a correlational research design to describe the statistical association among multiple variables. To provide a better description of the relationship between cyberbullying and moral disengagement, a regression analysis was performed for those cases where a positive association between cyberbullying and moral disengagement exists. Specifically, my study was planned to determine whether higher levels of moral disengagement are associated with (1) increased acceptability for cyberbullying behaviors among students, (2) lower levels of seriousness for cyberbullying behaviors among students, (3) increased acceptability for cyberbullying based on victim characteristics, (4) lower levels of seriousness for cyberbullying based on victim characteristics, and (5) justification for cyberbullying among students who report cyberbullying others. Note that my study reported relationships among the variables listed above (i.e., whether the data show a statistical relationship). Correlational research does not imply causation, and results from my study can only be used as a means for describing the relationship between the cyberbullying and moral disengagement variables. If there is a positive relationship between variables, justification for further research to explore the relationship is confirmed and supported, including an exploration of predictor variables.

## **Research Variables**

My study described the relationship between the processes of moral disengagement and cyberbullying behavior during participants' last semester of high school for two primary variables: acceptability for cyberbullying, and level of seriousness for cyberbullying. For all five research questions, the four processes of moral disengagement served as independent variables. In RQ1, acceptability for

cyberbullying and cyberbullying behaviors served as dependent variables; in RQ2, level of seriousness for cyberbullying behaviors served as the dependent variable; in RQ3, acceptability for cyberbullying based on victim characteristics served as the dependent variable; in RQ4, level of seriousness for cyberbullying based on victim characteristics served as the dependent variable; and, in RQ5, justifiability for cyberbullying behaviors served as the dependent variable.

### **Measurements: Instrument Development Process**

Several instruments that explore student perceptions of cyberbullying were developed and published during the past 10 years. Additionally, Bandura (1995) created the Moral Disengagement Scale, a 32-item self-report measure that assesses an individual's tendency to use cognitive mechanisms that justify aggressive and violent behaviors. However, an instrument that specifically explores high school students' perceptions of cyberbullying behaviors in relation to the theory of moral disengagement had not been published at the time of my study. As a result, an instrument needed to be developed to answer the research questions for my study. To guide the instrument-development process for *Survey of Student Experiences with Electronic Media and Perceptions of Cyberbullying Behaviors*, Krause's (2002) nine-step comprehensive strategy (Figure 3-1) for developing closed-ended survey items was used. Krause (2002) described a multi-modal technique for developing close-ended survey questions that effectively bridges both qualitative and quantitative methodological approaches. Figure 3-1 shows Krause's instrument development process.

### **Literature review**

Before adopting Krause's (2002) strategy for developing closed-ended survey items, a thorough literature review was conducted to explore cyberbullying research

trends. Upon review of the existing literature, a few studies were discovered that examined Bandura's Theory of Moral Disengagement and bullying. Although they were few in number, these studies indicated a positive correlation between bullying and moral disengagement (MD). Before 2010, research on MD and cyberbullying was nonexistent. However, Ponari and Wood (2010) examined the role of moral disengagement in peer and cyber aggression among secondary students from the United Kingdom. Their results indicate that cyber aggression was predicted by MD, but highlighted the need for more research. Thus, further exploration of cyberbullying and MD could provide insight regarding a young person's perceptions of cyberbullying actions, and, as a result, led to the development of effective school interventions targeting cyberbullying.

Additionally, an exploration of the factors related to individuals involved with cyberbullying, as well as the type of cyberbullying behaviors and the electronic media through which the aggressive act is committed will assist in the development of appropriately designed prevention and intervention activities to meet the needs of different adolescents (David-Ferdon & Hertz, 2009). To aid cyberbullying prevention efforts, my study examined the relationship between youth cyberbullying behaviors and the theory of moral disengagement. My study aimed to determine whether college freshmen, upon looking back at cyberbullying incidents that occurred during their final semester of high school, ethically justified the aggressive behavior(s) through the processes of moral disengagement based on victim characteristics and type of cyberbullying behavior.

College freshmen were surveyed for two reasons: (1) college freshmen have been removed from high school for less than one year, thus can recall experiences with and perceptions of cyberbullying during high school; and, (2) college freshmen are more likely to honestly and fully report their cyberbullying experiences during high school, now that they are removed from high school.

Because of the nature of the subject matter, my study instrument was designed to be administered online. One of the primary types of electronic media used by youth to engage in cyberbullying behaviors is computers to connect to the Internet (Smith & Slonje, 2010). In a recent report about teens and technology, The Pew Research Center (2013) said 93% of American teens have a computer or have access to one at home, and 95% of teens use the internet (Madden, Lenhart, Duggan, & Gasser, 2013). Additionally, 78% of teens now have a cell phone, and nearly half (47%) of them own smartphones with access to the Internet (Madden, Lenhart, Duggan, & Gasser, 2013). Thus, using the Internet for data collection can improve access to the target population.

Additionally, among college students, web-based surveys are more cost-effective and convenient than other modes of survey research. A meta-analysis comparing web and mail surveys among college respondents said the web survey response rate was 3% higher (Shih & Xitao, 2008). Benefits of using web-based surveys include reduced implementation costs, faster data collection, improved formatting, elimination of data entry, and reduced processing costs (Dillman, 2007). Also, by emphasizing a study's brevity and implementing multiple survey reminders, a higher response rate is more likely (Dillman, 2007). Thus, my study was administered online, notifying participants via multiple reminders to respond to the one-time survey. Participants were told they had

the option of discontinuing the survey at any point. In addition, no e-mail or IP addresses were collected in order to ensure the anonymity of subjects.

### **Identify concepts and conceptual framework**

Bandura's Theory of Moral Disengagement (MD) was chosen as the theoretical framework for my study. This theory suggests that individuals allow themselves to engage in behaviors they would normally consider unethical, wrong and harmful by engaging in a socio-cognitive process in which harmful acts against others are rationalized and justified. Individuals undergo the socio-cognitive reconstruction through four psychological processes: cognitive restructuring, minimizing agency, disregarding or distorting the harmful consequences, and dehumanizing or blaming the victim.

### **Development of Preliminary Measures**

Preliminary measures were developed based on existing study questionnaires for bullying and the theory of moral disengagement, as well as cyberbullying research (Appendix F). Likert-type scales provide precise information on respondents' degrees of attitudes and provide high reliability (Creswell, 2012); thus this format was used for many of the survey items. Special attention was given to avoiding the use of vague words, technical terms, and double-negative wording. The instrument identified and repeatedly reminded participants of the time period in which their responses should be framed (during their last semester of high school). Additionally, definitions important to the content of the instrument (i.e., "picked on," "electronic media," "cyberbullying") were given to make sure all respondents' used the same definition for their item responses.

Six scenario statements were developed for each of the 4 processes of MD. The statements reflected a cyberbullying behavior or a belief about cyberbullying.

Respondents were asked to identify the extent to which they agreed or disagreed with each statement using a 5-point Likert-type scale consisting of the following options: strongly agree, agree, neither agree nor disagree, disagree, and strongly disagree. Some of these questions were developed based on MD questions used by Hymel, Rocke-Henderson, and Bonanno (2005). A total of 24 questions were developed (6 questions per each MD process).

To assess acceptability for cyberbullying, three questions were developed to determine respondents' perception of the acceptability of cyberbullying, acceptability of various cyberbullying behaviors, and acceptability of picking on someone based on specific personal characteristics of the individual who was picked on. These questions also required respondents to select from a list of Likert-type responses consisting of never okay, rarely okay, sometimes okay, usually okay, and always okay. Two additional questions were developed to determine respondents' perceptions of the level of seriousness regarding various cyberbullying behaviors, and level of seriousness associated with picking on someone based on specific characteristics. Response options for these questions included Likert-type responses consisting of never serious, rarely serious, sometimes serious, usually serious, and always serious. Additionally, respondents were asked to report whether their behavior or action related to cyberbullying was ever justifiable if they had picked on a classmate using electronic media. Response options ranged from never justifiable to always justifiable. "Never picked on a classmate using electronic media" was an additional option in the event that a respondent never engaged in this behavior.

Related to personal experiences with cyberbullying during high school, respondents were asked to report how often (1) they experienced cyberbullying, (2) they observed a classmate experience cyberbullying, and (3) they cyberbullied a classmate. Students recorded their involvement with cyberbullying by responding to scenario questions that identified involvement with specific cyberbullying behaviors. Each type of involvement included 10 scenarios, and the same scenarios were used for each of the three types of involvement assessed. Response options for these questions included Likert-type responses consisting of never, once, a few times, several times, and many times. Respondents were also directly asked whether they had (1) been cyberbullied, (2) observed others being cyberbullied, and (3) cyberbullied others during their final semester of high school.

The final set of questions focused on demographic information. The primary purpose for these questions was to tell the researcher more about survey participants. Demographic questions explored the following information about participants: age, gender, sexual orientation, race/ethnicity, where they attended high school, type of high school they received their diploma from, and level of popularity during high school. The demographic questions were placed at the end of the survey.

### **Review by Expert Panel**

The expert panel consisted of five scholars knowledgeable in the area of cyberbullying or youth development, and instrument development or statistical analysis. All panel members received the complete preliminary questionnaire, and a list of questions to help guide their thinking during survey review. The panel was asked to evaluate the content, instrument structure, and ability of the measures to produce data appropriate to answer the stated research questions. Problems identified by the expert

panel were discussed with supervisory committee members, and potential solutions were proposed. The panel judged the ability of specific questions related to the Theory of Moral Disengagement to adequately address each of the four processes. In addition to reviewing questions and response formats, the panel was also asked to review the demographic questions.

Based on input from the expert review panel, changes were made to the survey instrument, including updates to the cyberbullying definition. Specifically, reviewers requested that the definition of cyberbullying used in the survey be more restrictive, to include differential power and repetition. All reviewers questioned the time frame in which respondents were being asked to recall. Common feedback from reviewers was that it would be nearly impossible for college freshman to recall cyberbullying incidents in the “at any point in time during high school” time period. Thus, the researcher opted to revise the timeframe to the last semester of high school, and also decided to survey newly admitted college freshman during the late-summer early enrollment time period. Thus, this population would access the survey only a few months after high school graduation, and within 6 months from their last semester of high school. The ability to recall cyberbullying incidents within the last semester of high school is more realistic for college freshman, and also is a shorter and more specific time frame.

Further edits included close examination of similar questions to avoid duplication, and the arrangement of the instrument was edited to begin with the most important information. Additionally, in an attempt to improve instrument validity, one reviewer suggested adding cyberbullying involvement questions from the *Cyberbullying and Online Aggression Survey Instrument* (Hinduja & Patchin, 2010). While four questions

from that survey were adopted, the target audience for the Hinduja and Patchin survey was high school students. That same reviewer suggested the target audience be changed to high school students; however, college freshman can provide a unique perspective about their high school experiences with cyberbullying. Thus, in consideration of the expert reviewers' feedback, four questions from the *Cyberbullying and Online Aggression Survey Instrument* were adopted and modified for my study.

Edits were also made to demographic questions. The age question was changed to open-ended; the sexual preference question was modified to better reflect the American College Health Association standard response options; and, questions about high school type and location (city and state) were added. During the course of the editing process, the literature was consulted to support decisions about recommended changes as they applied to previous qualitative and quantitative cyberbullying studies.

### **Cognitive Interviews**

After edits based on experts' comments, cognitive interviews were conducted with members of the target audience. The purpose of the interviews was to assess item interpretability by the participants. Participants may have trouble understanding questions with negative phrasing, clauses to the behavior, or answers depending on further information, not specified in the question (Dillman, 2007). Sometimes issues arise due to cultural and societal differences between researchers and the participants. Thus, it is critical for each item to be clear, concise, and completely exhaustive.

Interviewees were recruited via word-of-mouth and asked to think aloud while completing the instrument. The cognitive interview (Appendix C) focused on assessing four components: comprehension of questions, appropriateness of available response options, ability to recall information during the time period specified, and personal

opinion regarding the likelihood that their peers would respond accurately and honestly to the questionnaire. Participants completed the cognitive interview in a conference room with the researcher. All interviews were audio recorded.

Cognitive interviews were conducted with six students (four female, two male). The self-reported ethnicity of the participants was diverse, although sample demographics did not fully represent the overall university. Two students self-identified as White; two students self-identified as Hispanic or Latino/a; one student self-identified as Black or African American; and, one student self-identified as Bi-racial or Multi-racial. Five cognitive interview participants reported their sexuality as heterosexual and all participants reported never having been cyberbullied during the last semester of high school. Five participants reported never having cyberbullied others, while one participant reported cyberbullying others a few times during the last semester of high school. All participants reported having seen others being cyberbullied during their last semester of high school a few times (n=1), several times (n=2), or many times (n=3).

Cognitive interviews were analyzed via researcher notes. Audio recordings were used to supplement researcher notes. Findings were used to further edit the instrument. Specifically, the definition of cyberbullying was further clarified; questions pertaining to participant involvement in cyberbullying were re-ordered and re-worded. In addition, greater emphasis was placed on formatting the web survey to include bolded categories, increased spacing, and larger font size.

Cognitive interviews also provided positive feedback concerning the survey instrument. All participants expressed interest in the topic, and all believed their peers would answer the questions honestly. Additionally, all participants believed the length

of the survey (i.e., time commitment) was appropriate and would not impede students from beginning or finishing the survey. When asked whether the format of the questions was adequate, all participants said the flow of the survey was appropriate, and the table formatting used for the questions with sub questions, as well as the use of bold font for emphasis used throughout the survey helped the reader identify exactly what the researcher wanted to know. Lastly, all participants said the time frame respondents were asked to reflect on would not be an issue for freshman students to recall. This feedback supported the use of college freshman to explore their experiences with cyberbullying during high school.

### **Pilot Test**

After editing the instrument based on cognitive interviews, a pilot study was conducted. The pilot study served as a quality check among the target population. The survey was loaded onto Qualtrics (Qualtrics, Provo, UT), a commercial internet survey software program. Qualtrics was used to collect and store electronic study data. A total of 6,210 students were selected by the registrar to participate in the pilot study. All selected students were classified as freshman at a large university in the southeast quadrant of the United States, and all were admitted to the university for the late-summer or fall 2012 terms. Invited participants received one initial contact via email, followed by two additional email reminders over the course of 2 weeks. To ensure anonymity, participants' IP addresses, names, and e-mails were not collected. Respondents were notified of their right to discontinue the questionnaire at any point without retribution.

Data were entered into IBM® SPSS® Statistics 21, statistical software used for analyzing data. Each question on the survey was coded numerically to facilitate data

analysis. Response patterns were assessed by age, gender, sexual preference, and relationship status. Distribution of missing responses was analyzed.

All currently enrolled university freshmen, enrolled in their first year at this university, received an email about the survey (n=6210). A total of 301 students completed the instrument, resulting in a 4.84% response rate. In general, online surveys are much less likely to achieve response rates as high as surveys administered via the telephone or face-to-face, and most online response rates fall between 10 and 20% (Nulty, 2008). Obviously, this pilot study response rate was significantly lower than the average response rate for online surveys. Many conditions affected the pilot study response rate. First, the survey was administered one week before the last week of classes for the term, and continued through final exam week. Thus, the pilot study competed for students' attention during a critical time of the semester in which students are preoccupied with studying for final exams. Second, participants were not offered an incentive for participating in the study. Offering incentives to survey respondents is one of the most effective strategies to improve survey response rates (Nulty, 2008), and this tactic was adopted for the final study. Finally, while the web link to the online survey was emailed to all currently enrolled freshman, a list provided by the registrar, the response rate may have been influenced by non-receipt of survey materials. Student email addresses may not be reliable, as students may not have checked their college email account during the weeks the survey was open. Similarly, some email inboxes might have been full, which would prevent the student from receiving the researcher's email.

Nevertheless, the survey response rate, though low, was sufficient for examining pilot data and yielded 301 completed surveys. Data analysis was completed for the pilot study data, and the statistical tests run were used to examine the adequacy of the newly designed instrument. More specifically, correlations were performed among independent and dependent variables pertaining to each research question, to examine the structure and psychometric properties of the newly developed instrument. Additionally, close attention was given to establishing the reliability and validity of the new instrument.

Prevalence statistics were also calculated using descriptive characteristics to view student involvement in cyberbullying during their last semester of high school. These statistics were then compared to findings reported by Patchin and Hinduja (2010), as the prevalence questions pertaining to offending and victimization (n=4) were adopted and revised (with author permission) based on similar measures used by Patchin and Hinduja (2010). In addition to inquiring about participants' involvement in cyberbullying as the perpetrator and victim, questions were added that also investigated their role as an observer to cyberbullying. Hinduja and Patchin (2010) did not collect this data in their previous cyberbullying studies; however, during communication with the authors regarding use of questions from their instrument, adding questions regarding cyberbullying observation was both supported and encouraged. More information about the final study's prevalence rates for cyberbullying, as well as how these statistics compare to those found by Hinduja and Patchin (2010) is discussed in Chapters 4 and 5.

Based on results from the pilot study, a few minor revisions were made to the final study protocol. First, an incentive was added to increase survey response rate. A \$50 Visa gift card was given to four participants. Due to state of Florida legalities, the four chosen participants could not be randomly selected from the group of survey participants; rather, the Institutional Review Board required that the gift cards be awarded to the first two, and last two survey participants. Nevertheless, the advertisement of a possible survey incentive was advertised to the target population in the email message introducing the survey, and the informed consent.

Additionally, to help boost the survey response rate, a sentence was added to the survey email reminders and the informed consent about the time required for survey completion. The added sentence explained to prospective respondents that although the survey may appear long, the average completion time for the survey was previously recorded as 10 to 15 minutes among college freshmen. This sentence was deemed critical, as the pilot survey attrition rate clearly showed significant participant drop-off before the start of each survey section. The attrition rate for the pilot survey explained to the researchers that as students moved from one question to the next, and because most survey questions included multiple sub questions, participants believed the survey to require more than 15 minutes to complete. As a result, participants dropped out of the survey. Providing a sentence explaining that the average college freshmen required just 10 to 15 minutes for the survey was believed to encourage students to continue the survey, despite the many sub questions. Percent to completion was also added to the final study, for the same reasons. Including percent to completion at the end of each

section of questions, allowed participants to approximate the time remaining for their survey.

One question was deleted from the pilot survey. Question 8-1 was deleted because of an apparent issue with the question, as interpreted by participants and revealed by statistical analysis. Question 8 included 6 sub questions designed to explore students' association with the "Minimizing Agency" process of Moral Disengagement. The original sub question was as follows: "adults should be held responsible for preventing students from cyberbullying one another." After running correlations between this question and the dependent variables associated with each research question, it was apparent that something was different. The correlation was not reporting as significant, and more specifically, the correlation was negative. Nearly all other correlations were both positive and significant; however, for Question 8-1, the opposite was true. Two hypotheses were provided to explain the negative, insignificant correlational values. First, the question was negatively worded, thus participants may have interpreted the question or response choice incorrectly. Secondly, the question asked participants (students) to respond based on what adults should, or should not be held responsible for. This question is the only survey question students were not responding based on their personal experiences, nor based on how they would or would not behave. Thus, it was deduced that the question's negative wording and focus on the adult's responsibility level created a poor assessment of the "Minimizing Agency" process of Moral Disengagement.

One additional survey question was revised, also a sub question of Question 8. The sub question was changed from: "when I saw or heard a classmate being

cyberbullied, there was nothing I could do to stop it” to “when I saw or heard a classmate being cyberbullied, I did not feel it was my responsibility to stop it.” Slight modification of the wording of this question was to better align it with the “Minimizing Agency” process of Moral Disengagement by directly asking student participants about their level of responsibility concerning seeing or hearing about a classmate being cyberbullied. After changes made to sub questions, Question 8 now contained only five sub questions.

A few additional updates were made to the final study survey, although the modifications were minor and focused on eliminating of duplicate information in the survey instructions and in the informed consent document. Despite the need for survey revisions, the reliability analysis of the pilot study survey revealed a Cronbach’s alpha score of .961. This score indicates that 96.1% of the responses reported for the pilot study survey represent a true score, which confirms that this instrument’s internal consistency measure is appropriate. Thus, this pilot test of the instrument suggested that the instrument possessed psychometric properties sufficient to continue its use.

### **Formal investigation**

Upon request, the University’s Registrar Office generated a list of email addresses belonging to all newly admitted, freshmen students registered for the late-summer term in which the survey was administered. The previously piloted methodology was applied in the formal investigation, with one exception. To increase the instrument’s response rate, an incentive was offered to the first two and last two participants. On the exit page, participants had the option to exit the survey and continue to the incentive form, which required submitting their email address to be considered for a \$50 gift card.

The formal data collection, with incentive, led to a 21.04% response rate (390 respondents), a 16.2% increase from the pilot administration. Tables 4-4 and 4-5 show race and gender for the final study sample and overall freshmen population at the university. Overall, the final study sample represented a sample fairly comparable to the entire freshmen population gender and race statistics. Final student notifications, consent information, and survey are shown in Appendices G, H, and I. Results of the final survey, a comparison of pilot study versus final study data are given in Chapter 4.

### **Summary**

Although establishment of an instrument is an ongoing task requiring replication across a series of studies, my study results provide structured guidelines and encouraging results. Research on why youth choose to engage in cyberbullying is limited. Although a few studies have explored the relationship between bullying and moral disengagement, only two studies examining the relationship of cyberbullying and moral disengagement have been published. The *Survey of Student Experiences with Electronic Media and Perceptions of Cyberbullying Behaviors* was developed to explore whether college freshman, upon looking back at cyberbullying incidents that occurred during their final semester of high school, ethically justified the aggressive behavior(s) through the processes of moral disengagement based on victim characteristics and type of cyberbullying behavior.

Krause's (2002) comprehensive strategy for developing closed-ended survey items guided the development of the instrument. After reviewing the literature to identify relevant concepts related to cyberbullying and moral disengagement, preliminary measures were cultivated. These measures were reviewed by a panel of experts, then edited and tested among the target population with cognitive interviews. This aspect of

the analysis proved productive because the researcher was able to analyze how the participant responded to the questions, response options, length, and overall instrument construction.

The instrument was revised based on feedback from cognitive interviewers, and was pilot-tested among the target population. The survey was administered online, and the survey web link was emailed to all currently enrolled college freshmen at the end of the spring 2013 term. The web-based design of the instrument proved cost-effective, and organizing the data was seamless because of the online software used. Pilot data were analyzed using IBM® SPSS® Statistics. Findings led to a few changes to the instrument, including elimination of one sub question and revision of another sub question. Other changes made to the final survey, including more specific information about average completion time and adding percent to completion at the end of each survey section, primarily focused on improving the final study response rate. The final study was implemented several weeks later and the revised survey web link was emailed to the newly admitted college freshmen, who had graduated from high school within the 6 months preceding survey implementation. To improve the response rate, a small incentive was provided to survey participants.

In Chapter 4, the results from the final study will be highlighted. The data analysis will be presented, including an explanation for the tests that were run. Statistical findings will also be presented, and resulting conclusions discussed in relation to the research study questions. Final concluding remarks in relation to the implications this study has on current cyberbullying prevention efforts will not be discussed until Chapter 5.

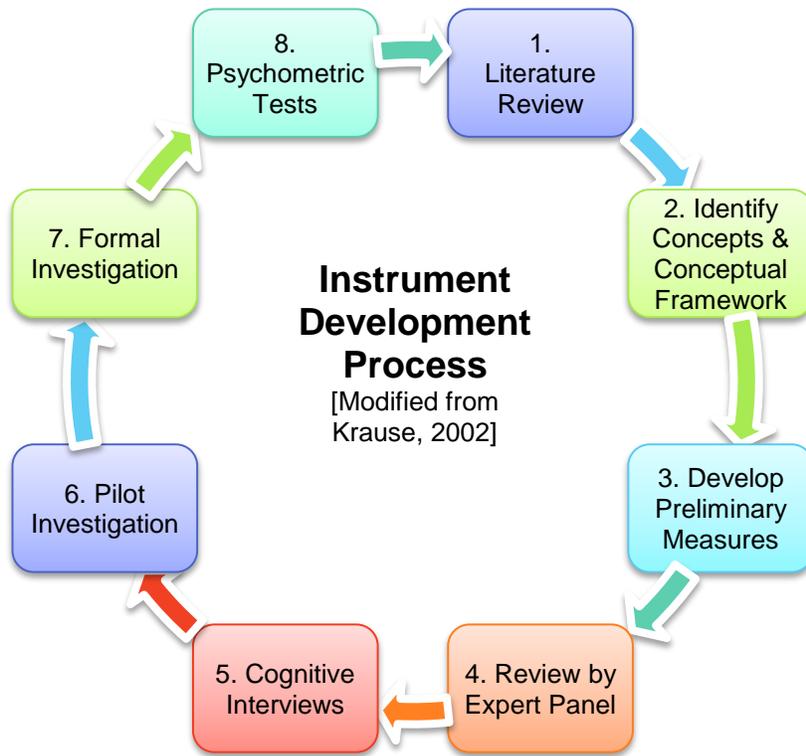


Figure 3-1. Instrument development process

## CHAPTER 4 RESULTS

My study explored the relationship between the theory of moral disengagement and college freshmen's self-reported experiences with cyberbullying during their final semester of high school. Results from data collected during the study are presented in this chapter. These results describe college freshmen's report of their experiences with cyberbullying during their final semester of high school, as well as relationships among the four processes of moral disengagement and students' perceptions of cyberbullying behaviors as victim, offender and observer.

Before analysis, all data were checked for outliers, and for any violations of the statistical assumptions for multiple linear regression. Results from the check indicated no outliers and no violations of any statistical assumptions. A total of 458 respondents consented to the survey. However, 68 freshmen consented to participate in the survey, yet never responded to a single question. These participants were deleted from the data set. The total number of survey respondents was therefore recorded as 390.

### **Instrument**

The purpose of my study was to describe the relationship between the processes of moral disengagement and cyberbullying behavior during participants' last semester of high school. The two primary variables of interest were acceptability for cyberbullying, and level of seriousness for cyberbullying. The instrument consisted of 23 questions, and several of the questions contained multiple sub questions (Appendix H). The first 10 questions were developed specifically for my study, and are collectively referred to as the *Student Experiences with Electronic Media and Perceptions of Cyberbullying Behaviors* survey instrument. These questions were developed from an extensive

literature search, and then revised based on feedback from expert reviewers, feedback from cognitive reviewers who were members of the target audience, and feedback collected during the pilot study.

Questions 11 through 16 were adopted and modified with permission from the *Cyberbullying and Online Aggression Survey Instrument* (Hinduja & Patchin, 2010). These questions focused on exploring participants' involvement in cyberbullying during their last semester of high school as the cyberbully, victim, and observer. While four questions were adopted from the *Cyberbullying and Online Aggression Survey Instrument* (Hinduja & Patchin, 2010), two new questions were added to the instrument in order to assess the participants' role as the observer, or bystander, during cyberbullying.

Questions 17 through 23 collected demographic information from the participants. Demographic questions explored the age, gender, sexual orientation, race and ethnicity of survey participants. Questions also included the location and type of high school participants attended, and popularity level of the participants during their last semester of high school.

### **Pilot Test**

A pilot study was conducted after editing the instrument based on feedback provided by expert reviewers, as well as cognitive interviews conducted with members of the target population. The pilot study served as a quality check among the target population. The survey was administered online during spring semester. A link to the survey was sent to all freshmen enrolled during spring semester who had graduated from high school within the past twelve months. A total of 6,210 students were selected by the registrar to participate in the pilot study. In addition to initial contact via email,

two additional follow-up email reminders were sent over the course of two weeks. A total of 301 students completed the instrument, which represents 4.84% of the entire population (n=6,210). This response rate was significantly lower than the average response rate for online surveys. Two preexisting conditions negatively affected the response rate: (1) the survey was administered one week before the last week of classes for the term, and continued through final exam week; and, (2) participants were not offered an incentive for participating in the study.

The survey response rate, although low, was sufficient for examining pilot data. Data analysis was completed for the pilot study, and the statistical tests run were used to examine the adequacy of the newly designed instrument. More specifically, correlations were performed among independent and dependent variables pertaining to each research question, to examine the structure and psychometric properties of the newly developed instrument. Close attention was also given to establishing the reliability and validity of the new instrument.

Based on results from the pilot study, a few minor revisions were made to the final study protocol. First, an incentive was added to increase survey response rate. A \$50 Visa gift card was awarded to the first and last two survey participants. Second, to help boost survey response, a sentence was added to survey email reminders and the informed consent about average time required for survey completion. The added sentence explained to prospective respondents that average completion time for the survey was recorded between 10 to 15 minutes among college freshmen.

One sub question was deleted from the pilot survey. Sub question 8-1 was deleted due to an apparent issue with how participants interpreted the question,

revealed through statistical analysis. This sub question was the only survey question requiring students to respond based on an adults responsibility level with regard to cyberbullying. The wording of another sub question from Question 8 was updated to better align with the “Minimizing Agency” process of MD.

A few additional updates were made to the final study survey, although the modifications were minor and focused on the elimination of duplicate information in the survey instructions and within the informed consent document. It is important to note, however, that despite the need for survey revisions, the reliability analysis of the pilot study survey revealed a Cronbach’s alpha of .961. Cronbach's alpha was the measure of internal consistency for this instrument. A reliability of .80 or higher is acceptable, and a score above .90 is considered excellent. Thus, the pilot instrument’s reliability analysis confirmed that the instrument possessed psychometric properties sufficient to continue its use.

### **Final Study**

A reliability analysis was also conducted to estimate the internal consistency of the Student Experiences with Electronic Media and Perceptions of Cyberbullying Behaviors final survey instrument. For the final study, Cronbach’s coefficient for the entire instrument was .963. This reliability was closely related to the pilot study’s reliability, which was computed at .961. The final instrument’s reliability analysis further supports that this instrument is a reliable measure for the variables of interest.

Survey questions 7 through 10 were specifically related to the four processes of moral disengagement, thus each question was considered a subscale of the instrument. Each question included a set of items that comprised the subscale. Questions 7 through 10 were renamed MD1, MD2, MD3, and MD4, respectively, with each focusing

on one process of moral disengagement. Specifically, MD1 represented cognitive restructuring, MD2 represented minimizing agency, MD3 represented distortion of negative consequences, and MD4 represented blaming/dehumanizing the victim. Throughout this chapter, Questions 7 through 10 are referred to as MD1, MD2, MD3, and MD4, respectively.

The total score for each of the MD subscales was computed by summing the score of the items in the relevant question. Questions 7, 9, and 10 each contained six sub questions, thus the minimum score possible was six and the maximum score possible was 30. Question 8 contained just five sub questions, therefore the minimum score possible was five and the maximum score possible was 25. Cronbach's alpha was the measure of internal consistency for each subscale. The reliability for each MD subscale is shown in Table 4-1. Descriptive statistics for the sub scales are shown Table 4-2.

### **Demographics**

Participants were recruited from a large University in the southeastern quadrant of the United States. A request was made to the University's Registrar Office for a list of email addresses belonging to all newly admitted, freshmen students registered for the late-summer term in which the survey was administered. A total of 1,853 freshmen were solicited to participate in the survey. All communication to participants was through email messages, including one initial email that introduced the researcher and the study, and included the web link to the survey; and three reminder emails sent at the end of the first, second, and third week of the survey opening period. Note that this group of freshmen was beginning their first semester of enrollment at this university, and had recently graduated from high school.

A total of 390 freshmen participated in the survey, which represents 21.04% of the entire class of newly admitted summer 2013 freshmen (n=1,853), all of which were invited to participate in the survey. This response rate represents a significant increase when compared to the pilot survey (4.84% response rate). The increase is attributed to the timing of the survey release, and the addition of an incentive. The first email message about the survey was sent during the early part of the semester; thus, the survey did not compete with final exams, as the pilot survey had. Additionally, the survey was available for one week longer than the pilot survey had been available. An incentive was also added for the final survey. Collectively, these updates to the final survey resulted in a survey response increase of 16.2%, when compared to the pilot study survey response rate.

As previously mentioned, the final sample consisted of 390 freshmen. However, the survey attrition rate resulted in a loss of 30 participants by the final survey question (n=360). Survey attrition was also a problem for the pilot survey, as there was a loss of 41 participants between the first and last survey question. Attrition rates for the pilot and final survey were 13.62 and 7.69%, respectively. Much like the improved survey response rate, it seems the reduced attrition rate can be attributed to the timing of the survey, as well as the addition of the survey incentive.

Of the 361 survey participants responding to the gender question, 31.0% self-identified as male (n=112), 68.1% self-identified as female (n=246), and less than 1% self-identified as transgender (n=3). Note that the gender breakdown among the entire freshman class contributed to the increase in female respondents. Among the entire freshmen population, approximately 59% self-identified as female, and 41% as male.

Thus, before the first email was sent to participants, female participants (n=1335) held an 18% advantage over male participants (n=932). Additionally, although females represented slightly more than two-thirds of survey respondents, females were identified in past research studies as having a greater participation in, and experience with cyberbullying (Hinduja & Patchin, 2008; Pornari & Wood, 2010). In a study by Hinduja and Patchin (2008), efforts were undertaken to equalize youth respondents in terms of gender, yet most of the respondents were female (82%). The authors offered a few explanations for the gender bias among respondents: the gender breakdown may characterize the distribution of cyberbullying across youth, or it may reflect the greater impact cyberbullying has on female youth, as well as their corresponding concern with the behavior (Hinduja & Patchin, 2008).

Regarding my study's response rate by gender, it would make sense that a population with a greater exposure to cyberbullying would also have a greater interest in a survey about such behaviors. Also of importance regarding gender, significant differences were found among mean scores of the four MD scales when comparing the scores of males and females. These data further support the gender bias findings of my study, as well as findings from Hinduja and Patchin (2008), and are further discussed in Chapter 5.

Most survey respondents self-identified as heterosexual (n=344; 95.6%), with only 4.4% self-identified as gay/lesbian (n=4), bisexual (n=7), or unsure (n=5). Additionally, nearly two-thirds of respondents self-identified as White (n=221; 61.2%), with Hispanic/Latino/a as the second most represented group (n=69; 19.1%). The breakdown of the remaining participants is as follows: Black or African American (n=34;

9.4%), Asian or Pacific Islander (n=25; 6.9%), Bi-racial or Multi-racial (n=8; 2.2%), Other (n=3; 0.8%), and American Indian or Alaskan Native (n=1; 0.3%). Overall, the survey respondents were representative of the entire freshmen sample, regarding ethnicity. A complete breakdown of the demographic descriptive statistics is given in Tables 4-3 through 4-8. Note: the vast majority of participants reported attending a Florida high school during their final semester of high school.

### **Research Question 1:**

**Are Higher Levels of Acceptability for Cyberbullying Behaviors Related to Higher Levels of Moral Disengagement?**

Pearson correlation coefficients were calculated to examine relationships among students' reported acceptability for cyberbullying and the processes of MD, and among students' reported acceptability for cyberbullying behaviors and the processes of MD. Prior to calculating the Pearson correlation coefficients, the independent variables were recoded so that a positive association between the independent variables and the dependent variables would be expected in all cases. All correlations were positive, and considered weak. Most correlations were significant, which indicated that linear associations exist among acceptability for cyberbullying, cyberbullying behaviors, and the processes of MD. Students who reported greater acceptability for cyberbullying were also more likely to report engagement in the processes of MD. Likewise, students who reported greater acceptability for cyberbullying behaviors were also more likely to report engagement in the processes of MD (Table 4-9).

To better describe the relationship between acceptability for cyberbullying and the processes of MD, two linear regression analyses were conducted. In the first analysis, acceptability for cyberbullying served as the dependent variable, and MD1, MD2, MD3,

and MD4 scores represented the independent variables ( $n=4$ ). A significant regression equation was found ( $F(4,353) = 19.158, p < .001$ ), and 17.8% of the variation in acceptability for cyberbullying can be explained by a student's engagement in the processes of moral disengagement. More specifically, MD1 (cognitive restructuring) and MD4 (blaming and dehumanizing the victim) were both positive and significant ( $\beta_1 = .045, t=3.173, p=.001$ ;  $\beta_4 = .041, t=2.961, p=.002$ ) predictors of students' acceptability for cyberbullying. Thus, students with higher levels of the MD1 and MD4 processes of moral disengagement also reported higher levels of acceptability for cyberbullying (Table 4-10).

In the second analysis, acceptability for the cyberbullying behaviors listed in Question 2 served as the dependent variable, and MD1, MD2, MD3, and MD4 scores represented the independent variables ( $n=4$ ). Responses for each of the ten behaviors listed in Question 2 were summed and the summed score was compared to the four processes of moral disengagement. The model containing all four moral disengagement variables was significant ( $F(4,353) = 21.267, p < .001$ ) and explained 19.8% of the total variance in acceptability for cyberbullying behaviors. Furthermore, the MD1 and MD4 total score variables were significant predictors of acceptability for cyberbullying behaviors. Additionally, an increase of one unit in the total score MD1 or MD4 resulted in an increase for the acceptability of cyberbullying behaviors; MD1 resulted in a .490 increase on average and MD 4 resulted in a .155 average increase ( $\beta_1 = .490, t=5.164, p<.0001$ ;  $\beta_4 = .155, t=1.70, p=.045$ ) (Table 4-11).

In separate analyses, acceptability for each of the individual cyberbullying behaviors in Question 2 served as the dependent variables ( $n=10$ ), and MD1, MD2,

MD3, and MD4 scores represented the independent variables (n=4). For all cyberbullying behaviors (2-1 through 2-10), MD1 was a positive and significant predictor. Thus, students who reported greater acceptability for the cyberbullying behaviors were also more likely to engage in the process of moral disengagement concerned with cognitive restructuring (Table 4-12).

For Questions 2-1 and 2-7, MD4 was also a positive and significant predictor for acceptability of cyberbullying behaviors. Thus, students who reported greater acceptability for “posting mean or hurtful comments about someone online” and “sending mean or hurtful comments about someone through a cell phone text message” were more likely to engage in the process of moral disengagement concerned with blaming or dehumanizing the victim, in addition to the process of moral disengagement concerned with cognitive restructuring (Table 4-12).

### **Research Question 2:**

Are Lower Levels of Seriousness for Cyberbullying Behaviors Related to Higher Levels of Moral Disengagement?

Pearson correlation coefficients were calculated to examine relationships among students' reported levels of seriousness for specific cyberbullying behaviors and the processes of MD. Prior to calculating the Pearson correlation coefficients, the independent and dependent variables were recoded so that a positive association between the independent variables and the dependent variables would be expected in all cases. All correlations were positive, and considered moderate to weak. With the exception of Question 3-9, each question had a few non-significant correlations. Nevertheless, most of the correlations were significant, which indicated a linear association between seriousness for cyberbullying behaviors and the processes of MD.

Students who reported lower levels of seriousness associated with cyberbullying behaviors were more likely to report engagement in the processes of MD (Table 4-13).

To better describe relationships among seriousness for cyberbullying behaviors and the processes of MD, two linear regression analyses were conducted. Seriousness for cyberbullying behaviors served as the dependent variable, and MD1, MD2, MD3, and MD4 scores represented the independent variables ( $n=4$ ) in the first analysis. Question 3 consisted of 10 sub questions, each representing a different behavior. Responses for each of the ten behaviors were summed and the summed score was compared to the four processes of moral disengagement to determine which specific cyberbullying behaviors showed significant results.

The model containing all four moral disengagement variables as independent variables was found to be significant ( $F(4,351) = 11.271$ ,  $p < .001$ ), and explained 11.4% of the variation associated with seriousness for cyberbullying behaviors. More specifically, MD1 (cognitive restructuring) and MD3 (distortion of negative consequences) were both positive and significant predictors of students' seriousness for cyberbullying behaviors ( $\beta_1 = .486$ ,  $t=2.736$ ,  $p=.004$ ;  $\beta_3 = .371$ ,  $t=2.026$ ,  $p=.022$ ). Thus, students with higher levels of the MD1 and MD3 processes of moral disengagement also reported lower levels of seriousness associated with cyberbullying. On average, students' level of seriousness for cyberbullying behaviors increased .486 units due to an increase on the MD1 scale, and .371 units due to an increase on the MD3 scale (Table 4-14).

In the second analysis, seriousness for each of the cyberbullying behaviors listed in Question 3 served as the dependent variables ( $n=10$ ), and MD1, MD2, MD3, and

MD4 scores represented the independent variables (n=4). The variable MD1 was a positive and significant predictor for all but two cyberbullying behaviors. The variable MD1 was not significant for 3-6 (pretending to be someone else online and acting in a way that was mean or hurtful to them) or 3-10 (threatening to hurt someone through electronic media). For sub questions 3-6, and 3-10, MD3 was a positive and significant predictor for lower levels of seriousness for the cyberbullying behaviors. Thus, students who reported lower levels of seriousness for the large majority of cyberbullying behaviors were more likely to engage in the process of moral disengagement concerned with cognitive restructuring. However, students who reported lower levels of seriousness for sub questions 3-6 and 3-10 were more likely to engage in the process of moral disengagement concerned with distortion of negative consequences.

For sub questions 3-4, 3-5, and 3-8, both MD1 and MD3 were positive and significant predictors for lower levels of seriousness for the cyberbullying behaviors. Thus, students who reported lower levels of seriousness for “creating a mean or hurtful web page about someone,” “spreading rumors about someone online,” and “sending a mean or hurtful picture of someone through a cell phone text message” were more likely to engage in the processes of moral disengagement concerned with cognitive restructuring, as well as distortion of negative consequences (Table 4-15).

### **Research Question 3:**

Are Higher Levels of Acceptability for Cyberbullying Based on Victim Characteristics Related to Higher Levels of Moral Disengagement?

Pearson correlation coefficients were calculated to examine the relationship between students' reported levels of acceptability for cyberbullying based on victim characteristics and the processes of MD. Prior to calculating the Pearson correlation

coefficients, the independent variables were recoded so that a positive association between the independent variables and the dependent variables would be expected in all cases. All correlations were positive, and ranged from weak to moderate. The majority of the correlations were significant, which indicated a linear association between acceptability for cyberbullying based on victim characteristics and the processes of MD. Students who reported higher levels of acceptability for cyberbullying based on victim characteristics were more likely to report engagement in the processes of MD (Table 4-16).

To better describe the relationship between acceptability for cyberbullying based on victim characteristics and the processes of MD, two linear regression analyses were conducted. Acceptability for cyberbullying based on victim characteristics served as the dependent variable, and MD1, MD2, MD3, and MD4 scores represented the independent variables ( $n=4$ ). Question 4 consisted of 10 sub questions, each representing a different victim characteristic. Responses for each of the ten victim characteristics were summed and the summed score was compared to the four processes of moral disengagement, to determine which specific victim characteristics displayed significant results.

The model containing MD1, MD2, MD3 and MD4 as independent variables was found to be significant ( $F(4,351) = 39.284$ ,  $p < .001$ ), and explained 30.9% of the variation associated with acceptability for cyberbullying based on victim characteristics. Overall, MD1 (cognitive restructuring), MD3 (distortion of negative consequences), and MD4 (blaming/dehumanizing the victim) were positive and significant predictors of students' acceptability for cyberbullying based on victim characteristics ( $\beta_1 = .415$ ,

$t=4.561$ ,  $p=.000$ ;  $\beta_3= .205$ ,  $t=2.165$ ,  $p=.012$ ;  $\beta_4= .264$ ,  $t=3.00$ ,  $p=.002$ ). Thus, students with higher levels of the MD1, MD3, and MD4 processes of moral disengagement also reported higher levels of acceptability for cyberbullying based on victim characteristics, with an average increase in acceptability of .415, .205 and .264 per unit of moral disengagement for the MD1, MD3 and MD4 processes, respectively (Table 4-17).

In the second analysis, acceptability for cyberbullying based on each of the victim characteristics served as the dependent variables ( $n=10$ ), and MD1, MD2, MD3, and MD4 scores represented the independent variables ( $n=4$ ). The variable MD1 was a positive and significant predictor for all but three victim characteristics. The variable MD1 was not significant for 4-3 (religious beliefs), 4-8 (physical disability), or 4-9 (learning disability). Thus, students who reported greater acceptability for cyberbullying based on a victim's religious beliefs, physical disability and learning disability, did not engage in the process of moral disengagement focused on cognitive restructuring. Instead, students used the process of moral disengagement focused on distortion of negative consequences for victims with a physical or learning disability, and used the processes of moral disengagement focused on distortion of negative consequences and blaming/dehumanizing the victim for victims with different religious beliefs.

The variables MD1 and MD4 were positive and significant predictors for sub questions 4-1 (body size or features), 4-2 (sexual orientation), 4-4 (race/ethnicity), 4-7 (style of dress, or clothes), and 4-10 (popularity level). Thus, students who reported greater acceptability for cyberbullying based on a victim's body size or features, sexual orientation, race/ethnicity, style of dress, or clothes, and popularity level were also more

likely to engage in the processes of moral disengagement focused on cognitive restructuring and blaming or dehumanizing the victim.

Additionally, MD1, MD3, and MD4 were positive and significant predictors for sub questions 4-5 (family's income level) and 4-6 (accent, or how one talks). Students who reported greater acceptability for cyberbullying based on a victim's family income level and accent were also more likely to engage in the processes of moral disengagement focused on cognitive restructuring, distortion of negative consequences, and blaming/dehumanizing the victim (Table 4-18).

#### **Research Question 4:**

**Are Lower Levels of Seriousness for Cyberbullying Based on Victim Characteristics Related to Higher Levels of Moral Disengagement?**

Pearson correlation coefficients were calculated to examine the relationship between students' reported levels of seriousness for cyberbullying behaviors based on victim characteristics and the processes of MD. Prior to calculating the Pearson correlation coefficients, the independent and dependent variables were recoded so that a positive association between the independent variables and the dependent variables would be expected in all cases. All correlations were positive and weak. Sub question 5-3 had three non-significant correlations with sub questions 7-1, 8-3, and 9-6; sub question 5-4 had non-significant correlations with sub questions 7-1, 8-1, 9-6; and 10-6; sub question 5-5 had non-significant correlations with sub questions 7-1, 8-3, and 9-6; sub question 5-6 had non-significant correlations with sub question 8-5; sub questions 5-8 and 5-9 had non-significant correlations with sub questions 7-1, 7-3, 7-6, 8-1, 8-2, 8-3, 9-6, 10-2, 10-5, and 10-6; and sub question 5-10 had non-significant correlations with sub question 8-3. Nevertheless, most of the correlations were significant, which

indicated a linear association between seriousness for cyberbullying behaviors based on victim characteristics and the processes of MD. Students who reported lower levels of seriousness associated with cyberbullying behaviors based on victim characteristics were more likely to report engagement in the processes of MD (Table 4-19).

To better describe the relationship between seriousness for cyberbullying behaviors based on victim characteristics and the processes of MD, two linear regression analyses were conducted. Seriousness for cyberbullying behaviors based on victim characteristics served as the dependent variable, and MD1, MD2, MD3, and MD4 scores represented the independent variables ( $n=4$ ). Question 5 consisted of 10 sub questions. Responses for each of the ten victim characteristics were summed and the summed score was compared to the four processes of moral disengagement, to determine which specific cyberbullying behaviors displayed significant results.

The regression equation with the four processes of moral disengagement as independent variables was found to be significant ( $F(4,349) = 9.634$ ,  $p < .001$ ), and explained 9.9% of the variation associated with seriousness for cyberbullying behaviors based on victim characteristics. More specifically, MD1 (cognitive restructuring) and MD3 (distortion of negative consequences) were both positive and significant predictors of students' seriousness for cyberbullying behaviors based on victim characteristics ( $\beta_1 = .383$ ,  $t=1.844$ ,  $p=.033$ ;  $\beta_3 = .618$ ,  $t=2.8845$ ,  $p=.002$ ). Thus, students with higher levels of the MD1 and MD3 processes of moral disengagement also reported lower levels of seriousness for cyberbullying behaviors based on victim characteristics. An increase of one unit in MD1 resulted in an average increase of .383 in level of seriousness, while an increase of one in MD3 resulted in an average increase of .618 (Table 4-20).

In the second analysis, seriousness for each of the cyberbullying behaviors based on victim characteristics served as the dependent variables (n=10), and MD1, MD2, MD3, and MD4 scores represented the independent variables (n=4). For all victim characteristics, MD1 and/or MD3 were positive and significant ( $p < .05$ ) predictors for cyberbullying behaviors. The variable MD1 was significant for sub questions 5-1 and 5-10. Thus, students who reported lower levels of seriousness for cyberbullying based on the victims' body size or features, or popularity level were more likely to engage in the process of moral disengagement concerned with cognitive restructuring. The variable MD3 was significant for sub questions 5-2, 5-5, 5-8, and 5-9. Thus, students who reported lower levels of seriousness for cyberbullying based on the victims' sexual orientation, family's income level, physical disability, or learning disability were more likely to engage in the process of moral disengagement concerned with distortion of negative consequences. Lastly, both MD1 and MD3 were significant for sub questions 5-3, 5-4, 5-6, and 5-7. Thus, students who reported lower levels of seriousness for cyberbullying based on the victims' religious beliefs, race/ethnicity, accent/how one talks, or style of dress or clothes were more likely to engage in the processes of moral disengagement concerned with cognitive restructuring and distortion of negative consequences (Table 4-21).

#### **Research Question 5:**

Are Higher Levels of Justification for Cyberbullying among Students who Report Cyberbullying Others Related to Higher Levels of Moral Disengagement?

Pearson correlation coefficients were calculated to examine the relationship between students' reported justification for cyberbullying and the processes of MD. Prior to calculating the Pearson correlation coefficients, the independent variables were

recoded so that a positive association between the independent variables and the dependent variables would be expected in all cases. All correlations were positive and ranged from moderate to weak. Because the correlations were significant, it can be concluded that a linear association exists between justification for cyberbullying and the processes of MD. Students who reported higher levels of justification for cyberbullying were more likely to report engagement in the processes of MD (Table 4-22).

To better describe the relationship between justification for cyberbullying and the processes of MD, linear regression analysis was conducted. Justification for cyberbullying served as the dependent variable, and MD1, MD2, MD3, and MD4 scores represented the independent variables ( $n=4$ ). The regression equation was found to be significant ( $F(4,354) = 25.208$ ,  $p < .001$ ), and explained 22.2% of the variation associated with justification for cyberbullying. Overall, MD1 (cognitive restructuring), and MD4 (blaming/dehumanizing the victim) were both positive and significant predictors of students' justification for cyberbullying ( $\beta_1 = .038$ ,  $t=2.010$ ,  $p=.023$ ;  $\beta_4 = .072$ ,  $t=3.997$ ,  $p=.000$ ). Thus, students with higher scores for the MD1 and MD4 processes of moral disengagement also reported higher levels of justification for cyberbullying (Table 4-23).

### **Summary**

This chapter presented findings describing the relationship between students' perceptions of cyberbullying and cyberbullying behaviors during their last semester of high school, as related to the Theory of Moral Disengagement. Findings suggested a significant relationship between the processes of moral disengagement and the levels of seriousness, as well as the levels of acceptability concerning cyberbullying, cyberbullying behaviors, and cyberbullying others based on specific victim characteristics. Additionally, findings suggested a positive relationship between

students' justification for cyberbullying and the processes of moral disengagement. However, not all processes of moral disengagement shared a significant relationship with each independent variable. Additionally, on close examination of each cyberbullying behavior, as well as each victim characteristic, the results indicate differing relationships with the processes of moral disengagement.

Chapter 5 will review the findings from the statistical analysis of the data, and provide conclusions to the study research questions. Additionally, implications of the study will be discussed from multiple perspectives. Finally, recommendations for future research and practice will conclude Chapter 5.

Table 4-1. Processes of Moral Disengagement sub scale reliability scores

Sub scale	Number of items	Cronbach's alpha
MD1 cognitive restructuring	6	.880
MD2 minimizing agency	5	.807
MD3 distortion of negative consequences	6	.910
MD4 dehumanizing the victim	6	.771

Table 4-2. Processes of Moral Disengagement sub scale inferential statistics

Sub Scale	Males	Mean	Females	Mean	Mean difference	t	Significance
MD1 cognitive restructuring	112	12.29	243	10.53	1.76	3.15	.002*
MD2 minimizing agency	112	11.31	245	9.48	1.83	4.83	.000*
MD3 distortion of negative consequences	111	11.12	246	8.44	2.68	2.68	.000*
MD4 dehumanizing the victim	112	15.36	244	13.21	2.15	4.20	.000*

\* significant at the  $p < 0.05$  level.

Table 4-3. Age of survey participants

Age	Frequency	Percent
18	353	97.50
19	8	2.20
20	1	.30

Table 4-4. Race breakdown for female survey participants and total population

	Female survey participants	% of female survey population	Female freshmen population	% of female freshmen population
American Indian or Alaskan Native	0	0	7	0.5
Asian or Pacific Islander	14	5.7	82	6.2
Black or African American	26	10.6	175	13.3
Hispanic or Latino/a	46	18.7	280	21.2
White	155	63.0	741	56.3
Bi-racial or Multi-racial	5	2.0	n/a	n/a
Other	0	0	33	2.5
Total	246		1318	

Table 4-5. Race breakdown for male survey participants and total population

	Male survey participants	% of male survey population	Male freshmen population	% of male freshmen population
American Indian or Alaskan Native	0	0	5	0.5
Asian or Pacific Islander	11	9.8	66	7.2
Black or African American	8	7.1	78	8.4
Hispanic or Latino/a	23	20.5	187	20.6
White	64	57.1	557	60.6
Bi-racial or Multi-racial	3	2.7	n/a	n/a
Other	3	2.7	25	2.7
Total	112		918	

Table 4-6. Participant sexual orientation

	Frequency	Percent
Heterosexual	344	95.60
Gay/Lesbian	4	1.10
Bisexual	7	1.90
Unsure	5	1.40

Table 4-7. Type of high school attended

	Frequency	Percent
Military high school	0	0.00
Private high school, non-religious	12	3.30
Private high school, religious	44	12.20
Public high school	304	84.00
Virtual school	2	0.50

Table 4-8. Participant high school popularity level

	Frequency	Percent
Very popular	29	8.10
Popular	109	30.30
Somewhat popular	180	50.00
Unpopular	38	10.60
Very unpopular	4	1.00

Table 4-9. Correlations between the four processes of moral disengagement, acceptability for cyberbullying, and acceptability for cyberbullying behaviors

Independent Variables	Acceptability for CB	Comments online	Pictures online	Video online	Hurtful web page	Rumors online	Pretending to be someone else online	Comments via text	Pictures via text	Video via text	Threatening using electronic media
MD1 cognitive restructuring	.387	.364	.338	.343	.257	.321	.333	.394	.444	.422	.292
MD2 minimizing agency	.271	.241	.225	.206	.166	.225	.210	.253	.257	.271	.170
MD3 distortion of consequences	.313	.220	.252	.279	.185	.206	.265	.210	.263	.266	.239
MD4 dehumanizing the victim	.376	.332	.288	.252	.184	.259	.268	.351	.330	.301	.234

Table 4-10. Regression coefficients for the four processes of moral disengagement and acceptability for cyberbullying

	B	Standard Error	t	Significance
MD1	.045	.014	3.173	.001*
MD2	-.014	.018	-.794	.214
MD3	.017	.015	1.145	.127*
MD4	.041	.014	2.961	.002*

\* significant at the  $p < 0.05$  level.

Table 4-11. Regression coefficients for moral disengagement and acceptability for cyberbullying behaviors (collapsed)

	B	Standard Error	t	Significance
MD1	.490	.095	5.164	.000*
MD2	-.108	.117	-.925	.177
MD3	.023	.098	.230	.409
MD4	.155	.091	1.700	.045*

\* significant at the  $p < 0.05$  level.

Table 4-12. Regression coefficients for the four processes of moral disengagement and acceptability for cyberbullying behaviors (individually)

		B	Standard Error	t	Significance
2_1	MD1	.054	.014	3.837	.000*
	MD2	-.008	.017	-.466	.320
	MD3	-.011	.015	-.771	.220
	MD4	.036	.013	2.654	.004*
2_2	MD1	.038	.011	3.396	.001*
	MD2	-.009	.014	-.673	.251
	MD3	.009	.011	.744	.228
	MD4	.016	.011	1.53	.062
2_3	MD1	.040	.010	3.986	.000*
	MD2	-.016	.012	-1.327	.093
	MD3	.019	.010	1.848	.033*
	MD4	.003	.010	.357	.361
2_4	MD1	.027	.009	2.974	.002*
	MD2	-.005	.011	-.436	.332
	MD3	.006	.009	.644	.260
	MD4	.002	.009	.217	.414
2_5	MD1	.044	.013	3.448	.001*
	MD2	.000	.016	.026	.489
	MD3	-.003	.013	-.210	.416
	MD4	.014	.012	1.171	.121
2_6	MD1	.036	.010	3.514	.000*
	MD2	-.014	.013	-1.055	.146
	MD3	.015	.011	1.411	.079
	MD4	.010	.010	1.003	.158
2_7	MD1	.069	.015	4.624	.000*
	MD2	-.009	.019	-.472	.318
	MD3	-.024	.016	-1.565	.059
	MD4	.042	.014	2.888	.002*

Table 4-12. Continued

		B	Standard Error	t	Significance
2_8	MD1	.083	.013	6.179	.000*
	MD2	-.022	.016	-1.307	.096
	MD3	-.004	.014	-.320	.374
	MD4	.017	.013	1.290	.099
2_9	MD1	.065	.012	5.503	.000*
	MD2	-.007	.014	-.496	.310
	MD3	.000	.012	.024	.490
	MD4	.007	.011	.621	.267
2_10	MD1	.033	.010	3.191	.001*
	MD2	-.018	.013	-1.373	.085
	MD3	.016	.011	1.498	.067
	MD4	.009	.010	.855	.196

\* significant at the  $p < 0.05$  level.

Table 4-13. Correlations between the four processes of moral disengagement and level of seriousness regarding cyberbullying behaviors

Independent Variables	Comments online	Pictures online	Video online	Hurtful web page	Rumors online	Pretending to be someone else online	Comments via text	Pictures via text	Video via text	Threatening using electronic media
MD1 cognitive restructuring	.313	.273	.241	.223	.320	.202	.295	.312	.290	.149
MD2 minimizing agency	.231	.226	.211	.153	.208	.172	.225	.218	.224	.128
MD3 distortion of consequences	.260	.237	.232	.228	.282	.214	.227	.270	.256	.212
MD4 dehumanizing the victim	.253	.193	.175	.174	.260	.168	.241	.230	.224	.133

Table 4-14. Regression coefficients for moral disengagement and level of seriousness regarding cyberbullying behaviors (collapsed)

	B	Standard Error	t	Significance
MD1	.486	.177	2.736	.004*
MD2	.009	.218	.041	.483
MD3	.371	.183	2.026	.022*
MD4	.048	.169	.281	.389

\* significant at the  $p < 0.05$  level.

Table 4-15. Regression coefficients for moral disengagement and level of seriousness regarding cyberbullying behaviors (individually)

		B	Standard Error	t	Significance
3_1	MD1	.058	.020	2.954	.002*
	MD2	.002	.024	.100	.460
	MD3	.024	.020	1.174	.120
	MD4	.014	.019	.756	.225
3_2	MD1	.048	.020	2.451	.008*
	MD2	.022	.024	.912	.181
	MD3	.028	.020	1.367	.086
	MD4	-.006	.019	-.321	.374
3_3	MD1	.034	.020	1.688	.046*
	MD2	.023	.025	.925	.178
	MD3	.031	.021	1.471	.071
	MD4	-.001	.019	-.057	.477
3_4	MD1	.038	.020	1.870	.031*
	MD2	-.012	.025	-.470	.319
	MD3	.046	.021	2.172	.015*
	MD4	.004	.019	.220	.413
3_5	MD1	.065	.021	3.172	.001*
	MD2	-.021	.025	-.808	.210
	MD3	.041	.021	1.950	.026*
	MD4	.016	.020	.817	.207

Table 4-15. Continued

		B	Standard Error	t	Significance
3_6	MD1	.024	.020	1.171	.121
	MD2	.012	.025	.460	.323
	MD3	.039	.021	1.839	.033*
	MD4	.005	.020	.247	.402
3_7	MD1	.059	.021	2.747	.003*
	MD2	.014	.026	.518	.302
	MD3	.011	.022	.514	.303
	MD4	.017	.021	.829	.204
3_8	MD1	.067	.021	3.240	.001*
	MD2	-.005	.026	-.213	.416
	MD3	.036	.021	1.701	.045
	MD4	.002	.020	.109	.457
3_9	MD1	.054	.020	2.621	.005*
	MD2	.010	.025	.377	.354
	MD3	.030	.021	1.417	.079
	MD4	.005	.020	.276	.391
3_10	MD1	.008	.020	.421	.337
	MD2	.000	.024	.014	.494
	MD3	.054	.020	2.647	.004*
	MD4	.001	.019	.078	.469

\* significant at the  $p < 0.05$  level.

Table 4-16. Correlations between the four processes of moral disengagement and acceptability for cyberbullying based on victim characteristics

Independent Variables	Body size	Sexual orientation	Religious beliefs	Race or Ethnicity	Family income	Accent	Style of dress	Physical disability	Learning disability	Popularity
MD1 cognitive restructuring	.445	.468	.353	.459	.412	.413	.474	.270	.297	.450
MD2 minimizing agency	.333	.339	.323	.325	.347	.296	.356	.245	.276	.315
MD3 distortion of consequences	.345	.372	.370	.334	.433	.359	.359	.313	.314	.332
MD4 dehumanizing the victim	.396	.388	.351	.395	.395	.399	.432	.269	.253	.378

Table 4-17. Regression coefficients for moral disengagement and acceptability for cyberbullying based on victim characteristics (collapsed)

	B	Standard Error	t	Significance
MD1	.415	.091	4.561	.000*
MD2	-.013	.113	-.118	.453
MD3	.205	.095	2.165	.012*
MD4	.264	.088	3.00	.002*

\* significant at the  $p < 0.05$  level.

Table 4-18. Regression coefficients for moral disengagement and acceptability for cyberbullying based on victim characteristics (individually)

		B	Standard Error	t	Significance
4_1	MD1	.055	.013	4.135	.000*
	MD2	-.003	.016	-.165	.434
	MD3	.010	.014	.690	.245
	MD4	.032	.013	2.520	.006*
4_2	MD1	.059	.013	4.676	.000*
	MD2	-.006	.016	-.374	.354
	MD3	.019	.013	1.464	.072
	MD4	.021	.012	1.771	.039*
4_3	MD1	.015	.011	1.323	.094
	MD2	.011	.014	.774	.219
	MD3	.031	.012	2.666	.004*
	MD4	.022	.011	2.080	.019*
4_4	MD1	.064	.014	4.690	.000*
	MD2	-.006	.017	-.381	.352
	MD3	.007	.014	.475	.317
	MD4	.031	.013	2.402	.009*
4_5	MD1	.020	.009	2.106	.018*
	MD2	.001	.011	.115	.454
	MD3	.035	.010	3.620	.000*
	MD4	.019	.009	2.179	.015*
4_6	MD1	.050	.015	3.342	.001*
	MD2	-.019	.019	-1.041	.149
	MD3	.027	.016	1.748	.041*
	MD4	.044	.015	2.999	.002*
4_7	MD1	.066	.016	4.249	.000*
	MD2	.001	.019	.069	.472
	MD3	.013	.016	.802	.211
	MD4	.043	.015	2.905	.002*

Table 4-18. Continued

		B	Standard Error	t	Significance
4_8	MD1	.006	.009	.709	.239
	MD2	.003	.011	.260	.397
	MD3	.025	.009	2.775	.003*
	MD4	.012	.009	4.469	.071
4_9	MD1	.013	.009	1.378	.084
	MD2	.011	.011	.953	.170
	MD3	.023	.009	2.446	.008*
	MD4	.005	.009	.547	.292
4_10	MD1	.075	.016	4.760	.000*
	MD2	-.010	.020	-.498	.309
	MD3	.011	.016	.677	.249
	MD4	.030	.015	1.972	.025*

\* significant at the p<0.05 level.

Table 4-19. Correlations between the four processes of moral disengagement and level of seriousness regarding cyberbullying based on victim characteristics

Independent Variables	Body size	Sexual orientation	Religious beliefs	Race or Ethnicity	Family income	Accent	Style of dress	Physical disability	Learning disability	Popularity
MD1 cognitive restructuring	.335	.235	.228	.264	.187	.308	.325	.124	.132	.298
MD2 minimizing agency	.215	.199	.167	.193	.179	.212	.233	.134	.129	.208
MD3 distortion of consequences	.275	.260	.234	.292	.244	.292	.278	.243	.249	.245
MD4 dehumanizing the victim	.268	.209	.185	.213	.148	.278	.267	.141	.143	.269

Table 4-20. Regression coefficients for moral disengagement and level of seriousness regarding cyberbullying based on victim characteristics (collapsed)

	B	Standard Error	t	Significance
MD1	.383	.208	1.844	.033*
MD2	-.118	.256	-.463	.322
MD3	.618	.214	2.884	.002*
MD4	.077	.202	.381	.352

\* significant at the  $p < 0.05$  level.

Table 4-21. Regression coefficients for moral disengagement and level of seriousness regarding cyberbullying based on victim characteristics (individually)

		B	Standard Error	t	Significance
5_1	MD1	.081	.023	3.528	.000*
	MD2	-.032	.028	-1.134	.129
	MD3	.038	.024	1.586	.057*
	MD4	.020	.022	.903	.183
5_2	MD1	.028	.023	1.255	.105
	MD2	.001	.028	.033	.486
	MD3	.054	.023	2.308	.011*
	MD4	.011	.022	.510	.305
5_3	MD1	.040	.023	1.701	.045*
	MD2	-.012	.029	-.430	.334
	MD3	.053	.024	2.208	.014*
	MD4	.004	.022	.186	.426
5_4	MD1	.045	.023	1.955	.025*
	MD2	-.021	.028	-.732	.232
	MD3	.074	.024	3.117	.001*
	MD4	.001	.022	.059	.476
5_5	MD1	.015	.024	.618	.268
	MD2	.013	.029	.442	.329
	MD3	.072	.024	2.951	.002*
	MD4	-.010	.023	-.444	.328

Table 4-21. Continued

		B	Standard Error	t	Significance
5_6	MD1	.058	.024	2.409	.009*
	MD2	-.031	.029	-1.042	.149
	MD3	.058	.025	2.356	.009*
	MD4	.031	.023	1.330	.092
5_7	MD1	.066	.023	2.860	.002*
	MD2	-.012	.029	-.419	.337
	MD3	.046	.024	1.921	.027*
	MD4	.016	.022	.732	.232
5_8	MD1	-.018	.023	-.752	.226
	MD2	-.003	.029	-.092	.463
	MD3	.092	.024	3.781	.000*
	MD4	.007	.023	.291	.385
5_9	MD1	-.012	.023	-.515	.303
	MD2	-.011	.029	-.375	.354
	MD3	.095	.024	3.923	.000*
	MD4	.005	.022	.237	.406
5_10	MD1	.059	.025	2.406	.009*
	MD2	-.017	.030	-.573	.283
	MD3	.034	.026	1.319	.094
	MD4	.036	.024	1.525	.064

\* significant at the  $p < 0.05$  level.

Table 4-22. Correlations between the processes of moral disengagement and justification for cyberbullying

Independent Variables	Justification for CB
MD1 cognitive restructuring	.405
MD2 minimizing agency	.354
MD3 distortion of consequences	.351
MD4 dehumanizing the victim	.441

Table 4-23. Regression coefficients for moral disengagement and justification for cyberbullying

	B	Standard Error	t	Significance
MD1	.038	.019	2.010	.023*
MD2	.020	.023	.844	.199
MD3	.019	.019	1.000	.159
MD4	.072	.018	3.997	.000*

\* significant at the  $p < 0.05$  level.

## CHAPTER 5 SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Electronic media, including cell phones, computers, and tablets allow people to communicate with one another around the world. Electronic media provide easy access to a multitude of communication tools (such as social media sites, text messages, online chat, email, and websites), all of which contribute to the ease with which people can communicate with one another at any time and from anywhere. Among school-aged youth, electronic media provide the opportunity for easy communication among friends, peers, and family members. Additionally, young people can quickly and easily increase their knowledge on a wide variety of topics using electronic media (CDC, Electronic Aggression, 2013).

Unfortunately, youth can also use electronic media to harass, mistreat, or make fun of a peer or classmate. This collective group of harmful behaviors is known as cyberbullying, and has become a major concern across the U.S. Cyberbullying is characterized as deliberate, repeated, and hostile victimization that occurs between young people through the use of electronic media. Although not as prevalent as traditional forms of bullying, cyberbullying has the potential to be far more damaging because of the difficulty of escaping the behavior. Cyberbullying can happen at any time, day or night, the behaviors can be committed anonymously, and it can be distributed widely and quickly. Additionally, deleting the messages, pictures, videos, and texts is extremely difficult once they have been distributed.

Youth involved in cyberbullying experience a host of negative health and academic concerns. They are more likely to experience in-person bullying (Ybarra, Diener-West, & Leaf 2007; Ybarra & Mitchell, 2007), skip school, or create excuses to stay home from

school (Katzner, Fetchenhauer, & Belschak, 2009), earn poor grades (Beran & Li, 2007), suffer from low self-esteem and high levels of depression (Ybarra, Mitchell, Wolak, & Finkelhor, 2006), and entertain suicidal thoughts and attempts (Hinduja & Patchin, 2010; van der Wal, de Wit, & Hirasing, 2003). In fact, a study by Schneider, O'Donnell, Stueve and Coulter (2012) confirmed that youth victims of cyberbullying, as compared to victims of traditional forms of bullying, were more likely to suffer from depressive symptoms, experience suicidal ideation, and self-inflict injury. Additionally, victims of cyberbullying were more than twice as likely to have reported attempting suicide, when compared to victims of traditional forms of bullying (Schneider, O'Donnell, Stueve & Coulter, 2012). With suicide ranking as the second leading cause of death among young people 15 to 24 years old in the U.S. (Hoyert & Xu, 2012), and because of the well-established link between cyberbullying and suicide, this form of victimization is a key issue for those concerned with the health and well-being of our youth population.

## **Summary and Discussion**

### **Cyberbullying and Moral Disengagement**

My study examined the relationship between the processes of moral disengagement and students' perception of cyberbullying during their last semester of high school. The *Student Experiences with Electronic Media and Perceptions of Cyberbullying Behaviors* survey instrument was developed specifically for my study to determine the relationship between perceived acceptability of cyberbullying, and level of perceived seriousness for cyberbullying, as related to the processes of moral disengagement (MD). The theory of MD focuses on the sociocognitive process through which an ordinary person can commit a harmful act against someone, when the act is normally considered by that person to be immoral or unethical (Bandura, 1991). Among

youth who bully others (and those who participate as a bystander), the ability to engage in harmful acts of victimization depends on the ability of the bully to selectively activate and disengage his/her personal moral controls. Normally, internal moral controls elicit feelings of guilt or shame, during the self-regulatory process, to keep an individual's behavior in line with personal standards. However, during four points in the self-regulatory process (Bandura, 1999) internal moral control can be turned off, leading to harmful or damaging behaviors. The four self-regulatory processes of moral disengagement include (a) cognitive restructuring (b) minimizing one's agentive role (c) disregarding/distorting the negative impact of harmful behavior, or (d) blaming and dehumanizing the victim.

To date, only two published studies have examined the relationship between cyberbullying and the theory of MD. In one of the studies, Pornari and Wood (2010) reported a relationship between the variables. However, the other study by Perren and Gutzwiller-Helfenfinger (2012) did not find significant evidence to document a relationship between cyberbullying and MD. Despite the conflicting results reported in past research studies, it was hypothesized results from my study would report a relationship between the theory of MD and students' self-reported levels of agreement regarding acceptability of, seriousness related to, and justification for cyberbullying, cyberbullying behaviors, and/or cyberbullying in relation to victim characteristics. This hypothesis was predicted based on past bullying research, which consistently displayed a relationship between peer victimization and MD. Youth involved in cyberbullying are also reportedly more likely to be involved in traditional forms of bullying (Raskauskas & Stoltz, 2007). Additionally, Perren and Gutzwiller-Helfenfinger (2012) suggested that

youth involved in cyberbullying have lower levels of morality than youth involved in traditional bullying because of findings published by Grading, Strohmeir, and Spiel (2009), which reported more severe patterns of maladjustment among youth involved with cyberbullying. Thus, it was hypothesized that my study, the first of its kind, would report a relationship between cyberbullying and MD.

As predicted, the processes of MD related positively and significantly to students' perceptions of cyberbullying during the final semester of high school. More specifically, my findings showed that students' who scored higher levels of acceptability for cyberbullying, who scored lower levels of seriousness related to cyberbullying, and who were more likely to justify cyberbullying behaviors were also more likely to cognitively rationalize cyberbullying in order to make such behaviors seem less harmful. However, the relationship between the processes of MD varied with each dependent variable. The next section provides a detailed description of the results for each research question, and an explanation for the relationships between dependent variables and the processes of MD. Additionally, interesting and significant trends among the MD scales are presented.

### **Acceptability for cyberbullying and cyberbullying behaviors**

Overall, 54.6% of participants said cyberbullying was never okay; however 45.4% said this behavior is acceptable at times, reporting that it was rarely, sometimes, usually, or always okay to pick on a classmate using electronic media. Among these respondents, MD1 (cognitive restructuring) and MD4 (blaming and dehumanizing the victim) predicted students' acceptability for cyberbullying behaviors. Thus, students who reported greater agreement with the cognitive restructuring and

blaming/dehumanizing the victim processes of moral disengagement were also more likely to report higher levels of acceptability, at any level, for cyberbullying (Table 5-1).

When examining the relationship between students' self-reported levels of acceptability for specific cyberbullying behaviors, MD1 (cognitive restructuring) was a predictor for all behaviors. Thus, students who reported greater agreement with the cognitive restructuring process of moral disengagement were also more likely to report any level of acceptability (rarely okay to always okay) for each of the cyberbullying behaviors. Additionally, MD3 (distortion of negative consequences) and MD4 (blaming and dehumanizing the victim) were predictors of students' acceptability for a few of the cyberbullying behaviors. Specifically, students who reported any level of acceptability for posting mean or hurtful comments about someone online, as well as sending mean or hurtful comments about someone through a cell phone text message, were more likely to engage in the blaming/dehumanizing the victim and cognitive restructuring processes of moral disengagement to justify the behaviors. And, students who reported any level of acceptability for posting a mean or hurtful video online of someone were more likely to engage in the distortion of negative consequences and cognitive restructuring processes of moral disengagement to justify the behaviors.

Upon closer examination of the students' self-reported levels of acceptability for each cyberbullying behavior (Table 5-2), the following behaviors had higher scores, indicating the behaviors were reported as more acceptable, at any level (rarely okay to always okay): posting mean or hurtful comments about someone online (32.1%), spreading rumors about someone online (22.7%), sending mean or hurtful comments about someone through a cell-phone text message (37.0%), and sending a mean or

hurtful picture of someone through a cell-phone text message (21.9%). Note that any response other than "never okay" indicates that students believe the action is acceptable, at some level. Thus, these four responses were collapsed to report students' levels of acceptability for specific cyberbullying behaviors. Conversely, the largest percentages of students reported the following behaviors were never okay: posting a mean or hurtful video online of someone (85.3%), creating a mean or hurtful web page about someone (90.5%), pretending to be someone else online and acting in a way that was mean or hurtful to them (86.9%), and threatening to hurt someone through electronic media (88.4%).

Interestingly, regardless of students' self-reported level of agreement for each cyberbullying behavior, the data provided evidence to support a relationship between the cognitive restructuring process of moral disengagement and a students' opinion about whether a cyberbullying behavior is acceptable. Thus, under certain circumstances, a student may use the process of cognitive restructuring to justify an otherwise wrongful and/or unethical behavior as acceptable. And, for some cyberbullying behaviors, students may also engage in the processes of blaming or dehumanizing the victim and distortion of negative consequences to justify the behaviors. These findings provide important considerations for prevention campaigns and intervention techniques.

### **Seriousness for cyberbullying behaviors**

A comparison between students' self-reported levels of seriousness for all cyberbullying behaviors, and the processes of moral disengagement revealed that MD1 (cognitive restructuring) and MD3 (distortion of negative consequences) were both predictors of students' perceptions of seriousness of cyberbullying behaviors. Students

who reported greater agreement with the cognitive restructuring and distortion of negative consequences processes of moral disengagement were also more likely to report lower levels of seriousness (never serious to usually serious) for each of the cyberbullying behaviors.

When examining the relationship among students' self-reported levels of seriousness for each specific cyberbullying behavior, students' who reported greater agreement with MD1 (cognitive restructuring) were also more likely to report lower levels of seriousness (never serious to usually serious) for the following cyberbullying behaviors: posting mean or hurtful comments about someone online, posting a mean or hurtful picture of someone online, posting a mean or hurtful video of someone online, sending mean or hurtful comments about someone through a cell-phone text message, and sending a mean or hurtful video of someone through a cell-phone text message. Additionally, students' who reported greater agreement with MD1 (cognitive restructuring) and MD3 (distortion of negative consequences) were more likely to report lower levels of seriousness, at any level, for the following cyberbullying behaviors: creating a mean or hurtful web page about someone, spreading rumors about someone online, and sending a mean or hurtful picture of someone through a cell phone text message. However, students who reported greater agreement solely with MD3 (distortion of negative consequences) were more likely to report lower levels of seriousness, at any level, for the following cyberbullying behaviors: pretending to be someone else online and acting in a way that was mean or hurtful to them, and threatening to hurt someone through electronic media.

When examining frequency data for the level of seriousness associated with each cyberbullying behavior, several interesting trends were found (Table 5-3). Students' reported lower levels of seriousness for the following cyberbullying behaviors, which indicates the behaviors were reported as less serious, at any level (never serious to usually serious): posting mean or hurtful comments about someone online (66.9%), posting a mean or hurtful picture of someone online (53.1%), spreading rumors about someone online (57.4%), sending mean or hurtful comments about someone through a cell-phone text message (60.5%), and sending a mean or hurtful picture of someone through a cell-phone text message (52.4%). Note that any response other than "always serious" indicates that students believe the action is not serious, to some degree. Thus, these four responses were collapsed to report students' levels of seriousness for specific cyberbullying behaviors. Conversely, students reported the highest levels of seriousness (always serious) for the following behaviors: creating a mean or hurtful web page about someone (60.6%), and threatening to hurt someone through electronic media (66.4%).

What's interesting about these results is how they compare to the results for cyberbullying acceptability. While findings for individual cyberbullying behaviors shared similar trends regarding acceptability and seriousness (i.e., the behaviors scored as least acceptable were also scored as most serious), the degree to which the students scored the behaviors as acceptable and serious varied. Upon comparison of these data, it is clear that students' generally don't find cyberbullying behaviors acceptable. Although the same students reported cyberbullying behaviors as serious, the levels of seriousness were reported at a lower degree, as compared to their levels of

acceptability for cyberbullying behavior. That is, although students report cyberbullying behaviors as unacceptable, their reports of the seriousness associated with the behaviors did not match their perceptions of acceptability.

This finding is significant, and is consistent with claims made by some researchers that young people consider cyberbullying less severe a behavior, with fewer serious consequences, than traditional forms of bullying. Without a doubt, this assumption must be addressed among young people, as the seriousness of cyberbullying behaviors is supported by the harmful, and in some cases deadly effects of this form of peer victimization. Additionally, the level of seriousness we associate with a behavior influences our decision to stop and report the questionable behavior. While it is important for young people to find cyberbullying behaviors unacceptable, it is equally important that they perceive cyberbullying behaviors as serious.

### **Acceptability for cyberbullying based on victim characteristics**

A comparison between students' self-reported levels of acceptability for cyberbullying based on victim characteristics, and the processes of moral disengagement revealed that MD1 (cognitive restructuring), MD3 (distortion of negative consequences), and MD4 (blaming/dehumanizing the victim) were all predictors of students' acceptability of cyberbullying based on victim characteristics. Thus, students who reported greater agreement with the cognitive restructuring, distortion of negative consequences, and blaming/dehumanizing the victim processes of moral disengagement were also more likely to report higher levels of acceptability, at any level, for cyberbullying based on certain victim characteristics. When examining the relationship between students' self-reported levels of acceptability for cyberbullying based on victim characteristics, MD3 (distortion of negative consequences) was a

predictor of students' acceptability for cyberbullying based on the following victim characteristics: physical disability and learning disability. Interestingly, students engaged in both MD3 (distortion of negative consequences) and MD4 (blaming/dehumanizing the victim) scored greater levels of acceptability, at any level, for cyberbullying based on religious beliefs. Furthermore, students who reported greater agreement with MD1 (cognitive restructuring), MD3 (distortion of negative consequences) and MD4 (blaming/dehumanizing the victim) scored greater levels of acceptability, at any level, for cyberbullying based on the following victim characteristics: family's income level; and accent, or how one talks. Additionally, MD1 (cognitive restructuring) and MD4 (blaming/dehumanizing the victim) scored greater levels of acceptability, at any level, for cyberbullying based on the following victim characteristics: body size or features, sexual orientation, race/ethnicity, style of dress or clothes, and popularity level.

When examining frequency data for the level of acceptability associated with cyberbullying based on victim characteristics, several interesting trends were found (Table 5-4). Students' reported higher levels of acceptability, at any level (rarely okay to always okay) for cyberbullying based on the following victim characteristics: accent, or how one talks (37.3%), style of dress or clothes (41.8%), and popularity level (34.1%). Note that any response other than "never okay" indicates that students believe the action is acceptable, to some degree. Thus, these four responses were collapsed to report students' levels of acceptability for cyberbullying based on victim characteristics. Conversely, students reported the lowest level of acceptability (never acceptable) for the following victim characteristics: family's income level (85.9%), physical disability

(94.2%), and learning disability (93.1%). This provides an interesting glimpse into how students rank victim characteristics regarding whether it is acceptable to engage in cyberbullying based on the victim's characteristics. More research is needed to further explore victim characteristics and cyberbullying prevalence. These data are critically important and should be addressed during any cyberbullying prevention efforts.

### **Seriousness for cyberbullying based on victim characteristics**

A comparison between students' self-reported levels of seriousness for cyberbullying based on victim characteristics, and the processes of moral disengagement revealed that MD1 (cognitive restructuring) and MD3 (distortion of negative consequences) were both predictors of students' perceptions of seriousness for cyberbullying behaviors based on victim characteristics. Students who reported greater agreement with the cognitive restructuring and distortion of negative consequences processes of moral disengagement were also more likely to report lower levels of seriousness (never serious to usually serious) for cyberbullying based on victim characteristics.

When examining the relationship between students' self-reported levels of seriousness for cyberbullying based on victim characteristics, students' who reported greater agreement with MD3 (distortion of negative consequences) were also more likely to report lower levels of seriousness (never serious to usually serious) for the following victim characteristics: sexual orientation, family's income level, physical disability, and learning disability. Additionally, students' who reported greater agreement with MD1 (cognitive restructuring) and MD3 (distortion of negative consequences) were more likely to report lower levels of seriousness, at any level, for the following victim characteristics: religious beliefs, race/ethnicity, accent or how one

talks, and style of dress or clothes. However, students' who reported greater agreement with MD1 (cognitive restructuring) only were more likely to report lower levels of seriousness, at any level, for the following victim characteristics: body size or features, and popularity level.

When examining frequency data for the level of seriousness associated with cyberbullying based on victim characteristics, several interesting trends were found (Table 5-5). Students' reported lower levels of seriousness for the following victim characteristics, which indicates that they were reported as less serious, at any level (never serious to usually serious): accent or how one talks (64.1%), style of dress or clothes (63.9%), and popularity level (61.7%). Note that any response other than "always serious" indicates that students believe the action is not serious, to some degree. Thus, these four responses were collapsed to report students' levels of seriousness for cyberbullying based on victim characteristics. Conversely, students reported the highest levels of seriousness (always serious) for the following victim characteristics: physical disability (67.5%), and learning disability (65.9%).

When comparing these findings to those regarding the acceptability of, and level of seriousness regarding cyberbullying behaviors, similar discrepancies were found among victim characteristics data. While findings for individual victim characteristics shared similar trends regarding acceptability and seriousness (i.e., the characteristics scored as least acceptable were also scored as most serious), the degree to which the students scored the victim characteristics as acceptable and serious varied. Upon comparison of these data, it is clear that students generally don't find cyberbullying acceptable based on certain victim characteristics. The same students reported cyberbullying based on

certain victim characteristics to be serious, however, the levels of seriousness were reported to a smaller degree, as compared to the reported levels of acceptability for the same victim characteristics. In other words, students reported cyberbullying based on victim characteristics to be more unacceptable than serious.

As previously discussed, this finding is significant, and seems consistent with claims made by some researchers that young people consider cyberbullying less severe a behavior, carrying less serious consequences than traditional forms of bullying. More research is needed to explore the relationship between students' perception of the seriousness associated with cyberbullying based on victim characteristics and type of cyberbullying behavior. If such an assumption exists among young people, then intervention efforts must be developed to address these dangerous thought processes. Seriousness associated with cyberbullying based on victim characteristics contributes to the many negative effects associated with this form of peer victimization. A person's perception of whether an action is serious also influences our decision to stop and report the questionable behavior. While it is important for young people to find cyberbullying based on victim characteristics to be unacceptable, it is equally important that they perceive the rationale behind the behavior as serious.

### **Justification for cyberbullying**

A comparison between students' self-reported justifiability of their cyberbullying behavior and the processes of moral disengagement revealed that MD1 (cognitive restructuring), and MD4 (blaming/dehumanizing the victim) were both predictors of students' acceptability for cyberbullying based on victim characteristics. Thus, students who reported greater agreement with cognitive restructuring and blaming/dehumanizing the victim also reported higher levels of justification for their cyberbullying behavior.

When examining frequency data for students' self-reported justifiability for cyberbullying behavior, several interesting trends were found (Table 5-6). First, 72.4% of participants claimed to never have picked on a classmate using electronic media. An additional 10.3% reported that they had cyberbullied a peer, yet they believed the behavior was never justifiable. However, the remaining 17.3% of participants, who had cyberbullied a peer, claimed their behavior was justifiable at some level (rarely to always justifiable). These data provide important consideration for information included in interventions. Specifically, it is evident, based on the findings from my study, that the repercussions associated with cyberbullying a peer must be addressed. The information discussed with young people should represent two perspectives: (1) discipline and legal repercussions related to the offender; and (2) harmful effects experienced by the victim. All repercussions represent detrimental effects of peer victimization, a preventable public health issue that is neither acceptable, nor justifiable. This must be appropriately and empathically communicated to the youth population in order to effectively stop and prevent cyberbullying.

### **General Findings from the MD Scales**

Close examination of the four MD scores uncovered a host of interesting findings. For MD1 (cognitive restructuring), students reported the strongest agreement (selected "agree" or "strongly agree") with the notion that being picked on is a normal part of life (22.5%); being picked on using electronic media is not a big deal (10.7%); and that it is okay to send or forward a message, photo or video that picks on a classmate if that person doesn't like you (10.7%). Across all cognitive restructuring sub questions, most participants disagreed (selected disagree or strongly disagree) with the corresponding scenarios. In fact, the rates of disagreement across all six sub-questions ranged from

60.5 to 87.7%. However, scenarios displaying the highest level of agreement were interesting, and provide important considerations for future research concentrated on cyberbullying and the theory of MD (Table 5-7).

For MD2, minimizing agency, students reported the strongest agreement (selected “agree” or “strongly agree”) regarding the following: when I saw or heard about a classmate being cyberbullied, I did not feel it was my responsibility to stop it (23.2%); and, when I received and/or viewed a message/photo/video that picked on a classmate, I did not feel it was my responsibility to stop it (22.7%). While the level of disagreement regarding these two scenarios was calculated at 42.3 and 49.1%, respectively, most interesting is that the neutral response calculations were 34.5 and 28.2%, respectively. Thus, the agreement, disagreement, and neutral options were split nearly evenly among participants. While these data may suggest an issue in the wording of sub questions (both questions were worded in a negative manner), these data could also suggest that nearly one-third of participants could not decide whether they agreed or disagreed with the scenarios related to minimizing agency. Clearly, more research is needed to determine how the minimizing agency process of MD interacts with high school students’ perceptions of cyberbullying and cyberbullying behaviors. And, perhaps the neutral response option should be eliminated, to better determine how high school students are influenced by the minimizing agency process of MD (Table 5-8).

The MD3 score focused on participants’ reaction to six scenarios aligned with the distortion of negative consequences. Overwhelmingly, most participants disagreed (selected disagree or strongly disagree) with the corresponding scenarios. In fact, the rates of disagreement across all six sub questions ranged from 78.7 to 93.4%.

However, findings related to the sub question exploring whether participants believe picking on a classmate makes them a tougher person provide interesting considerations for future research. While most respondents disagreed with the scenario (78.7%), 9.5% reported agreement with this scenario, and 11.8% responded that they neither agreed nor disagreed with the scenario. Again, while most respondents disagreed with this scenario, 21.3% did not disagree with the statement. Because this statement certainly should not be supported by students, parents, or school officials, it is important to find out why one-fifth of the participants did not disagree with the notion that picking on a classmate helps make them a tougher person (Table 5-9).

For MD4, blaming/dehumanizing the victim, students reported the strongest agreement (selected “agree” or “strongly agree”) with the following scenarios: high school students get picked on because they are different or weird (65.5%); high school students get picked on because they pick on others (38.0%); and, it is acceptable to pick on classmates who pick on others (19.8%). Conversely, most participants disagreed (selected disagree or strongly disagree) with the remaining three scenarios: high school students get picked on because they deserve it (78.7%); it is acceptable to pick on classmates who are different or weird (93.7%); and, it is acceptable to pick on classmates who deserve it (74.8%). Thus, while participants agree that high school students are picked on because they are different or weird, they do not find this uniqueness to be an acceptable reason to pick on the students, nor do they feel that it is acceptable to pick on a classmate, regardless of whether they deserve it. These findings shed light on the reasons why young people are picked on, which in turn

provides an important focus for prevention curricula in the fight against cyberbullying (Table 5-10).

By and large, most participants disagreed (selected disagree or strongly disagree) with scenarios or sub questions corresponding to all four processes of MD. However, the scenarios displaying the highest level of agreement, as well as the scenarios with high levels of uncertainty (neither agree, nor disagree) indicate interesting findings, and provide important considerations for future research concentrated on cyberbullying and the theory of MD.

Another interesting finding related to the mean scores for the four MD scales related to significant differences concerning gender (Table 5-11). Statistical significance was found between male and female scores for MD1 ( $p=.002$ ), MD2 ( $p=.000$ ), MD3 ( $p=.000$ ), and MD4 ( $p=.000$ ). Overall, the male scores averaged 2 points higher than female scores across all four MD scales. The greatest difference between male and female scores occurred for MD3, distortion of negative consequences. Male scores averaged 2.69 points higher than female scores ( $p=.000$ ). Interestingly, the female score for MD3 represented the lowest average score for females across all four MD scales. Thus, males were more likely to ignore or dismiss the negative consequences associated with cyberbullying behaviors, while females were less likely to dismiss the negative consequences associated with cyberbullying.

The highest scores for both male and female participants were reported for MD4, blaming/dehumanizing the victim. Thus, both males and females were more likely to blame or dehumanize the victim in an attempt to justify a cyberbullying behavior. Among sub questions in the MD4 scale, participants reported the strongest agreement

(agree or strongly agree) for the following statements: high school students get picked on because they are different or weird (65.5%); high school students get picked on because they pick on others (38%); and, it is acceptable to pick on classmates who pick on others (19.8%). Clearly, these findings provide support for future research looking to explore relationships among cyberbullying, gender, and the theory of moral disengagement. Additionally, these findings provide important considerations for prevention efforts directed at cyberbullying.

### **Prevalence of Cyberbullying**

Also included with my study's survey instrument were questions to explore prevalence rates for cyberbullying among participants during their last semester of high school (Table 5-12). The questions were borrowed and adapted with permission from Hinduja and Patchin (2010). Results from my study indicated higher rates of cyberbullying than those reported by Hinduja and Patchin in their 2010 study examining cyberbullying prevalence rates among a large sample of 10- to 18-year-olds from a large school district in the southern U.S. According to Hinduja and Patchin (2010), 7.5% of survey respondents reported having been cyberbullied during the 30 days preceding the survey, and 8.6% of survey respondents reported having cyberbullied others during the 30 days preceding the survey. In contrast, data from my study indicated that 23.2% of participants reported being cyberbullied during their last semester of high school, whereas 18.8% reported cyberbullying a peer during their last semester of high school.

Although rates reported in my survey are higher than those reported in Hinduja and Patchin's (2010) study, it is important to discuss three key differences that likely contributed to the prevalence rate differences. First, data reported by Hinduja and

Patchin (2010) were collected three years earlier. It is plausible that the increased percentage of participants who were cyberbullied during their last semester of high school was due in part to the difference in time taken between the surveys. It is realistic to assume that students have greater access to various forms of electronic media in 2013, as compared to youth in 2010. And, the literature indicates that as access to electronic media increases, so too does cyberbullying (Smith & Slonje, 2010).

Additionally, the time frame in which participants reported cyberbullying involvement in the study by Hinduja and Patchin (2010) was 30 days; whereas the time frame for my study was the students' last semester of high school, or roughly 6 months. Widening the time frame in which respondents report cyberbullying involvement, increases the likelihood that prevalence rates will go up. Lastly, the age of participants varied significantly. In the study by Hinduja and Patchin (2010), participants' ages ranged from 10 to 18 years old. In my study, 97.5% of the participants self-reported as 18 years old, while the other 2.5% self-reported as 19 or 20 years old. The literature clearly identifies an increase in cyberbullying involvement with age (Smith et al., 2008).

Although prevalence rates for cyberbullying involvement varied between the two studies, the factors described above provide alternate explanations for the higher rates in my study. However, when examining the data from Hinduja and Patchin (2010), 20.8% of survey respondents reported ever having been cyberbullied in their lifetime, and 19.4% reported ever having cyberbullied a peer in their lifetime. These numbers are more comparable to my study's findings, and may serve as a better indicator for how often young people are involved in cyberbullying, as both bully and victim.

## **Cyberbullying Observers**

Another important finding emerged from my study's data. In addition to inquiring about participants' involvement in cyberbullying as the perpetrator and victim, questions were added to investigate the observer's role. Hinduja and Patchin (2010) did not collect these data in their previous cyberbullying studies, although during communication with these authors regarding the use of questions from their instrument, they supported and encouraged adding questions regarding cyberbullying observers. My study's data indicated that 82.4% of participants' reported having seen a peer being cyberbullied during their last semester of high school. More specifically, 13.5% reported seeing it once, 43.8% reported seeing it a few times, 14.3% reported seeing it several times, and 10.7% reported seeing it many times. These data support the need to involve observers, also referred to as bystanders, in the fight against cyberbullying. Young people are more likely to see or hear about peer victimization, as compared to teachers, school administration, and even parents. In fact, in a research report by the National Crime Prevention Council (2007), cyberbullied teens reported that they were twice as likely to talk to a friend about the victimization as they were to talk to their parents or another adult. By educating young people about cyberbullying; its harmful effects; and how to prevent, stop and report this type of victimization; we have the potential to make an enormous impact reducing the prevalence of cyberbullying, and lessening the harmful effects associated with this form of peer violence.

## **Implications**

As previously mentioned, research on cyberbullying is limited because of the relative newness of this phenomenon. Although research has expanded during the past 5 years, because technology advancements and youth technology usage changes

rapidly, it is difficult to design surveys that accurately capture trends. My study's results confirmed that cyberbullying is a real issue among high school students, as participants' reported a high degree of involvement in cyberbullying as perpetrator, victim, and observer. Additionally, my study revealed a relationship between the processes of moral disengagement and high school students' perceptions of cyberbullying, including individual cyberbullying behaviors and cyberbullying based on characteristics belonging to the victim. As a result of my study's findings, several important directions for future work in this field emerged. These important findings are discussed in reference to implications for researchers, health educators, and school practitioners.

### **Implications for Research**

In his critical review and synthesis of research on cyberbullying, Tokunaga (2010) stressed the importance for future research focused on cyberbullying to incorporate theory. More specifically, Tokunaga (2010) highlighted the pivotal role theory could play in providing a framework for "explaining, understanding, and predicting cyberbullying behaviors and victimization" (p. 286). Past research on cyberbullying lacked the theoretical framework component, and the few studies that did incorporate theory, such as moral disengagement, reported inconclusive or conflicting findings. My study was developed in an attempt to incorporate a theoretical framework with cyberbullying, and to build upon past research. While the research findings from my study, when published, will add to existing literature, the existing research will remain small and limited. Therefore, for progress to be made in the fight against cyberbullying, more theoretical research must be conducted.

My study reported a significant relationship between the processes of MD and participants' perceptions of cyberbullying. Additionally, my study supports the value of

the Student Experiences with Electronic Media and Perceptions of Cyberbullying Behaviors survey instrument, developed to examine the relationship between cyberbullying and the processes of MD. Based on the findings from my study, further research is warranted, and the instrument seems valuable in exploring the relationship between cyberbullying and the processes of MD.

Pornari and Wood (2010) also found significant relationships between cyberbullying and moral disengagement; however, in a study investigating whether moral disengagement predicted cyberbullying behavior, Perren and Gutzwiller-Helfenfinger did not report significant findings. Inconsistencies reported between these studies are likely related to different forms of measurement. Certainly the relationship between the processes of moral disengagement and cyberbullying needs further exploration. More importantly, replication of published research studies and/or the evaluation of existing measurements to further explore the relationship between cyberbullying and moral disengagement will critically add to the existing body of literature. Results of continued research will, therefore, inform cyberbullying prevention and intervention efforts.

### **Implications for Health Educators**

If the researchers' goal is to identify trends associated with cyberbullying, then the goal of health educators' is to determine how to use the data to address this youth victimization issue. More specifically, health educators are charged with the task of developing, implementing, and evaluating interventions designed to target cyberbullying among a specific population. Additionally, the increasing prevalence rate, the harmful effects, and the negative impact in the school setting are more than enough evidence to suggest that this emerging public health issue must be addressed. As is the case with

any new public health issue, little is known regarding successful intervention efforts, as cyberbullying research is still in the infancy stage. Nevertheless, health educators must use existing research to develop prevention programs to address this dangerous form of youth aggression. And, because youth technology usage changes rapidly, health educators must engage in formative research in order to make necessary adjustments to the intervention as needed.

Although prevention programs specifically designed to address cyberbullying are lacking (David-Ferdon & Feldman, 2007), findings from my study highlight moral disengagement as a significant contributing factor to the likelihood that a young person would find cyberbullying more acceptable and less serious. Likewise, Pornari and Wood (2010) reported a relationship between cyberbullying and moral justification among adolescents. Additionally, Williams and Guerra (2007) highlighted moral approval of bullying as a significant factor contributing to the likelihood that an adolescent would cyberbully a peer. Clearly, all of these findings underscore the importance of incorporating what we have learned about moral disengagement and cyberbullying in the development of interventions specifically designed to address this form of peer aggression.

Lastly, and perhaps most importantly, health educators must advocate for the importance of a coordinated effort to combat cyberbullying. A solution to this public health issue does not solely rest on the shoulders of researchers, school officials, parents, or even the students themselves. Rather, this public health issue requires the help of many to reinforce the message of intolerance toward cyberbullying, and the involvement of multiple groups/people to target cyberbullying from all angles. Research

supporting a coordinated effort to combat traditional forms of bullying is well established. As the two forms of peer victimization share many similarities, and are connected to one another in many important ways, it is not surprising that prevention strategies for cyberbullying call for the same coordinated prevention efforts (Hertz & David-Ferdon, 2008). Additionally, because new types of electronic media are always emerging, prevention efforts must be flexibly created in order to allow adjustment as needed. David-Ferdon and Feldman (2007) said it best when they highlighted the need for interested parties to “create a coordinated strategy that is flexible enough to evolve as technology and electronic aggression change” (p. S4). Said prevention efforts create the opportunity for a positive impact in the fight against cyberbullying, while also allowing the opportunity for minor updates to the intervention in order to better address cyberbullying over time.

### **Implications for School Officials**

It has been said that “if schools don’t deal with the health of children by design, they deal with it by default” (Barto, 2010, p. 1). Truer words were never spoken. The status of a young person’s health does not live in isolation from school; rather, the health issues of young people follow them to school, and can disrupt normal learning and socialization processes in numerous ways. Therefore, it is critically important for school officials to recognize the opportunity they have been inadvertently given, and to strive to improve the health and wellbeing of their students.

Although a strong research link between cyberbullying and schools has not been established, school systems are acknowledging their role in combatting this public health issue (David-Ferdon & Feldman, 2007). In a research report regarding the prevention of bullying in schools and colleges, the American Educational Research

Association (AERA) detailed the importance for teacher preparation programs to place school safety education at the core of professional preparation programs. Specifically, the AERA (2013) identified teachers as an essential part of the solution to childhood bullying, and supported the notion that all educators be trained in bullying prevention during preservice and preparation programs for K-12 education, including continuing education programs. This recommendation further supported the need for teacher training to improve their ability to address this form of peer victimization (Bauman & Del Rio, 2006; Espelage, 2004). Furthermore, Crothers and Kolbert (2010) said “it is necessary that educators are empowered to play a pivotal role in solving the peer victimization problems that occur among children to ensure both their psychological and physical safety at school” (p. 544).

In a report published by Agatson et al. (2007), detailed findings from a series of focus groups conducted with multiple members of a school system revealed promising discussions about the scope of the cyberbullying issue, as well as appropriate messages and policies for students. Clearly, conversations such as the one described by Agatson et al. (2007) must continue, as they provide critically important directions for school officials. Additionally, these important conversations “illustrate important recognition by educators [regarding] their role in [the] prevention” of cyberbullying (Agatson et al., 2007, S60). These conversations are pivotal and create a culture of intolerance toward cyberbullying and all types of peer victimization.

### **Final Thoughts**

Findings reported from my study contribute to a deeper understanding of the nature of cyberbullying. Additionally, my study represents an important first step in highlighting the cognitive processes youth undergo in an attempt to morally justify

cyberbullying. While cognitive restructuring (MD1) proved to be a recurring crutch used by students to justify cyberbullying, distortion of negative consequences (MD3) and blaming and dehumanizing the victim (MD4) were used by students as well. However, minimizing agency (MD2) was the only process of MD not significantly associated with students' cyberbullying perceptions. The relationship between youth perceptions of cyberbullying and the processes of MD must receive more research attention if the data can inform intervention efforts. Incredible potential exists for the findings from my study, and hopefully future research to positively impact the prevalence of cyberbullying, as well as the detrimental effects associated with this form of peer victimization.

Because my study was the first of its kind, more research needs to concentrate on cyberbullying and the theory of MD. By engaging in more research examining the link between cyberbullying and the theory of MD, the potential to explain the processes by which an individual morally disengages from what is normally considered harmful behavior in order to intentionally cause harm to another person using electronic media is greatly enhanced. An increased understanding about this area of cyberbullying research can inform existing intervention and prevention efforts, and can influence future school initiatives to combat cyber victimization. Findings from my study, along with those reported by Pornari and Wood (2010) provide evidence that young people engage in the processes of MD to justify cyberbullying behaviors. Therefore, it is of great importance that these cognitive rationalizations are addressed, and addressed early, during the school-aged years. In agreement with Pornari and Wood (2010), it is suggested that

“school intervention programs should help students identify and alter any dysfunctional and maladaptive thinking styles related to harmful behavior in

general and peer aggression in specific. They should help them realize the objective nature of harmful behavior, acknowledge responsibility for their acts, realize the direct connection between their own behavior and the negative outcomes of this behavior to others and themselves, and encourage prosocial behavior for conflict resolution. They should focus on enhancing children's empathy for others and moral emotions, especially guilt (for doing something harmful to others), and pride (for behaving prosocially). Moral emotions and cognitions are not independent from one another" (pp. 91-92).

Finally, the high prevalence of cyberbullying reported from my study identifies the need for greater attention to cyberbullying among high school students. More than 8 of 10 survey participants' reported having seen a peer being cyberbullied during their last semester of high school. Researchers, health educators, and school officials need to determine how to involve observers, or bystanders, in the fight against cyberbullying. My study confirms that young people are more likely to know about cyber victimization, as compared to teachers, school administration, and even parents; either through direct observation or by hearing from the victim (National Crime Prevention Council, 2007). By educating young people about cyberbullying; its harmful effects; and how to prevent, stop and report this type of victimization; we have the potential to make an enormous impact in both reducing the prevalence of cyberbullying, and lessening the harmful effects associated with this form of peer violence.

Table 5-1. Acceptability of cyberbullying

	Frequency	Percent
Never okay	212	54.6
Rarely okay	116	29.9
Sometimes okay	43	11.1
Usually okay	13	3.4
Always okay	4	1.0

Table 5-2. Acceptability and cyberbullying behaviors (percentage)

	Comments online	Pictures online	Video online	Hurtful web page	Rumors online	Pretending to be someone else online	Comments via text	Pictures via text	Video via text	Threatening using electronic media
Never okay	67.9	82.0	85.3	90.5	77.3	86.9	63.0	78.1	81.5	88.4
Rarely okay	21.6	12.9	10.3	6.9	14.9	9.0	22.4	12.1	12.1	7.2
Sometimes okay	6.7	3.1	3.1	1.5	4.6	1.8	9.0	5.4	2.8	2.6
Usually okay	2.6	1.3	0.5	0.3	2.3	1.8	4.1	2.6	2.6	1.0
Always okay	1.3	0.8	0.8	0.8	0.8	0.5	1.5	1.8	1.0	0.8

Table 5-3. Seriousness and cyberbullying behaviors (percentage)

	Comments online	Pictures online	Video online	Hurtful web page	Rumors online	Pretending to be someone else online	Comments via text	Pictures via text	Video via text	Threatening using electronic media
Always serious	33.1	46.9	53.4	60.6	42.6	56.9	39.5	47.6	51.8	66.4
Usually serious	24.9	24.1	21.9	18.8	21.0	19.2	20.3	22.1	19.5	14.6
Sometimes serious	26.4	16.2	12.4	8.5	20.0	11.3	21.8	14.7	14.1	8.7
Rarely serious	11.0	8.7	7.5	6.4	11.5	7.4	12.3	10.0	10.0	5.6
Never serious	4.6	4.1	4.9	5.7	4.9	5.1	6.2	5.7	4.6	4.6

Table 5-4. Acceptability and victim characteristics (percentage)

	Body size	Sexual orientation	Religious beliefs	Race or Ethnicity	Family income	Accent	Style of dress	Physical disability	Learning disability	Popularity
Never okay	72.2	79.9	80.6	77.5	85.9	62.7	58.2	94.2	93.1	65.9
Rarely okay	16.4	10.1	13.0	11.1	10.1	20.9	22.6	3.4	4.2	17.7
Sometimes okay	7.1	6.3	4.2	6.9	2.4	10.8	12.8	1.1	1.3	8.5
Usually okay	3.2	2.6	1.3	3.2	0.8	4.0	4.0	0.0	0.0	5.8
Always okay	1.1	1.1	0.8	1.3	0.8	1.6	2.4	1.3	1.3	2.1

Table 5-5. Seriousness and victim characteristics (percentage)

	Body size	Sexual orientation	Religious beliefs	Race or Ethnicity	Family income	Accent	Style of dress	Physical disability	Learning disability	Popularity
Always serious	44.4	55.6	55.3	53.8	53.7	35.9	36.1	67.5	65.9	38.3
Usually serious	16.7	16.9	16.1	16.4	17.2	19.9	19.1	11.4	13.5	16.0
Sometimes serious	19.8	10.8	11.1	12.7	9.5	16.2	19.4	7.1	6.3	18.1
Rarely serious	9.3	8.7	8.5	8.0	10.8	16.5	15.6	3.4	3.7	14.9
Never serious	9.8	7.9	9.0	9.0	8.7	11.4	9.8	10.6	10.6	12.8

Table 5-6. Justification for cyberbullying

	Frequency	Percent
Never picked on a classmate	273	72.4
Never justifiable	39	10.3
Rarely justifiable	28	7.4
Sometimes justifiable	17	4.5
Usually justifiable	14	3.7
Always justifiable	6	1.6

Table 5-7. MD1 cognitive restructuring frequency data (percentages)

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
7-1 Being picked on using electronic media is a normal part of life for high school students.	24.1	36.4	17.0	18.4	4.1
7-2 Being picked on using electronic media is not a big deal.	46.2	33.0	10.2	9.3	1.4
7-3 It is okay to send or forward a message/photo/video that picks on a classmate if you don't know that person.	59.7	26.3	10.1	2.7	1.1
7-4 It is okay to send or forward a message/photo/video that picks on a classmate if you don't like that person.	51.2	29.6	12.9	5.2	1.1
7-5 It is okay to send or forward a message/photo/video that picks on a classmate if that person doesn't like you.	46.2	30.8	12.4	8.5	2.2
7-6 It is okay to send or forward a message/photo/video that picks on a classmate because you did not create or send the original message.	57.3	30.4	7.4	4.1	0.8

Table 5-8. MD2 minimizing agency frequency data (percentages)

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
8-1 When I saw or heard about a classmate being cyberbullied, I did not feel it was my responsibility to stop it.	16.1	26.2	34.4	20.2	3.0
8-2 When I received and/or viewed a message/photo/video that picked on a classmate, I did not feel it was my responsibility to stop it.	19.9	29.2	28.1	20.5	2.2
8-3 When I received and/or viewed a message/photo/video that picked on a classmate, I did not feel bad for forwarding the message to other classmates because I did not create or send the original message.	47.4	27.4	18.4	5.8	1.1
8-4 It is okay to pick on a classmate if your friends are doing it.	61.7	28.7	7.9	1.1	0.5
8-5 It is okay to pick on a classmate if your friends would get mad if you didn't join in.	63.4	28.1	6.8	0.8	0.8

Table 5-9. MD3 distortion of negative consequences frequency data (percentages)

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
9-1 Picking on a classmate helps to make them a tougher person.	47.4	31.0	11.8	8.8	0.8
9-2 Picking on a classmate helps to teach them a lesson.	54.0	30.7	11.2	3.0	1.1
9-3 Picking on a classmate helps to solve problems between students.	60.5	28.2	8.2	2.2	0.8
9-4 Picking on a classmate does not cause them any harm.	69.6	23.0	5.2	1.4	0.8
9-5 Picking on a classmate does not create negative effects inside schools.	67.4	26.0	4.1	1.6	0.8
9-6 Picking on a classmate does not create negative effects outside schools.	66.3	27.1	4.1	1.4	1.1

Table 5-10. MD4 blaming or dehumanizing the victim frequency data (percentages)

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
10-1 High school students get picked on because they are different or weird.	10.9	10.7	12.8	47.5	18.0
10.2 High school students get picked on because they deserve it.	50.8	27.9	14.5	6.0	0.8
10.3 High school students get picked on because they pick on others.	16.7	17.5	27.9	29.0	9.0
10.4 It is acceptable to pick on classmates who are different or weird.	65.3	28.4	4.4	1.4	0.5
10.5 It is acceptable to pick on classmates who deserve it.	47.9	26.8	16.2	6.8	2.2
10.6 It is acceptable to pick on classmates who pick on others.	31.5	24.7	24.1	14.0	5.8

Table 5-11. Inferential statistics for the MD scales

	Males mean score	Female mean score	Standard Error	t	Significance
MD1 cognitive restructuring	12.29	10.54	.558	3.15	.002
MD2 minimizing agency	11.31	9.48	.378	4.83	.000
MD3 distortion of consequences	11.13	8.44	.486	5.53	.000
MD4 dehumanizing the victim	15.37	13.21	.514	4.20	.000

Table 5-12. Cyberbullying among participants during their last semester of high school (percentages)

	Never	Once	A few times	Several times	Many times
During my last semester in high school, I was cyberbullied.	76.8	12.4	8.6	1.1	1.1
During my last semester in high school, I saw other people being cyberbullied.	17.6	13.5	43.8	14.3	10.7
During my last semester in high school, I cyberbullied others.	81.2	10.2	7.8	0.3	0.6

APPENDIX A  
COGNITIVE INTERVIEW CONSENT

**Cognitive Interviews: Student Experiences with Electronic Media and Perceptions of Cyberbullying Behaviors**

**Please read this consent document carefully before you decide to participate in this study.**

**Purpose of the research study:** The scientific purpose of this study is to investigate the relationship between student experiences with electronic media and personal perceptions of cyberbullying behaviors through a survey. For this phase of the survey design the purpose is to collect feedback from a small group of participants through cognitive interviews in order to determine if necessary revisions should be made to the survey prior to conducting the pilot study.

**What you will be asked to do in the study:** If you agree to participate, you will be asked to respond to a 23-item (with multiple sub-items) survey. The survey assesses demographic characteristics such as age, sex, and race/ethnicity as well as investigates the relationship between student experiences with electronic media and personal perceptions of cyberbullying behaviors during their last semester of high school. You do not have to answer any question you do not wish to answer. You will not be penalized in any way for refusing to respond to the moderator's questions.

The moderator will ask questions concerning your thought processes while you are completing the survey. You will provide feedback regarding how well you understand the questions, as well as provide feedback regarding the appropriateness of the corresponding response options for each question. The moderator will take notes while you provide feedback, and the cognitive interview will be audio recorded for accuracy. The tape will be kept in a secured location, transcribed before the end of the study, and then destroyed. Only the principal investigator and select members of the research team will have access to the tapes.

**Time required:** 45 to 60 minutes (one time only).

**Risks:** There are no anticipated risks for participating in this study.

**Benefits:** You will not directly benefit from participating in this study.

**Compensation:** Compensation is not provided for participation in this research.

**Confidentiality:** Your name will never be used in any report or other materials associated with this project. Your responses will be kept confidential by all those

associated with this research project. Additionally, the audio recording will be destroyed after analyzed.

**Voluntary participation:** Your participation in this cognitive interview is completely voluntary. You have the right to withdraw from the study at anytime without consequence. You do not have to answer any question(s) you do not wish to answer.

**Whom to contact if you have questions about the study:**

*Principal Investigator:*

Holly T. Moses, Doctoral Candidate  
School of Teaching and Learning,  
PO Box 118210, FLG-5  
[hmoses@hhp.ufl.edu](mailto:hmoses@hhp.ufl.edu), 352-294-1804

*Faculty Supervisor:*

Dorene D. Ross, Ed.D., Professor  
School of Teaching and Learning,  
PO Box 117048, 2215D Norman Hall [dross@coe.ufl.edu](mailto:dross@coe.ufl.edu), 352-273-4206

**Whom to contact about your rights as a research participant in the study:**

IRB02 Office, Box 112250, University of Florida, Gainesville, FL 32611-2250; phone 392-0433.

**Agreement:**

**I have read the procedure described above and voluntarily agree to participate in the cognitive interview process. Additionally, I acknowledge having received a copy of this process by writing today's date below, which also signifies my consent for participating in this study.**

**Date:** \_\_\_\_\_

## APPENDIX B COGNITIVE INTERVIEW GUIDE

Step 1: Review the informed consent with the participant and answer any questions that they might have about the cognitive interview, study purpose, etc.

Step 2: Collect the signed informed consent, and provide a clean copy of the informed consent to the participant.

Moderator script: Thank you for agreeing to participate in this cognitive interview, and for providing feedback regarding the survey. The purpose of the cognitive interview is to allow me to understand what you think about this survey. Ultimately, I want to find out if this survey, in its current format, will provide information about student experiences with electronic media and cyberbullying, as intended.

Directions: You will be given a printed copy of the survey, *Student Experiences with Electronic Media and Perceptions of Cyberbullying Behaviors*. You are expected to complete the survey as a study participant by reading each question and responding to the best of your ability. Although I am not particularly interested in your actual responses to the survey questions, it is important that you respond truthfully so that I can understand your experience related to responding to the survey. If you feel confused about an item, or items on the survey, please share your thoughts immediately (i.e., as soon as a thought occurs to you while responding to the survey). This process is known as “thinking aloud”, and I am very interested in your thought process as a survey respondent. Also, if you come across a questionable word, a question or response option that seems confusing, or if an entire survey question feels difficult to answer, please stop and tell me this immediately.

Additionally, as you complete one page of the survey (and before you continue to the next page), I will likely ask you probing questions to explore your thoughts regarding how you reacted to the questions, how you interpreted the questions, and how you felt about the possible response options for each question. The purpose of the probing questions is to determine if the survey questions are consistently understood and interpreted the same by all respondents.

Sample probing questions include:

- Are there any words in this question that are unclear (I may ask about specific words in the question)?
- What do you think the question is asking?
- If a question is confusing, what about the question seems confusing to you, or what makes this question difficult to answer?
- Does the design of the response options affect the way you decide to answer? If so, how?
- Why did you choose the response option selected?
- Is it difficult to respond to a question based on the period of time in question?
- Does the question make you uncomfortable? If so, why?

- Do you think your peers will give an honest answer to a question like this? Why or why not?
- Define “cyberbullying” in your own words.
- Define “electronic media” in your own words.

APPENDIX C  
STUDENT EMAIL CONTACT: COGNITIVE INTERVIEW

Subject: Exciting Research Opportunity!!!

Students,

Are you interested in research? Would you like the opportunity to contribute to a University of Florida research study? Now is your chance! Holly Moses, UF doctoral candidate is looking for 7 to 10 UF freshmen to participate in cognitive interviews related to her dissertation research. Specifically, Holly wants feedback from UF freshmen regarding the survey created for her doctoral research. If you are interested in serving as a research participant, please send an email to Holly Moses ([hmoses@hhp.ufl.edu](mailto:hmoses@hhp.ufl.edu)) today! Additionally, for more information about this research opportunity, please see below information, or email [hmoses@hhp.ufl.edu](mailto:hmoses@hhp.ufl.edu).

I hope you will take advantage of this awesome research opportunity!

**RESEARCH OPPORTUNITY DETAILS**

**WHO:** UF freshmen, defined as a UF student who earned a high school diploma in 2012, and who was admitted to UF for the Summer B 2012 or Fall 2012 term.

**WHAT:** Participate in a cognitive interview (45 to 60 minutes) to share your thoughts and feedback about the researcher's survey. For more information about this study, please see attached "Informed Consent", which will be provided to all participants before each cognitive interview session. Only one student will participate in a cognitive interview per time block. Note: This research was approved by the UF IRB: #U-320-2013.

**WHEN:** Select a 90 minute time block between 8:30am and 6:30pm on Tuesday, March 19 or Friday, March 22. The researcher will schedule each cognitive interview time block for 90 minutes; however, the approximate time for each cognitive interview is 45 to 60 minutes. All cognitive interviews will take place on campus and in the Florida Gym building.

**WHY:** Freshmen will provide feedback about the researcher's survey through cognitive interviews in order to determine if survey revisions are necessary. Sample questions asked during the cognitive interview include: Are the questions clearly written? Do the questions make sense to you? What is the question asking?

**HOW:** Sign-up TODAY by sending an email to Holly Moses ([hmoses@hhp.ufl.edu](mailto:hmoses@hhp.ufl.edu)) to schedule your cognitive interview!

APPENDIX D  
PILOT SURVEY CONSENT

**Purpose of the research study:** The scientific purpose of this study is to investigate the relationship between student experiences with electronic media and personal perceptions of cyberbullying behaviors through a survey

**What you will be asked to do in the study:** If you agree to participate, you will be asked to respond to a 23-item (with multiple sub-items) survey. The survey assesses demographic characteristics such as age, sex, and race/ethnicity as well as investigates the relationship between student experiences with electronic media and personal perceptions of cyberbullying behaviors during their last semester of high school. You do not have to answer any question you do not wish to answer.

**Time required:** 15 minutes (one time only).

**Risks:** There are no anticipated risks for participating in this study.

**Limits of Online Data Security:** There is a minimal risk that security of any online data may be breached. However, Qualtrics (the online survey platform in which this survey will be run through) utilizes several layers of encryption and firewalls to eliminate the risk of an information breach, and your data will be removed from the server soon after you complete the survey. It is unlikely that a security breach of the online data will result in any adverse consequence for you. For more information about Qualtrics' security policy statement, please visit <http://www.qualtrics.com/security-statement>.

**Benefits:** You will not directly benefit from participating in this study.

**Compensation:** Compensation is not provided for participation in this research.

**Confidentiality:** This survey is anonymous. This means you will not be asked to provide any information that can identify you. There is no way to connect you to your responses. Your email or IP address will not be collected for any reason.

**Voluntary participation:** Your participation in this study is completely voluntary. You have the right to withdraw from the study at any time without consequence. You do not have to answer any question you do not wish to answer.

**Whom to contact if you have questions about the study:**

*Principal Investigator:*

Holly T. Moses, Doctoral Candidate  
School of Teaching and Learning,  
PO Box 118210, FLG-5  
[hmoses@hnp.ufl.edu](mailto:hmoses@hnp.ufl.edu), 352-294-1804

*Faculty Supervisor:*

Dorene D. Ross, Ed.D., Professor  
School of Teaching and Learning,  
PO Box 117048, 2215D Norman Hall  
[dross@coe.ufl.edu](mailto:dross@coe.ufl.edu), 352-273-4206

**Whom to contact about your rights as a research participant in the study:**  
IRB02 Office, Box 112250, University of Florida, Gainesville, FL 32611; phone 392-0433.

**Your consent to participate in this study will be implied by continuing to the next page and completing this anonymous survey.**

**Remember: Your responses to these questions are anonymous.** This means that you cannot be linked to your responses. Your participation in this study is voluntary. You have the right to withdraw from the study at any time without consequence. You do not have to answer a question if you find it objectionable.

APPENDIX E  
PILOT SURVEY INSTRUMENT

*A Survey: Student Experiences with Electronic Media and Perceptions of Cyberbullying Behaviors*

**Eligibility:** To participate in this study, you must currently be considered a college freshman, completing your first year of college at the University, and having graduated from high school within the last 12 months.

This survey examines your experiences with electronic media, as well as your perceptions of cyberbullying behaviors during the last semester of high school. Survey data will assist researchers to better understand how youth interact with one another using electronic media, and specifically, the nature of these interactions as related to cyberbullying behaviors. For the purposes of this study, **electronic media includes any device or equipment such as cell phones, computers, and tablets** that provide access to various communication tools (i.e., social media sites, text messages, chat, email, and websites). The survey requires approximately 15 minutes to complete. Please answer all questions completely based on what you knew about, observed, or actually experienced during your last semester in high school (i.e., January 2012 through May or June 2012).

We offer you the following safeguards for completing the survey:

1. Your participation in the survey is voluntary. Whether or not you choose to participate, your status at the University of Florida will **not** be affected in any way.
2. Your responses will remain anonymous, and **cannot** be traced to you.
3. We do **not** request or collect any personal identification such as name, UFID, Social Security number, etc.
4. Demographic information about your background only will be used to describe the general types and categories of respondents. Your name will **not** be traced to your responses, and no respondent names will ever be reported.
5. If at any time, now or in the future, you have questions or concerns about the survey, you will receive immediate assistance by contacting:

**Ms. Holly T. Moses, Doctoral Candidate**  
University of Florida  
PO Box 118210, FLG-5  
Gainesville, FL 32611-8210  
(352)294-1804  
[hmoses@hhp.ufl.edu](mailto:hmoses@hhp.ufl.edu)

**Dr. Dorene Ross, Professor and Supervisor**  
University of Florida  
PO Box 117048, 2215D Norman Hall  
Gainesville FL 32611  
(352)273-4206  
[dross@coe.ufl.edu](mailto:dross@coe.ufl.edu)

**Thank you for your time and consideration. If you would like to participate in the survey, please indicate your consent by clicking the NEXT button below. [NEXT >>](#)**

***The first set of questions examines YOUR perceptions regarding the seriousness and acceptability of specific behaviors or actions. Respond to the questions based on YOUR experiences during your last semester of high school. Your perceptions may have changed since high school so please remember to respond from your perspective at that time.***

**Important Definitions**

- **Picked on:** For the purposes of this survey, “picked on” may include harassing, mistreating, or making fun of another person.
- **Electronic media:** For the purposes of this survey, “electronic media” may include any device or equipment such as cell phones, computers, and tablets that provide access to various communication tools (i.e., social media sites, text messages, online chat, email, and websites).

1. During your last semester in high school, what was your perception of the **ACCEPTABILITY of a classmate picking on another classmate** using electronic media?
  - a. Never okay
  - b. Rarely okay
  - c. Sometimes okay
  - d. Usually okay
  - e. Always okay
  
2. During your last semester in high school, what was your perception of the **ACCEPTABILITY of the following behaviors?**

	Never okay	Rarely okay	Sometimes okay	Usually okay	Always okay
Posting mean or hurtful comments about someone online					
Posting a mean or hurtful picture online of someone					
Posting a mean or hurtful video online of someone					
Creating a mean or hurtful web page about someone					
Spreading rumors about someone online					
Pretending to be someone else online and acting in a way that was mean or hurtful to them					
Sending mean or hurtful					

comments about someone through a cell phone text message					
Sending a mean or hurtful picture of someone through a cell phone text message					
Sending a mean or hurtful video of someone through a cell phone text message					
Threatening to hurt someone through electronic media					

3. During your last semester in high school, what was your perception of the **SERIOUSNESS of the following behaviors or actions?**

	Never serious	Rarely serious	Sometimes serious	Usually serious	Always serious
Posting mean or hurtful comments about someone online					
Posting a mean or hurtful picture online of someone					
Posting a mean or hurtful video online of someone					
Creating a mean or hurtful web page about someone					
Spreading rumors about someone online					
Pretending to be someone else online and acting in a way that was mean or hurtful to them					
Sending mean or hurtful comments about someone through a cell phone text message					
Sending a mean or hurtful picture of someone through a cell phone text message					
Sending a mean or hurtful video of someone through a cell phone text message					
Threatening to hurt someone through electronic media					

4. During your last semester in high school, what was your perception of the **ACCEPTABILITY of a classmate picking on another classmate** using electronic media **based on the following characteristics?**

<i>Victim Characteristics</i>	Never okay	Rarely okay	Sometimes okay	Usually okay	Always okay
Body size or features					
Sexual orientation					
Religious beliefs					
Race/ethnicity					
Family's income level					
Accent, or how one talks					
Style of dress, or clothes					
Physical disability					
Learning disability					
Popularity level					

5. During your last semester in high school, what was your perception of the **SERIOUSNESS of a classmate picking on another classmate** using electronic media **based on the following characteristics?**

<i>Victim Characteristics</i>	Never serious	Rarely serious	Sometimes serious	Usually serious	Always serious
Body size or features					
Sexual orientation					
Religious beliefs					
Race/ethnicity					
Family's income level					
Accent, or how one talks					
Style of dress, or clothes					
Physical disability					
Learning disability					
Popularity level					

6. If you ever picked on a classmate using electronic media during your last semester in high school, **did you believe that your behavior/action was JUSTIFIABLE?**
- Never picked on a classmate using electronic media
  - Never justifiable
  - Rarely justifiable
  - Sometimes justifiable
  - Usually justifiable
  - Always justifiable

7. During your last semester in high school, to what extent **did YOU agree or disagree** with the below statements regarding the use of electronic media?

	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree
Being picked on using electronic media is a <b>normal part of life</b> for high school students.					
Being picked on using electronic media is <b>not a big deal</b> .					
It is okay to send or forward a message/photo/video that picks on a classmate if you <b>don't know</b> that person.					
It is okay to send or forward a message/photo/video that picks on a classmate if you <b>don't like</b> that person.					
It is okay to send or forward a message/photo/video that picks on a classmate if that person <b>doesn't like you</b> .					
It is okay to send or forward a message/photo/video that picks on a classmate because you <b>did not create or send</b> the original message.					

8. During your last semester in high school, to what extent **did YOU agree or disagree** with the below statements regarding the use of electronic media?

	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree
<b>Adults should be held responsible</b> for preventing students from cyberbullying one another.					
When I saw or heard about a					

classmate being cyberbullied, <b>there was nothing I could do</b> to stop it.					
When I received and/or viewed a message/photo/video that picked on a classmate, I <b>did not feel it was my responsibility</b> to stop it.					
When I received and/or viewed a message/photo/video that picked on a classmate, I did not feel bad for forwarding the message to other classmates because I <b>did not create or send</b> the original message.					
It is okay to pick on a classmate if your <b>friends are doing it</b> .					
It is okay to pick on a classmate if your <b>friends would get mad</b> if you didn't join in.					

9. During your last semester in high school, to what extent **did YOU agree or disagree** with the below statements regarding the use of electronic media?

	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree
Picking on a classmate helps to <b>make them a tougher person</b> .					
Picking on a classmate helps to <b>teach them a lesson</b> .					
Picking on a classmate helps to <b>solve problems between students</b> .					
Picking on a classmate <b>does not cause them any harm</b> .					
Picking on a classmate does not create negative effects <b>inside schools</b> .					
Picking on a classmate does not					

create negative effects <b>outside schools.</b>					
---	--	--	--	--	--

10. During your last semester in high school, to what extent **did YOU agree or disagree** with the below statements regarding the use of electronic media?

	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree
High school students get picked on because they are <b>different or weird.</b>					
High school students get picked on because they <b>deserve it.</b>					
High school students get picked on because they <b>pick on others.</b>					
It is acceptable to pick on classmates who are <b>different or weird.</b>					
It is acceptable to pick on classmates who <b>deserve it.</b>					
It is acceptable to pick on classmates who <b>pick on others.</b>					

***The next 6 questions explore YOUR experiences with cyberbullying during YOUR final semester of high school.***

### **Important Definitions**

- **Cyberbullying:** For the purposes of this survey, “cyberbullying” is when someone repeatedly harasses, mistreats, picks on, or makes fun of another person using various forms of electronic media.
  - Note, the behavior or action is considered to occur repeatedly when it occurs more than once or when it is viewed/forwarded more than once or by more than one person.
- **Electronic media:** For the purposes of this survey, “electronic media” may include any device or equipment such as cell phones, computers, and tablets that provide access to various communication tools (i.e., social media sites, text messages, online chat, email, and websites).

11. During my last semester in high school, **I experienced the following treatment from a classmate or peer:**

	Never	Once	A few times	Several times	Many times
Someone posted mean or hurtful <b>comments about me online</b>					
Someone posted a mean or hurtful <b>picture online of me</b>					
Someone posted a mean or hurtful <b>video online of me</b>					
Someone created a mean or hurtful <b>web page about me</b>					
Someone spread a mean or hurtful <b>rumor about me online</b>					
Someone <b>pretended to be me online</b> and acted in a way that was mean or hurtful to me					
Someone sent mean or hurtful <b>comments about me through a cell phone text message</b>					
Someone sent a mean or hurtful <b>picture of me through a cell phone text message</b>					
Someone sent a mean or hurtful <b>video of me through a cell phone text message</b>					
Someone threatened to <b>hurt me through electronic media</b>					

12. During my last semester in high school, **I was cyberbullied.**

- a. Never
- b. Once
- c. A few times
- d. Several times
- e. Many times

13. During my last semester in high school, **I saw other people experience the following treatment from a classmate or peer:**

	Never	Once	A few times	Several times	Many times
Someone posted mean or hurtful <b>comments about them online</b>					
Someone posted a mean or hurtful <b>picture online of them</b>					
Someone posted a mean or hurtful <b>video online of them</b>					
Someone created a mean or hurtful <b>web page about them</b>					
Someone spread a mean or hurtful <b>rumor about them online</b>					
Someone <b>pretended to be them online</b> and acted in a way that was mean or hurtful to them					
Someone sent mean or hurtful <b>comments about them through a cell phone text message</b>					
Someone posted a mean or hurtful <b>picture of them through a cell phone text message</b>					
Someone posted a mean or hurtful <b>video of them through a cell phone text message</b>					
Someone threatened to <b>hurt them through electronic media</b>					

14. During my last semester in high school, **I saw other people being cyberbullied.**

- a. Never
- b. Once
- c. A few times
- d. Several times
- e. Many times

15. During my last semester in high school, **I treated a classmate or peer in these ways:**

	Never	Once	A few times	Several times	Many times
I posted a mean or hurtful <b>comment about someone online</b>					
I posted a mean or hurtful <b>picture online of someone</b>					
I posted a mean or hurtful <b>video online of someone</b>					
I created a mean or hurtful <b>web page about someone</b>					
I spread a mean or hurtful <b>rumor about someone online</b>					
I <b>pretended to be someone else online</b> and acted in a way that was mean or hurtful to them					
I sent mean or hurtful <b>comments about them through a cell phone text message</b>					
I sent a mean or hurtful <b>picture of them through a cell phone text message</b>					
I sent a mean or hurtful <b>video of them through a cell phone text message</b>					
I threatened to <b>hurt someone through electronic media</b>					

16. During my last semester in high school, **I cyberbullied others.**

- a. Never
- b. Once
- c. A few times
- d. Several times
- e. Many times

***The final set of questions focuses on demographic information. The primary purpose for the questions is to tell the researcher more about survey participants. However, please be reminded that your responses to the survey will remain anonymous and cannot be traced to you.***

17. How old are you now? \_\_\_\_\_

18. What is your gender?

- a. Male
- b. Female
- c. Transgender

19. What is your sexual orientation?

- a. Heterosexual
- b. Gay/Lesbian
- c. Bisexual
- d. Unsure

20. How do you usually describe yourself?

- a. American Indian or Alaskan Native
- b. Asian or Pacific Islander
- c. Black or African American
- d. Hispanic or Latino/a
- e. White
- f. Bi-racial or Multi racial
- g. Other

21. Please identify the City and State for the High School that you received your diploma from: \_\_\_\_\_

22. What type of High School did you receive your diploma from?

- a. Military High School
- b. Private High School, non-Religious affiliation
- c. Private High School, Religious affiliation
- d. Public High School
- e. Virtual School

23. During your last semester in high school, how would you describe your popularity level?

- a. Very popular
- b. Popular
- c. Somewhat popular
- d. Unpopular
- e. Very unpopular

***Thank you for participating in the survey.***

APPENDIX F  
STUDENT EMAIL CONTACT: PILOT STUDY

**First Email**

Subject: Electronic Media and Cyberbullying Survey

Dear UF Freshman,

I am a UF doctoral student and I am writing to ask for your participation in an **Electronic Media and Cyberbullying Survey**. The purpose of this study is to explore the relationship between student experiences with electronic media and personal perceptions of cyberbullying behaviors. In short, this survey is being conducted to better address the health and safety of America's youth.

Your name was selected from the records at the UF Registrar's Office. If you choose to participate in this survey, **your answers will be completely anonymous**. No personal identification (IP address, names, emails, etc.) will be collected and thus you will not be connected to your answers in any way. The survey is only available for **two weeks** so please act quickly.

When you are ready to complete this 15 minute survey, please click on the following link: [https://ufhhphealtheducation.qualtrics.com/SE/?SID=SV\\_3xCjtGWYQrvCrGt](https://ufhhphealtheducation.qualtrics.com/SE/?SID=SV_3xCjtGWYQrvCrGt).

Thank you very much for helping us better understand the relationship between student experiences with electronic media and personal perceptions of cyberbullying behaviors. If you have any questions or comments about this survey, please feel free to contact me at (352) 294-1804 or by replying to this email.

Thank you for your help and Go Gators!

Sincerely,

Holly T. Moses

Holly T. Moses, MSHE, CHES  
Doctoral Candidate  
School of Teaching and Learning  
University of Florida  
PO Box 117048, 2403 Norman Hall  
Gainesville, FL 32611  
Phone: 352.294.1804  
Email: hmoses@hhp.ufl.edu



## Second Email

Subject: Electronic Media and Cyberbullying Survey

Dear UF Freshman,

A few days ago, I emailed you introducing myself and asking for your participation in an **Electronic Media and Cyberbullying Survey**. If you have already completed and returned the questionnaire, please accept my sincere thanks. If not, I urge you to please consider doing so today. Your opinions are very important as it identifies the relationship between student experiences with electronic media and personal perceptions of cyberbullying behaviors. As a fellow UF student I am grateful for your help.

If you choose to participate in this survey **your answers will be completely anonymous**. No personal identification (IP address, names, emails, etc.) will be collected and thus you will not be connected to your answers in any way.

When you are ready to complete this 15 minute survey, please click on the following link: [https://ufhhphealtheducation.qualtrics.com/SE/?SID=SV\\_3xCjtGWYQrvCrGt](https://ufhhphealtheducation.qualtrics.com/SE/?SID=SV_3xCjtGWYQrvCrGt).

The survey is only available for **a few more days** so please act quickly. If you have any questions or comments about this survey, please feel free to contact me at (352) 294-1804 or by replying to this email.

Once again thank you for your help!

Sincerely,

Holly T. Moses

Holly T. Moses, MSHE, CHES  
Doctoral Candidate  
School of Teaching and Learning  
University of Florida  
PO Box 117048, 2403 Norman Hall  
Gainesville, FL 32611  
Phone: 352.294.1804  
Email: hmoses@hhp.ufl.edu



## Final Email

Subject: Electronic Media and Cyberbullying Survey

Dear UF Freshman,

Several days ago, I emailed you introducing myself and asking for your participation in an **Electronic Media and Cyberbullying Survey**. If you have already completed and returned the questionnaire, please accept my sincere thanks. If not, I urge you to please consider doing so today. Your opinions are very important as it identifies the relationship between student experiences with electronic media and personal perceptions of cyberbullying behaviors. As a fellow UF student I am grateful for your help.

If you choose to participate in this survey **your answers will be completely anonymous**. No personal identification (IP address, names, emails, etc.) will be collected and thus you will not be connected to your answers in any way.

When you are ready to complete this 15 minute survey, please click on the following link: [https://ufhhphealtheducation.qualtrics.com/SE/?SID=SV\\_3xCjtGWYQrvCrGt](https://ufhhphealtheducation.qualtrics.com/SE/?SID=SV_3xCjtGWYQrvCrGt).

The survey is only available until 11:59pm **TODAY** so please act quickly. If you have any questions or comments about this survey, please feel free to contact me at (352) 294-1804 or by replying to this email.

Once again thank you for your help!

Sincerely,

Holly T. Moses

Holly T. Moses, MSHE, CHES  
Doctoral Candidate  
School of Teaching and Learning  
University of Florida  
PO Box 117048, 2403 Norman Hall  
Gainesville, FL 32611  
Phone: 352.294.1804  
Email: hmoses@hhp.ufl.edu



APPENDIX G  
FINAL STUDY SURVEY CONSENT

**Student Experiences with Electronic Media and Perceptions of Cyberbullying Behaviors**

**Purpose of the research study:** The scientific purpose of this study is to investigate the relationship between student experiences with electronic media and personal perceptions of cyberbullying behaviors through a survey.

**What you will be asked to do in the study:** If you agree to participate, you will be asked to respond to a 23-item (with multiple sub-items) survey. The survey assesses demographic characteristics such as age, sex, and race/ethnicity as well as investigates the relationship between student experiences with electronic media and personal perceptions of cyberbullying behaviors during their last semester of high school.

**Time required:** 15 minutes (one time only). Although the survey may appear long, the average completion time for this survey has been 10 to 15 minutes among college freshman.

**Compensation/Incentive:** Compensation is not provided for participation in this research. However, the first two and last two survey participants will each receive a \$50 Visa gift card. If you wish to be considered for the incentive you will be sent to an additional screen, separate from the survey, where you can enter your contact information. *Your information will not be linked to the survey, it is completely separate.* Additionally, the gift cards will be awarded, and then all recorded email addresses destroyed before any of the surveys are analyzed. To receive the gift card you must pick it up in room 6 of the Florida Gym.

**Risks:** There are no anticipated risks for participating in this study.

**Limits of Online Data Security:** There is a minimal risk that security of any online data may be breached. However, Qualtrics (the online survey platform in which this survey will be run through) utilizes several layers of encryption and firewalls to eliminate the risk of an information breach, and your data will be removed from the server soon after you complete the survey. It is unlikely that a security breach of the online data will result in any adverse consequence for you. For more information about Qualtrics' security policy statement, please visit <http://www.qualtrics.com/security-statement>.

**Benefits:** You will not directly benefit from participating in this study.

**Confidentiality:** This survey is anonymous. This means you will not be asked to provide any information that can identify you. There is no way to connect you to your responses. Your email or IP address will not be collected for any reason.

**Voluntary participation:** Your participation in this study is completely voluntary. You have the right to withdraw from the study at any time without consequence. You do not have to answer any question you do not wish to answer.

**Whom to contact if you have questions about the study:**

*Principal Investigator:*

Holly T. Moses, Doctoral Candidate  
School of Teaching and Learning,  
PO Box 118210, FLG-5 hmoses@hhp.ufl.edu, 352-294-1804

*Faculty Supervisor:*

Dorene D. Ross, Ed.D., Professor  
School of Teaching and Learning,  
PO Box 117048, 2215D Norman Hall dross@coe.ufl.edu, 352-273-4206

**Whom to contact about your rights as a research participant in the study:**

IRB02 Office, Box 112250, University of Florida, Gainesville, FL 32611; phone 392-0433.

**Your consent to participate in this study will be implied by continuing to the next page and completing this anonymous survey.**

APPENDIX H  
FINAL SURVEY INSTRUMENT

*A Survey: Student Experiences with Electronic Media and Perceptions of Cyberbullying Behaviors*

**Eligibility:** To participate in this study, you must currently be considered a college freshman, completing your first semester of college at the University, and having graduated from high school within the last 12 months. Additionally, you must be 18, or older.

This survey examines your experiences with electronic media, as well as your perceptions of cyberbullying behaviors during the last semester of high school. Survey data will assist researchers to better understand how youth interact with one another using electronic media, and specifically, the nature of these interactions as related to cyberbullying behaviors. For the purposes of this study, **electronic media includes any device or equipment such as cell phones, computers, and tablets** that provide access to various communication tools (i.e., social media sites, text messages, chat, email, and websites). Although the survey may appear long, the average completion time for this survey has been 10 to 15 minutes among college freshman. Please answer all questions completely based on what you knew about, observed, or actually experienced during your last semester in high school (i.e., January 2013 through May or June 2013).

We offer you the following safeguards for completing the survey:

1. Your participation in the survey is voluntary. Whether or not you choose to participate, your status at the University of Florida will **not** be affected in any way.
2. Your responses will remain anonymous, and **cannot** be traced to you.
3. We do **not** request or collect any personal identification such as name, UFID, Social Security number, etc.
4. Demographic information about your background only will be used to describe the general types and categories of respondents. Your name will **not** be traced to your responses, and no respondent names will ever be reported.
5. If at any time, now or in the future, you have questions or concerns about the survey, you will receive immediate assistance by contacting:

**Ms. Holly T. Moses, Doctoral Candidate**

University of Florida  
PO Box 118210, FLG-5  
Gainesville, FL 32611-8210  
(352)294-1804  
[hmoses@hhp.ufl.edu](mailto:hmoses@hhp.ufl.edu)

**Dr. Dorene Ross, Professor and Supervisor**

University of Florida  
PO Box 117048, 2215D Norman Hall  
Gainesville FL 32611  
(352)273-4206  
[dross@coe.ufl.edu](mailto:dross@coe.ufl.edu)

**Thank you for your time and consideration. If you would like to participate in the survey, please indicate your consent by clicking the NEXT button below.**

**The first set of questions examines YOUR perceptions regarding the seriousness and acceptability of specific behaviors or actions. Respond to the questions based on YOUR experiences during your last semester of high school. Your perceptions may have changed since high school so please remember to respond from your perspective at that time.**

**Important Definitions**

- **Picked on:** For the purposes of this survey, “picked on” may include harassing, mistreating, or making fun of another person.
- **Electronic media:** For the purposes of this survey, “electronic media” may include any device or equipment such as cell phones, computers, and tablets that provide access to various communication tools (i.e., social media sites, text messages, online chat, email, and websites).

1. During your last semester in high school, what was your perception of the **ACCEPTABILITY of a classmate picking on another classmate** using electronic media?
  - a. Never okay
  - b. Rarely okay
  - c. Sometimes okay
  - d. Usually okay
  - e. Always okay

2. During your last semester in high school, what was your perception of the **ACCEPTABILITY of the following behaviors?**

	Never okay	Rarely okay	Sometimes okay	Usually okay	Always okay
Posting mean or hurtful comments about someone online					
Posting a mean or hurtful picture online of someone					
Posting a mean or hurtful video online of someone					
Creating a mean or hurtful web page about someone					
Spreading rumors about someone online					
Pretending to be someone else online and acting in a way that was mean or hurtful to them					
Sending mean or hurtful					

comments about someone through a cell phone text message					
Sending a mean or hurtful picture of someone through a cell phone text message					
Sending a mean or hurtful video of someone through a cell phone text message					
Threatening to hurt someone through electronic media					

3. During your last semester in high school, what was your perception of the **SERIOUSNESS of the following behaviors or actions?**

	Never serious	Rarely serious	Sometimes serious	Usually serious	Always serious
Posting mean or hurtful comments about someone online					
Posting a mean or hurtful picture online of someone					
Posting a mean or hurtful video online of someone					
Creating a mean or hurtful web page about someone					
Spreading rumors about someone online					
Pretending to be someone else online and acting in a way that was mean or hurtful to them					
Sending mean or hurtful comments about someone through a cell phone text message					
Sending a mean or hurtful picture of someone through a cell phone text message					
Sending a mean or hurtful video of someone through a cell phone text message					
Threatening to hurt someone through electronic media					

4. During your last semester in high school, what was your perception of the **ACCEPTABILITY of a classmate picking on another classmate** using electronic media **based on the following characteristics?**

<i>Victim Characteristics</i>	Never okay	Rarely okay	Sometimes okay	Usually okay	Always okay
Body size or features					
Sexual orientation					
Religious beliefs					
Race/ethnicity					
Family's income level					
Accent, or how one talks					
Style of dress, or clothes					
Physical disability					
Learning disability					
Popularity level					

5. During your last semester in high school, what was your perception of the **SERIOUSNESS of a classmate picking on another classmate** using electronic media **based on the following characteristics?**

<i>Victim Characteristics</i>	Never serious	Rarely serious	Sometimes serious	Usually serious	Always serious
Body size or features					
Sexual orientation					
Religious beliefs					
Race/ethnicity					
Family's income level					
Accent, or how one talks					
Style of dress, or clothes					
Physical disability					
Learning disability					
Popularity level					

6. If you ever picked on a classmate using electronic media during your last semester in high school, **did you believe that your behavior/action was JUSTIFIABLE?**
- Never picked on a classmate using electronic media
  - Never justifiable
  - Rarely justifiable
  - Sometimes justifiable
  - Usually justifiable
  - Always justifiable

7. During your last semester in high school, to what extent **did YOU agree or disagree** with the below statements regarding the use of electronic media?

	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree
Being picked on using electronic media is a <b>normal part of life</b> for high school students.					
Being picked on using electronic media is <b>not a big deal</b> .					
It is okay to send or forward a message/photo/video that picks on a classmate if you <b>don't know</b> that person.					
It is okay to send or forward a message/photo/video that picks on a classmate if you <b>don't like</b> that person.					
It is okay to send or forward a message/photo/video that picks on a classmate if that person <b>doesn't like you</b> .					
It is okay to send or forward a message/photo/video that picks on a classmate because you <b>did not create or send</b> the original message.					

8. During your last semester in high school, to what extent **did YOU agree or disagree** with the below statements regarding the use of electronic media?

	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree
When I saw or heard about a classmate being cyberbullied, I <b>did not feel it was my responsibility to stop it</b> .					
When I received and/or viewed					

a message/photo/video that picked on a classmate, I <b>did not feel it was my responsibility</b> to stop it.					
When I received and/or viewed a message/photo/video that picked on a classmate, I did not feel bad for forwarding the message to other classmates because I <b>did not create or send</b> the original message.					
It is okay to pick on a classmate if your <b>friends are doing it</b> .					
It is okay to pick on a classmate if your <b>friends would get mad</b> if you didn't join in.					

9. During your last semester in high school, to what extent **did YOU agree or disagree** with the below statements regarding the use of electronic media?

	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree
Picking on a classmate helps to <b>make them a tougher person</b> .					
Picking on a classmate helps to <b>teach them a lesson</b> .					
Picking on a classmate helps to <b>solve problems between students</b> .					
Picking on a classmate <b>does not cause them any harm</b> .					
Picking on a classmate does not create negative effects <b>inside schools</b> .					
Picking on a classmate does not create negative effects <b>outside schools</b> .					

10. During your last semester in high school, to what extent **did YOU agree or disagree** with the below statements regarding the use of electronic media?

	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree
High school students get picked on because they are <b>different or weird</b> .					
High school students get picked on because they <b>deserve it</b> .					
High school students get picked on because they <b>pick on others</b> .					
It is acceptable to pick on classmates who are <b>different or weird</b> .					
It is acceptable to pick on classmates who <b>deserve it</b> .					
It is acceptable to pick on classmates who <b>pick on others</b> .					

***The next 6 questions explore YOUR experiences with cyberbullying during YOUR final semester of high school.***

**Important Definitions**

- **Cyberbullying:** For the purposes of this survey, “cyberbullying” is when someone repeatedly harasses, mistreats, picks on, or makes fun of another person using various forms of electronic media.
  - Note, the behavior or action is considered to occur repeatedly when it occurs more than once or when it is viewed/forwarded more than once or by more than one person.
- **Electronic media:** For the purposes of this survey, “electronic media” may include any device or equipment such as cell phones, computers, and tablets that provide access to various communication tools (i.e., social media sites, text messages, online chat, email, and websites).

11. During my last semester in high school, **I experienced the following treatment from a classmate or peer:**

	Never	Once	A few times	Several times	Many times
Someone posted mean or hurtful <b>comments about me online</b>					
Someone posted a mean or hurtful <b>picture online of me</b>					
Someone posted a mean or hurtful <b>video online of me</b>					
Someone created a mean or hurtful <b>web page about me</b>					
Someone spread a mean or hurtful <b>rumor about me online</b>					
Someone <b>pretended to be me online</b> and acted in a way that was mean or hurtful to me					
Someone sent mean or hurtful <b>comments about me through a cell phone text message</b>					
Someone sent a mean or hurtful <b>picture of me through a cell phone text message</b>					
Someone sent a mean or hurtful <b>video of me through a cell phone text message</b>					
Someone threatened to <b>hurt me through electronic media</b>					

12. During my last semester in high school, **I was cyberbullied.**

- a. Never
- b. Once
- c. A few times
- d. Several times
- e. Many times

13. During my last semester in high school, **I saw other people experience the following treatment from a classmate or peer:**

	Never	Once	A few times	Several times	Many times
Someone posted mean or hurtful <b>comments about them online</b>					
Someone posted a mean or hurtful <b>picture online of them</b>					
Someone posted a mean or hurtful <b>video online of them</b>					
Someone created a mean or hurtful <b>web page about them</b>					
Someone spread a mean or hurtful <b>rumor about them online</b>					
Someone <b>pretended to be them online</b> and acted in a way that was mean or hurtful to them					
Someone sent mean or hurtful <b>comments about them through a cell phone text message</b>					
Someone posted a mean or hurtful <b>picture of them through a cell phone text message</b>					
Someone posted a mean or hurtful <b>video of them through a cell phone text message</b>					
Someone threatened to <b>hurt them through electronic media</b>					

14. During my last semester in high school, **I saw other people being cyberbullied.**

- a. Never
- b. Once
- c. A few times
- d. Several times
- e. Many times

15. During my last semester in high school, **I treated a classmate or peer in these ways:**

	Never	Once	A few times	Several times	Many times
I posted a mean or hurtful <b>comment about someone online</b>					
I posted a mean or hurtful <b>picture online of someone</b>					
I posted a mean or hurtful <b>video online of someone</b>					
I created a mean or hurtful <b>web page about someone</b>					
I spread a mean or hurtful <b>rumor about someone online</b>					
I <b>pretended to be someone else online</b> and acted in a way that was mean or hurtful to them					
I sent mean or hurtful <b>comments about them through a cell phone text message</b>					
I sent a mean or hurtful <b>picture of them through a cell phone text message</b>					
I sent a mean or hurtful <b>video of them through a cell phone text message</b>					
I threatened to <b>hurt someone through electronic media</b>					

16. During my last semester in high school, **I cyberbullied others.**

- a. Never
- b. Once
- c. A few times
- d. Several times
- e. Many times

***The final set of questions focuses on demographic information. The primary purpose for the questions is to tell the researcher more about survey participants. However, please be reminded that your responses to the survey will remain anonymous and cannot be traced to you.***

17. How old are you now? \_\_\_\_\_

18. What is your gender?

- a. Male
- b. Female
- c. Transgender

19. What is your sexual orientation?

- a. Heterosexual
- b. Gay/Lesbian
- c. Bisexual
- d. Unsure

20. How do you usually describe yourself?

- a. American Indian or Alaskan Native
- b. Asian or Pacific Islander
- c. Black or African American
- d. Hispanic or Latino/a
- e. White
- f. Bi-racial or Multi racial
- g. Other

21. Please identify the City and State for the High School that you received your diploma from: \_\_\_\_\_

22. What type of High School did you receive your diploma from?

- a. Military High School
- b. Private High School, non-Religious affiliation
- c. Private High School, Religious affiliation
- d. Public High School
- e. Virtual School

23. During your last semester in high school, how would you describe your popularity level?

- a. Very popular
- b. Popular
- c. Somewhat popular
- d. Unpopular
- e. Very unpopular

***Thank you for participating in the survey.***

APPENDIX I  
STUDENT EMAIL CONTACT: FINAL STUDY

**First Email**

Subject: Electronic Media and Cyberbullying Survey

Dear UF Freshman,

I am a UF doctoral student and I am writing to ask for your participation in an **Electronic Media and Cyberbullying Survey**. The purpose of this study is to explore the relationship between student experiences with electronic media and personal perceptions of cyberbullying behaviors. In short, this survey is being conducted to better address the health and safety of America's youth.

Your name was selected from the records at the UF Registrar's Office. If you choose to participate in this survey, **your answers will be completely anonymous**. No personal identification (IP address, names, emails, etc.) will be collected and thus you will not be connected to your answers in any way.

**Four participants will be selected at random to each receive a \$50 Visa gift card.** If you wish to be considered for the incentive you will be sent to an additional screen, separate from the survey, where you can enter your contact information. **Your information will not be linked to the survey, it is completely separate.** To receive the gift card you must pick it up in room 6 of the Florida Gym.

The survey is only available for **three weeks** so please act quickly. When you are ready to complete this 10-15 minute survey, please click on the following link:  
[https://ufhphhealtheducation.qualtrics.com/SE/?SID=SV\\_4YF3VoZfHUjWXLd](https://ufhphhealtheducation.qualtrics.com/SE/?SID=SV_4YF3VoZfHUjWXLd).

Thank you very much for helping us better understand the relationship between student experiences with electronic media and personal perceptions of cyberbullying behaviors. If you have any questions or comments about this survey, please feel free to contact me at (352) 294-1804 or by replying to this email.

Thank you for your help and Go Gators!

Sincerely,

Holly T. Moses, MSHE, CHES  
Doctoral Candidate  
School of Teaching and Learning  
University of Florida  
PO Box 117048, 2403 Norman Hall  
Gainesville, FL 32611  
Phone: 352.294.1804  
Email: hmoses@hhp.ufl.edu



## Second Email

Subject: Electronic Media and Cyberbullying Survey

Dear UF Freshman,

I am a UF doctoral student and I am writing to ask for your participation in an **Electronic Media and Cyberbullying Survey**. The purpose of this study is to explore the relationship between student experiences with electronic media and personal perceptions of cyberbullying behaviors. In short, this survey is being conducted to better address the health and safety of America's youth.

Your name was selected from the records at the UF Registrar's Office. If you choose to participate in this survey, **your answers will be completely anonymous**. No personal identification (IP address, names, emails, etc.) will be collected and thus you will not be connected to your answers in any way.

**Four participants will be selected at random to each receive a \$50 Visa gift card.** If you wish to be considered for the incentive you will be sent to an additional screen, separate from the survey, where you can enter your contact information. **Your information will not be linked to the survey, it is completely separate.** To receive the gift card you must pick it up in room 6 of the Florida Gym.

The survey is only available for **three weeks** so please act quickly. When you are ready to complete this 10-15 minute survey, please click on the following link:  
[https://ufhphhealtheducation.qualtrics.com/SE/?SID=SV\\_4YF3VoZfHUjWXLd](https://ufhphhealtheducation.qualtrics.com/SE/?SID=SV_4YF3VoZfHUjWXLd).

Thank you very much for helping us better understand the relationship between student experiences with electronic media and personal perceptions of cyberbullying behaviors. If you have any questions or comments about this survey, please feel free to contact me at (352) 294-1804 or by replying to this email.

Thank you for your help and Go Gators!

Sincerely,

Holly T. Moses, MSHE, CHES  
Doctoral Candidate  
School of Teaching and Learning  
University of Florida  
PO Box 117048, 2403 Norman Hall  
Gainesville, FL 32611  
Phone: 352.294.1804  
Email: hmoses@hhp.ufl.edu



### Third Email

Subject: Electronic Media and Cyberbullying Survey

Dear UF Freshman,

I am a UF doctoral student and I am writing to ask for your participation in an **Electronic Media and Cyberbullying Survey**. The purpose of this study is to explore the relationship between student experiences with electronic media and personal perceptions of cyberbullying behaviors. In short, this survey is being conducted to better address the health and safety of America's youth.

Your name was selected from the records at the UF Registrar's Office. If you choose to participate in this survey, **your answers will be completely anonymous**. No personal identification (IP address, names, emails, etc.) will be collected and thus you will not be connected to your answers in any way.

**Four participants will be selected at random to each receive a \$50 Visa gift card.** If you wish to be considered for the incentive you will be sent to an additional screen, separate from the survey, where you can enter your contact information. **Your information will not be linked to the survey, it is completely separate.** To receive the gift card you must pick it up in room 6 of the Florida Gym.

The survey is only available for **three weeks** so please act quickly. When you are ready to complete this 10-15 minute survey, please click on the following link:  
[https://ufhphhealtheducation.qualtrics.com/SE/?SID=SV\\_4YF3VoZfHUjWXLd](https://ufhphhealtheducation.qualtrics.com/SE/?SID=SV_4YF3VoZfHUjWXLd).

Thank you very much for helping us better understand the relationship between student experiences with electronic media and personal perceptions of cyberbullying behaviors. If you have any questions or comments about this survey, please feel free to contact me at (352) 294-1804 or by replying to this email.

Thank you for your help and Go Gators!

Sincerely,

Holly T. Moses, MSHE, CHES  
Doctoral Candidate  
School of Teaching and Learning  
University of Florida  
PO Box 117048, 2403 Norman Hall  
Gainesville, FL 32611  
Phone: 352.294.1804  
Email: hmoses@hhp.ufl.edu



## Final Email

Subject: Electronic Media and Cyberbullying Survey

Dear UF Freshman,

I am a UF doctoral student and I am writing to ask for your participation in an **Electronic Media and Cyberbullying Survey**. The purpose of this study is to explore the relationship between student experiences with electronic media and personal perceptions of cyberbullying behaviors. In short, this survey is being conducted to better address the health and safety of America's youth.

Your name was selected from the records at the UF Registrar's Office. If you choose to participate in this survey, **your answers will be completely anonymous**. No personal identification (IP address, names, emails, etc.) will be collected and thus you will not be connected to your answers in any way.

**Four participants will be selected at random to each receive a \$50 Visa gift card.** If you wish to be considered for the incentive you will be sent to an additional screen, separate from the survey, where you can enter your contact information. **Your information will not be linked to the survey, it is completely separate.** To receive the gift card you must pick it up in room 6 of the Florida Gym.

The survey is only available for **three weeks** so please act quickly. When you are ready to complete this 10-15 minute survey, please click on the following link:  
[https://ufhphhealtheducation.qualtrics.com/SE/?SID=SV\\_4YF3VoZfHUjWXLd](https://ufhphhealtheducation.qualtrics.com/SE/?SID=SV_4YF3VoZfHUjWXLd).

Thank you very much for helping us better understand the relationship between student experiences with electronic media and personal perceptions of cyberbullying behaviors. If you have any questions or comments about this survey, please feel free to contact me at (352) 294-1804 or by replying to this email.

Thank you for your help and Go Gators!

Sincerely,

Holly T. Moses, MSHE, CHES  
Doctoral Candidate  
School of Teaching and Learning  
University of Florida  
PO Box 117048, 2403 Norman Hall  
Gainesville, FL 32611  
Phone: 352.294.1804  
Email: hmoses@hhp.ufl.edu



## LIST OF REFERENCES

- Agatston, P. W., Kowalski, R., & Limber, S. (2007). Students' perspectives on cyber bullying. *Journal of Adolescent Health, 41*(6), S59-S60.
- American Educational Research Association. (2013). *Prevention of bullying in schools, colleges, and universities: Research report and recommendations*. Washington, DC: American Educational Research Association.
- Bacchini, D., Amodeo, A.L., Ciardo, A., Valerio, P., & Vitelli, R. (1998). Bully-victim relationship: Stability of the phenomenon and use of moral disengagement. *Scienze dell'Interazione, 5*(1), 29-46.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Bandura, A. (1991). Social cognitive theory of moral thought and action. In W.M. Kurtines & J. L. Gewirtz (Eds.), *Handbook of moral behavior and development: Theory, research and applications* (Vol. 1, pp. 71-129). Hillsdale, NJ: Erlbaum.
- Bandura, A. (1995). *Multifaceted scale of the mechanisms of moral disengagement*. Available from A. Bandura, Stanford University, Stanford CA 94305-2130.
- Bandura, A. (1999). Moral disengagement in the perpetration of inhumanities. *Personality and Social Psychology Review, 3*(3), 193-209.
- Bandura, A., Barbaranelli, C., Vittorio Caprara, G., & Pastorelli C. (1996). Mechanisms of moral disengagement in the exercise of moral agency. *Journal of Personality and Social Psychology, 71*, 364-374.
- Barriga, A. Q., & Gibbs, J.C. (1996). Measuring cognitive distortion in antisocial youth: Development and preliminary evaluation of the How I Think Questionnaire. *Aggressive Behavior, 22*, 333-343.
- Barto, S. H. (2010). *Illuminate: Bullying and coordinated school health*. [PowerPoint slides]. Retrieved from <http://www.safeschools.info/images/stories/Coordinated-School-Health-and-Bullying-SLIDES.pdf>
- Bauman, S. (2010). Cyberbullying in a rural intermediate school: An exploratory study. *The Journal of Early Adolescence, 30*(6), 803-833.
- Bauman, S., & Del Rio, A. (2006). Preservice teachers' responses to bully scenarios: Comparing physical, verbal and relational bullying. *Journal of Educational Psychology, 98*(1), 219-231.
- Beran, T., & Li, Q. (2007). The relationship between cyberbullying and school bullying. *Journal of Student Wellbeing, 1*(2), 15-33.

- Birnbaum, M.H. (2004). Human research and data collection via the internet. *Annual Review of Psychology*, 55, 803-832.
- Campbell, M.A. (2005). Cyber bullying: An old problem in a new guise?. *Australian Journal of Guidance and Counselling*, 15(1), 68-76.
- Centers for Disease Control and Prevention. (2011, February 27). *Youth Risk Behavior Surveillance System (YRBSS)*. Retrieved from <http://www.cdc.gov/healthyyouth/yrbs/>.
- Centers for Disease Control and Prevention. (2012, August 15). *Suicide prevention*. Retrieved from [http://www.cdc.gov/violenceprevention/pub/youth\\_suicide.html](http://www.cdc.gov/violenceprevention/pub/youth_suicide.html).
- Corsaro, W. A., & Eder, D. (1990). Children's peer cultures. *Annual Review of Sociology*, 16, 197-220.
- Craig, W.M., Pepler, D.J., & Atlas, R. (2000). Observations of bullying in the playground and in the classroom. *School Psychology International*, 21, 22-36.
- Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. Boston, Massachusetts: Pearson Education, Inc.
- Crothers, L.M. & Kolbert, J.B. (2010). Teachers' Management of Student Bullying in the Classroom. In S. R. Jimerson, S. M. Swearer, & D. Espelage (Eds.), *The handbook of school bullying: An international perspective* (pp. 535–546). New York, NY: Routledge.
- Dake, J., Price, J., & Telljohann, S. (2003). The nature and extent of bullying at school. *Journal of School Health*, 73(5), 173-180.
- David-Ferdon, C., & Hertz, M. F. (2009). *Electronic Media and Youth Violence: A CDC Issue Brief for Researchers*. Atlanta (GA): Centers for Disease Control; 2009.
- David-Ferdon, C., & Hertz, M. F. (2007). Electronic media, violence, and adolescents: An emerging public health problem. *Journal of Adolescent Health*, 41(6), S1–S5.
- Dillman DA. (2007). *Mail and internet surveys: The tailored design method*. Hoboken, New Jersey: Wiley.
- Dooley, J.J., Pyzalski, J., & Cross, D. (2009). Cyberbullying versus face-to-face bullying: A theoretical and conceptual review. *Journal of Psychology*, 217(4), 182–188.
- Eder, D. (1985). The cycle of popularity: Interpersonal relations among female adolescents. *Sociology of Education*, 58(3), 154-165.

- Englander, E., Mills, E., & McCoy, M. (2009). Cyberbullying and information exposure: User-generated content in post-secondary education. *International Journal of Contemporary Sociology*, 46(2), 213-230.
- Englander, E., & Muldowney, A. M. (2007). Just turn the darn thing off: Understanding cyberbullying. Retrieved from <https://ncjrs.gov/pdffiles1/ojdp/grants/226233.pdf#page=97>.
- Espelage, D.L. (2004). An ecological perspective to school-based bullying prevention. *The Prevention Researcher*, 11, 3-6.
- Espelage, D.L., Holt, M.K., & Henkel, R.R. (2003). Examination of peer-group contextual effects on aggression during early adolescence. *Child Development*, 74(1), 205-220.
- Gini, G. (2006). Social cognition and moral cognition in bullying: What's wrong? *Aggressive Behavior*, 32(6), 528-539.
- Gradinger, P., Strohmeir, D., & Spiel, C. (2009). Traditional bullying and cyberbullying: Identification of risk groups for adjustment problems. *Journal of Psychology*, 217(4), 205-213.
- Hawker, D.S.J., & Boulton, M.J. (2000). Twenty years' research on peer victimization and psychological maladjustment: A meta-analysis review of cross-sectional studies. *Journal of Child Psychology and Psychiatry*, 41(4), 441-445.
- Hinduja, S., & Patchin, J. (2007). Offline consequences of online victimization: School violence and delinquency. *Journal of School Violence* 6(3), 89-112.
- Hinduja, S., & Patchin, J. (2008). Cyberbullying: An exploratory analysis of factors related to offending and victimization. *Deviant Behavior*, 29(2), 129-156.
- Hinduja, S., & Patchin, J. (2008). Personal information of adolescents on the Internet: A quantitative content analysis of MySpace. *Journal of Adolescence* 31(1), 125-146.
- Hinduja, S., & Patchin, J. (2010). Bullying, cyberbullying, and suicide. *Archives of Suicide Research* 14(3), 206-221.
- Hoyert, D.L., & Xu, J. (2012). Deaths: Preliminary data for 2011. *National Vital Statistics Reports*, 61(6), 1-52.
- Huesmann, L.R. (2007). The impact of electronic media violence: scientific theory and research. *Journal of Adolescent Health*, 41(6), S6-S13.

- Hymel, S., Roche-Henderson, N., & Bonanno, R.A. (2005). Moral disengagement: A framework for understanding bullying among adolescents. In A. Oyaziwo, A. McEachern & M. C. Kenny, *Peer victimization in schools: An international perspective* (1-11). Delhi, India: Kamla Raj Enterprises.
- Hymel, S., Schonert-Reichl, K. A., Bonanno, R. A., Vaillancourt, T., & Henderson, N. R. (2010). Bullying and morality: Understanding how good kids can behave badly. In S. R. Jimerson, S. M. Swearer, & D. Espelage (Eds.), *The handbook of school bullying: An international perspective* (pp. 101–118). New York, NY: Routledge.
- IBM Corp. Released 2012. IBM® SPSS® Statistics for Windows, Version 21.0. Armonk, NY: IBM Corp.
- Katzer, C., Fetchenhauer, D., & Belschak, F. (2009). Cyberbullying: Who are the victims? A comparison of victimization in Internet chatrooms and victimization in school. *Journal of Media Psychology, 21*(1), 25–36.
- Kim, Y., Leventhal, B.L., Koh, Y., Hubbard, A., & Boyce, W. (2006). School bullying and youth violence: Causes or consequences of psychopathologic behavior?. *Archives of Pediatrics and Adolescent Medicine, 63*(9), 1035-1041.
- Kiriakidis, S. P., & Kavoura, A. (2010). Cyberbullying: A review of the literature on harassment through the internet and other electronic means. *Family Community Health, 33*(2), 82-93.
- Kowalski, R.M., & Limber, S.P. (2007). Electronic bullying among middle school students. *Journal of Adolescent Health, 41*(6), S22–S30.
- Kowalski, R.M., Limber, S.P., & Agatston, P.W. (2012). *Cyberbullying: Bullying in the digital age*. Malden, MA: Blackwell Publishing Ltd.
- Krause, N. (2002). A comprehensive strategy for developing closed-ended survey items for use in studies of older adults. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences, 57*(s5), 263-274.
- Lenhart, A., Madden, M., Smith, A., Purcell, K., Zickuhr, K., & Rainie, L. (2011, November 9). Teens, kindness and cruelty on social network sites: How American teens navigate the new world of "digital citizenship". Retrieved from [http://www.pewinternet.org/~media/Files/Reports/2011/PIP\\_Teens\\_Kindness\\_Cruelty\\_SNS\\_Report\\_Nov\\_2011\\_FINAL\\_110711.pdf](http://www.pewinternet.org/~media/Files/Reports/2011/PIP_Teens_Kindness_Cruelty_SNS_Report_Nov_2011_FINAL_110711.pdf).
- Li, Q. (2007). Bullying in the new playground: Research into cyberbullying and cyber victimisation. *Australasian Journal of Educational Technology, 23*(4), 435–454.
- Li, Q. (2007). New bottle but old wine: A research of cyberbullying in schools. *Computers in Human Behavior, 23*(4), 1777–1791.

- Madden, M., Lenhart, A., Duggan, M., Cortesi, S., & Gasser, U. (2013, March 13). Teens and Technology 2013. Retrieved from [http://www.pewinternet.org/~media/Files/Reports/2013/PIP\\_TeensandTechnology2013.pdf](http://www.pewinternet.org/~media/Files/Reports/2013/PIP_TeensandTechnology2013.pdf).
- Menesini, E., Sanchez, V., Fonzi, A., Ortega, R., Costabile, A., & Lo Feudo, G. (2003). Moral emotions and bullying: A cross-national comparison of differences between bullies, victims and outsiders. *Aggressive Behavior, 29*(6), 515–530.
- Mishna, F., Cook, C., Gadalla, T., Daciuk, J., & Solomon, S. (2010). Cyber bullying behaviors among middle and high school students. *American Journal of Orthopsychiatry, 80*(3), 362–374.
- Nansel, T.R., Overpeck, M., Pilla, R.S., Ruan, W.J., Simons-Morton, B., & Scheidt, P. (2001). Bullying behaviors among US youth: Prevalence and association with psychosocial adjustment. *Journal of the American Medical Association, 285*(16), 2094-2100.
- Nansel T.R., Overpeck M.D., Haynie D.L., Ruan W., & Scheidt, P.C. (2003). Relationships between bullying and violence among US youth. *Archives of Pediatrics and Adolescent Medicine, 157*(4), 348-353.
- National Crime Prevention Council. (2007). Teens and cyberbullying. <http://www.ncpc.org/resources/files/pdf/bullying/Teens%20and%20Cyberbullying%20Research%20Study.pdf>
- Nulty, D.D. (2008). The adequacy of response rates to online and paper surveys: what can be done? *Assessment & Evaluation in Higher Education, 33*(3), 301-314.
- Obermann, M.L. (2011). Moral disengagement in self-reported and peer-nominated school bullying. *Aggressive Behavior, 37*(2), 133-144.
- Olweus, D. (1993). *Bullying at school: What we know and what we can do*. Oxford, UK: Blackwell.
- Olweus, D. (2010). Understanding and researching bullying. In S. R. Jimerson, S. M. Swearer, & D. Espelage (Eds.), *The handbook of school bullying: An international perspective* (pp. 9–33). New York, NY: Routledge.
- Patchin, J. W., & Hinduja, S. (2006). Bullies move beyond the schoolyard: A preliminary look at cyberbullying. *Youth Violence and Juvenile Justice, 4*(2), 148–169.
- Patchin, J. W., & Hinduja, S. (2010). Changes in adolescent online social networking behaviors from 2006 to 2009. *Computers in Human Behavior, 26*(6), 1818–1821.
- Patchin, J. W., & Hinduja, S. (2012). *Cyberbullying prevention and response: Expert perspectives*. New York, New York: Routledge.

- Perren, S., & Gutzwiller-Helfenfinger. (2012). Cyberbullying and traditional bullying in adolescence: Differential roles of moral disengagement, moral emotions, and moral values. *European Journal of Developmental Psychology, 9*(2), 195-209.
- Pornari, C.D. & Wood, J. (2010). Peer and cyber aggression in secondary school students: The role of moral disengagement, hostile attribution bias, and outcome expectations. *Aggressive Behavior, 36*(2), 81-94.
- Pratt, M. W., Hunsberger, B., Pancer, M., & Alisat, S. (2003). A longitudinal analysis of personal values socialization: Correlates of a moral self-ideal in late adolescence. *Social Development, 12*(4), 563–585.
- The data collection for this paper was generated using Qualtrics software, Version 2005 of the Qualtrics Research Suite. Copyright © 2005 Qualtrics. Qualtrics and all other Qualtrics product or service names are registered trademarks or trademarks of Qualtrics, Provo, UT, USA. <http://www.qualtrics.com>
- Raskauskas, J., & Stoltz, A. D. (2007). Involvement in traditional and electronic bullying among adolescents. *Developmental Psychology, 43*(3), 564-575.
- Rigby, K. & Slee, P. (1999). Suicidal ideation among adolescent school children, involvement in bully-victim problems, and perceived social support. *Suicide and Life-Threatening Behavior, 29*(2), 119–130.
- Robers, S., Zhang, J., & Truman, J. (2011). Indicators of School Crime and Safety: 2011 (NCES 2012-002/NCJ 236021). National Center for Education Statistics, U.S. Department of Education, and Bureau of Justice Statistics, Office of Justice Programs, U.S. Department of Justice. Washington, DC.
- Salmivalli, C., & Voden, M. (2004). Connections between attitudes, group norms, and behaviour in bullying situations. *International Journal of Behavioral Development, 28*(3), 246-258.
- Schneider, S.K., O'Donnell, L., Stueve, A., & Coulter, R.W.S. (2012). Cyberbullying, school bullying, and psychological distress: A regional census of high school students. *American Journal of Public Health, 102*(1), 171-177.
- Shih, T.H., & Xitao, F. (2008). Comparing response rates from web and mail surveys: A meta-analysis. *Field Methods, 20*(3), 249-271.
- Slonje, R., & Smith, P.K. (2008). Cyberbullying: Another main type of bullying? *Scandinavian Journal of Psychology, 49*(2), 147–154.
- Smith, P. K., Mahdavi, J., Carvalho, M., Fisher, S., Russell, S., & Tippett, N. (2008). Cyberbullying: Its nature and impact in secondary school pupils. *Journal of Child Psychology and Psychiatry, 49*(4), 376-385.

- Smith, P., Mahdavi, J., Carvalho, M., & Tippet, N. (2006). An investigation into cyber bullying, its forms, awareness and impact, and the relationship between age and gender in cyber bullying. Retrieved from [http://www.anti-bullyingalliance.org/media/15587/cyberbullyingreportfinal230106\\_000.pdf](http://www.anti-bullyingalliance.org/media/15587/cyberbullyingreportfinal230106_000.pdf).
- Smith, P. K., & Slonje, R. (2010). Cyberbullying: The nature and extent of a new kind of bullying in and out of school. In S. R. Jimerson, S. M. Swearer, & D. L. Espelage(Eds.), *Handbook of bullying in schools: An international perspective* (pp. 249–262). New York: Routledge.
- Telljohann, S.K., Symons, C.W., Pateman, B., & Seabert, D.M. (2012). *Health education: Elementary and middle school applications*. 7<sup>th</sup> Ed. New York, NY: McGraw-Hill Education.
- Tettegah, S. Y., Betout, D., & Taylor, K. R. (2006). Cyber-bullying and schools in an electronic era. *Advances in Educational Administration*, 8, 17–28.
- The data analysis for this paper was generated using Qualtrics software, Version 50832 of the Qualtrics Research Suite. Copyright © 2013 Qualtrics. Qualtrics and all other Qualtrics product or service names are registered trademarks or trademarks of Qualtrics, Provo, UT, USA. <http://www.qualtrics.com>
- Tokunaga, R. S. (2010). Following you home from school: A critical review and synthesis of research on cyberbullying victimization. *Computers in Human Behavior*, 26(3), 277-287.
- Ttofi, M.M., Farrington, D.P., Losel, F., & Loeber, R. (2011). The predictive efficiency of school bullying versus later offending: A systematic/meta-analytic review of longitudinal studies. *Criminal Behaviour and Mental Health*, 21(2), 80-89.
- United States Department of Health and Human Services, Healthy People 2020. (2011, June 29). Injury and Violence Prevention: Overview. Retrieved from <http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicId=24>
- van der Wal, M. F., de Wit, C. A., & Hirasing, R. A. (2003). Psychosocial health among young victims and offenders of direct and indirect bullying. *Pediatrics*, 111(6), 1312–1317.
- Varjas, K., Henrich, C. C., & Meyers, J. (2009). Urban middle school students' perceptions of bullying, cyberbullying, and school safety. *Journal of School Violence*, 8(2), 159–176.
- What is Bullying*. (2013, June). Retrieved from <http://www.stopbullying.gov/what-is-bullying/index.html>
- Willard, N. (2006). Cyberbullying and cyber threats: Responding to the challenge of online social cruelty, threats, and distress. Retrieved from <http://cyberbully.org>.

- Williams, K. R., & Guerra, N. G. (2007). Prevalence and predictors of internet bullying. *Journal of Adolescent Health, 41*(6), S14–S21.
- Wolak, J., Mitchell, K. J., & Finkelhor, D. (2007). Does on-line harassment constitute bullying? An exploration of online harassment by known peers and online only contacts. *Journal of Adolescent Health, 41*(6), S51–S58.
- Yadava, A., Sharma, N.R., & Gandhi, A. (2001). Aggression and moral disengagement. *Journal of Personal Clinical Studies, 17*, 95-99.
- Ybarra, M., Diener-West, M. & Leaf, P.J. (2007). Examining the overlap in internet harassment and school bullying: Implications for school intervention. *Journal of Adolescent Health, 41*(6), S42–S50.
- Ybarra, M., & Mitchell, K. J. (2004). Online aggressor/targets, aggressors, and targets: A comparison of associated youth characteristics. *Journal of Child Psychology and Psychiatry, 45*(7), 1308-1316.
- Ybarra, M., & Mitchell, K. J. (2007). Online aggressor/targets, aggressors, and targets: A comparison of associated youth characteristics. *Journal of Adolescent Health, 41* (2), 189-195.
- Ybarra, M., Mitchell, K. J., Wolak, J., & Finkelhor, D. (2006). Examining characteristics and associated distress related to Internet harassment: Findings from the Second Youth Internet Safety Survey. *Pediatrics, 118*(4), e1169–e1177.
- Ybarra, M., West, M.D., & Leaf, P. (2007). Examining the overlap in internet harassment and school bullying: Implications for school intervention. *Journal of Adolescent Health, 41*(6), S42–S50.

## BIOGRAPHICAL SKETCH

Holly Turner Moses was born January 1, 1981 in Lake City, Florida. She grew up in Fort White, Florida and graduated from Columbia High School in 1999. After graduation, Holly attended the University of Florida (UF) as an undergraduate in Health Science Education where her passion for health education began. She graduated with a Bachelor of Science in Health Science Education with a specialization in School Health in 2003. Holly continued her studies by pursuing a Master of Science in Health Science Education immediately following graduation. With a newfound interest in college health education, Holly taught multiple sections of HSC2100, Personal and Family Health, throughout her graduate studies.

After earning her master's degree, Holly was hired to serve as the Undergraduate Program Coordinator in the Department of Health Education and Behavior at the University of Florida. Holly assumed the roles of academic advisor and internship coordinator, as well as served on the Department's undergraduate program advisory committee. She also served as the faculty sponsor of Eta Sigma Gamma's Alpha Lambda chapter, the health education honorary.

In 2008, Holly enrolled half-time in the Ph.D. program in the College of Education's School of Teaching and Learning. During her time as a UF doctoral student she clarified her research focus and developed a survey instrument to investigate students' perceptions of cyberbullying behaviors as related to the processes of moral disengagement. Holly's doctoral dissertation research included significant findings that will lead to several publications in scholarly journals. Holly was granted a Doctor of Philosophy in Curriculum and Instruction with an emphasis in Curriculum, Teaching, and Teacher Education on December 13, 2013.