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Predictors of Bullying in an Adolescent School Sample

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PREDICTORS OF BULLYING IN AN ADOLESCENT SCHOOL SAMPLE

by

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(Under the Direction of Rebecca Ryan)

ABSTRACT

Bullying is a pervasive problem in our society. Contributing to this problem is the fact that bullying is not well understood. This makes it difficult to design successful interventions. The current study aims to create a complete picture of bullying in order to increase understanding of this behavior. For this study, 59 adolescents completed a survey packet including measures of bullying behaviors and other variables expected to relate to bullying. The results revealed that bullying is a problem for both genders. Multivariate analyses revealed males to be more directly and indirectly aggressive, but there were no significant gender differences on verbal and physical aggression. Regression analysis revealed that age and negative coping created a significant model predicting cyberbullying. Regression analysis also showed belief in a just world, self-esteem, age, and negative coping created a significant model predicting traditional bullying. The findings particularly highlight belief in a just world as a variable that should be further explored. The findings are discussed in relation to current research on bullying and interventions.

Index Words: bullying, cyberbullying, belief in a just world, coping, interventions

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DEDICATION

I would like to dedicate this paper to all victims of bullying. Their perseverance, fortitude, and

spirit inspire me to this day. My hope is that they will be the real beneficiaries of this research

and that soon a solution will be found for this horrible social problem.

ACKNOWLEDGMENTS

I am so grateful to my advisor, Dr. Rebecca Ryan, for all her help and encouragement during this process. Her advice was indispensable and this would not have been possible without her help. I am also grateful to my committee members, Dr. Jeff Klibert and Dr. Janice Kennedy, for their assistance throughout the whole process. From the proposal to the IRB application to the final defense, they were always ready to offer advice or encouragement. I also would like to thank Megan Brock, Tori Allen, and Kendra Warren for their help during data collection and entry. Their hard work and energy helped me through the most exhausting moments. And I am forever grateful to Holly Greeson and the school staff at Bulloch Academy. They were understanding and helpful through the whole process. And finally, I would like to thank the students of Bulloch Academy for their honesty and willingness to help. Without their participation, this truly could not have happened.

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CHAPTER 1

INTRODUCTION

Bullying is a major problem in many schools in the United States. Researchers in the

United States have found that between 40 and 80% of students experience bullying while in

school. Also, 10-15% report chronic, or repeated, bullying, and 8% of students report missing at

least one day of school per month for fear of being bullied (Juvonen & Graham, 2001). Bullying

is a serious problem that affects millions of children and adolescents and needs to be addressed.

Many researchers have studied bullying for the purpose of better understanding the behavior and

in the hope of ultimately preventing it. However, bullying behavior is still not well understood.

Most studies have focused on only one predictor of the behavior and some of the literature have

resulted in mixed findings. A more thorough model predicting bullying is needed. In the current

study, I analyzed both established and exploratory variables that may impact bullying in order to

determine predictors of bullying behaviors in school age children.

Bullying

Bullying has been defined as "a form of aggression that is hostile and proactive, and

involves both direct and indirect behaviors that are repeatedly targeted at an individual or group

perceived as weaker" (Elinoff, Chafouleas, & Sassu, 2004, p. 888). It also been more simply

defined as a form of peer aggression "in which one student intends to hurt another" (Klein &

Cornell, 2010). Also, a new concern is the existence and increase of cyberbullying (using

electronic devices to bully) among adolescents (Menesini & Nocentini, 2009). However, most

definitions of bullying do not include this new concern (Twyman, Taylor, & Corneaux, 2010).

Because there is not a standard definition for bullying, rates of bullying and its effects can vary

by the researcher's criteria. It can also be measured in a variety of ways, including observations

and questionnaires. Regardless, researchers have consistently found negative effects of bullying with these various definitions, criteria and measures.

Bullying has been associated with negative effects for victims, observers, and the bullies themselves. Victims of bullying often experience low self-esteem, low academic achievement and symptoms of depression (Card & Hodges, 2008). Guzick, Dorman, Groff, Altermatt, and Forsyth (2004) found the negative consequences of bullying (defined as teasing and rejection by peers) can last into adulthood. Guzick and colleagues asked 581 college-aged participants to recall events during their adolescence when they had been rejected by their peers and teased by others. Analysis revealed that peer rejection and lack of close friends during middle school (a potential side effect of being bullied) positively correlated with social anxiety disorders in adulthood. The authors suggested that social support is crucial during these early years. Even participants who reported having highly responsive parents were likely to suffer from social anxiety if they reported being rejected by their peers during middle school. While this study did not specifically focus on bullying, it highlights the importance of healthy peer interactions during adolescence.

The effects of bullying extend beyond the victim. Menesini (2007) used the Olweus Bullying/Victim Questionnaire (BVQ) to survey a sample of Italian and English students, aged 8-11. Bullying was defined as a stronger child teasing, kicking, hitting, or picking on a weaker child. He found that the more bullying participants witnessed, the less likely they were to intervene and help. Older students were less likely to say they would intervene and less likely to expect other students to intervene when bullying occurred. Older students were also more likely to say they would join in on the bullying of another student.

Other researchers also found increased exposure to bullying exacerbates these problems. Ireland and Clarkson (2007) surveyed adults (mean age 38.9 years) using the Attitudes Towards Bullying Scale and found that decreased empathy and perspective taking were strongly correlated with harsher attitudes toward bullying. Participants with lower levels of empathy were less concerned with finding a fair and just solution and more likely to support severe punishments for bullies. The authors found that the more exposure people had to bullying the more desensitized to aggression they became. They worried that both children and adults would become overwhelmed by the stress of dealing with bullying and would justify more hostile repercussions as a way of solving the problem. The authors suggested that future research should focus on increasing empathy and perspective taking as an effective way to stop bullying.

Once bullying begins, it is a very difficult behavior to stop. Researchers have tried to prevent it with minimal success. Jenson and Dieterich (2007) implemented a prevention program in fourth grade classroom at 28 public schools. The intervention consisted of interactive discussions and social skill training modules. Participants took part in ten sessions per semester for four semesters. Analyses with the BVQ showed no significant effects of the program. There was a trend of teaching students social skills lowering their chance of becoming victims of bullying. This was an encouraging finding and the authors suggested that teaching children social and emotional coping skills would lower their chances of becoming victims of bullying. However, this same training did not stop ongoing bullying nor did it deter future bullying. In the current study, I assume that a better understanding of bullying behavior will lead to effective prevention programs.

Baldry and Farrington (1999) assessed 238 British middle school students using the BVQ and found that bullies (those who physically, verbally, or psychologically attacked or intimidated

a less powerful person) displayed lower achievement, heightened hyperactivity, behavior problems, and showed less sensitivity toward others than their peers. They posited that effectively preventing bullying would entail addressing almost all of these problems, so they suggested that researchers focus on prevention instead. However, prevention is not possible without complete understanding of the problem and since bullying is such a multifaceted problem, many different variables need to be assessed for their relation to it. In the following sections, I will present different variables that have been previously studied in relation to bullying behavior. I will investigate whether these variables can predict bullying behaviors. Understanding these potential predictive factors will help researchers better understand and hopefully subsequently prevent this serious problem.

CHAPTER 2

AGGRESSION

Aggression is one of the most common variables associated with bullying. Bullying is by definition aggressive behavior perpetrated by a bully onto a victim. While there are similarities between bullying and aggression, they are distinct behaviors. Aggression is a specific event while bullying is continuous and targets the same person. Aggressive behavior is usually divided into physical (e.g., hitting) and social (e.g., gossiping) aggression. Boys tend to engage in more physically aggressive behavior and see it as more hurtful than social aggression. Girls tend to engage in more social aggression and find it worse than physical aggression. For both genders, higher levels of aggression, as measured by the Peer Conflict Scale, predict increased frequency of bullying behavior, as measured by peer rankings using the BVQ (Crapanzano, Frick, & Terranova, 2010)

Lee (2009) found bullying frequency to be equal across both genders in a sample of fifth graders. However, males and females differed in the type of aggression attributed to them. Lee asked participants to name the classmates they believed were bullies (those who chronically harassed someone either physically or psychologically) and also to rank the classmates they saw as the most physically (hitting, kicking, punching), verbally (shouting, insulting, teasing) and relationally (spreading rumors or lies, excluding peers during activities) aggressive. Using a regression analysis, Lee found that combined aggression scores (physical, verbal and relational) accounted for 24% of the variance in bullying with males and 66% with females. He also found that relationally and verbally aggressive girls were viewed as bullies but only boys who were physically aggressive were perceived to be bullies.

Lee (2009) also found that aggressive behavior and bullying behavior were not associated with rejection from peer groups. While there was a tendency for peers to reject aggressive boys, aggressive girls were less likely to be rejected. There was even evidence that highly aggressive participants were perceived to be among the most popular in their class. Lee posited that this perception would encourage aggressive behavior and lead more people to engage in bullying behaviors. Lee speculated that for any bullying prevention program to be successful, the social environment in which the action takes place would have to be changed. Also, all children, not just bullies, would need to be taught the negative effects of aggressive behavior in order to create a atmosphere less tolerant of aggression and bullying.

Crapanzano et al. (2010) studied fourth through seventh graders. Using the Peer Conflict Scale, they found girls to be more relationally aggressive while boys were more physically aggressive. The authors did note that while these patterns were significant, there were some examples of both types of aggression in males and females. They used Olweus' definition from the BVQ and a peer nominating scale to assess bullying rates. They found that participants who scored higher in aggression were more likely to be identified as bullies by their peers. They also noted how many aggressive girls would have been missed had the study only included one measure of aggression. They discovered 12% of female bullies would not have been identified had only relational aggression been assessed and 19% of female bullies would not have been identified had only physical aggression been assessed. While the authors concluded that girls tended to be more relationally and emotionally aggressive, both aspects of bullying need to be assessed in order to fully understand female bullying behavior.

At first glance, cyberbullying may seem to be a form of indirect aggression because it is not face-to-face. It can be anonymous and cyberbullies can disguise their words as comments or

even as being supportive in order to avoid being labeled as bullies. However, cyberbullying is a form of both direct and indirect aggression. Bullying on the internet allows bullies the opportunity to be anonymous, but they can also choose to be identified. Some of their comments can be very direct and straightforward, making cyberbullying both direct and indirect aggression. For example, anonymous chat room comments would be considered indirect aggression, while texting malicious comments to someone would be considered direct aggression.

Based on this research, in the current study I predicted that both genders would be equally aggressive, but bullying would be better predicted by social aggression in girls and physical aggression in boys. However, I expected to find examples of both types of aggression in both genders.

CHAPTER 3

EMPATHY

Joliffe and Farrington (2006) assessed empathy in 15-year-olds and found that both boys

and girls with low affective empathy (the ability to experience the emotions of another person)

were more likely to engage in bullying behavior (e.g., hitting, kicking, teasing, or rejecting

another). These researchers used the Basic Empathy Scale to measure both affective empathy

and cognitive empathy (the ability to understand the emotions of another). Though the difference

was not significant, males who bullied showed a trend of having lower affective and cognitive

empathy scores than males who did not. A significant effect was found with females. Females

who bullied had lower scores in both cognitive and affective empathy compared to females who

did not bully.

Joliffe and Farrington (2006) also compared the empathy scores of different types of

bullies, though the differences were not statistically significant, they did find that males who

bullied violently (e.g., physically assaulting someone) tended to have lower scores on the

empathy measure and males who bullied indirectly (e.g., not speaking to someone) did not differ

in their overall empathy scores from those who did not bully. Again, though not statistically

significant, the authors did find a trend for females who bullied indirectly to have lower

cognitive empathy. The authors stated that with more participants their analyses would have had

more power and they would have found significant differences between levels of empathy and

bullying. The authors concluded that bullies may be high in cognitive (knowing how others feel)

empathy, but have insufficient affective (feeling what others feel) empathy.

Viding, Simmonds, Petrides and Frederickson (2009) found that both female and male

bullies lacked overall empathy (e.g., both affective and cognitive) and described many bullies as

callous and unemotional as determined by the Inventory of Callous-Unemotional Traits (ICU).

Participants with lower scores on the ICU (e.g., more callous and less empathetic) were more

likely to be nominated by their peers as bullies (e.g., someone who picks on a weaker person,

someone who spreads rumors about another) using the Guess Who Measure of Bullying.

Participants identified by their peers as bullies struggled with empathy and understanding the

emotional states of others.

Jagers, Sydnor, Mouttapa, and Flay (2007) administered the Bryant Empathy Scale and

the Davis Empathetic Concern Subscale to fifth graders and also found that bullies scored lower

on empathetic traits compared to those who did not bully. The researchers found that overall

empathy, along with communal values (social responsibilities and commitment to their culture),

predicted less violent behavior through positive relationships with violence avoidance self-

efficacy beliefs (e.g., beliefs that they could keep from getting into fights and seek help

elsewhere instead). Though significant for both genders, bivariate correlations showed this

relationship to be stronger for boys than for girls.

Other researchers have supported Jagers, et al.'s (2007) finding that lack of overall

empathy is a better predictor for decreased bullying behavior in males than in females. Caravita,

Di Blasio, and Salmivalli (2009) assessed overall empathy (the ability to understand another's

emotional state) in Italian children, ages 8 to 14, using the How I Feel in Different Situations

questionnaire and found that high empathy predicted decreased bullying behaviors in males, but

not in females. Females, particularly ones rated as popular, could have high levels of empathy

and still frequently engage in bullying behaviors (e.g., encouraging others to tease a less

powerful peer) as measured by the Participant Role Questionnaire. Gini, Albiero, Benelli and

Altoe (2007) found similar results with male participants. They found low empathy significantly

predicted bullying for males. However, they were unable to predict prosocial behavior or bullying based on empathy levels for females. Though both Caravita et al. and Gini et al. included Italian children in their samples, I also expected to find similar results with the current sample as both locations are within a Western society.

In the current study, I further analyzed the relationship between bullying and empathy. Results have been mixed about the relationship between empathy and bullying, particularly for females. Based on previous findings, I predicted that low overall empathy would predict bullying behavior in boys. I believed that this relationship would be stronger for boys than for girls, although I expected to observe it in both genders.

CHAPTER 4

SELF-ESTEEM

O'Moore and Kirkham (2001) studied the relationship between self-esteem and bullying using the Piers-Harris Self-Concept Scale. They found that participants who were not considered bullies (e.g., do not tease or hit others) had higher self-esteem than both bullies (e.g., those who tease and hit others) and victims (e.g., those who are teased and hit). Bully/victim status was assessed with the BVQ. Victims of bullying rated themselves as less attractive and less popular than others, including bullies. The relationship between self-esteem and bullying was such that the more bullying the victims reported experiencing, the lower their self-esteem. Bullies had lower self-esteem than non-bullies, but higher self-esteem than victims.

Andreou (2000) gave the Self-Esteem Inventory and the Bullying Behavior Scale to 108 8-12-year-old Greek students (mean age was 10.2). She found both bullies and victims had lower self-esteem compared to their peers. Though not statistically significant, there was a trend for victims to have lower self-esteem than bullies. In addition to their negative opinions about themselves, both bullies and victims held negative beliefs about others. The only difference was bullies believed they had more control over their situation while victims reported feeling no control over their situation.

These studies support a connection between bullying and self-esteem. Based on these studies, I expected low self-esteem to be predictive of bullying. It could be that youths with low self-esteem bully in an attempt to feel better about themselves. Or they may dislike their inability to properly handle social situations thus being a bully lowers their self-esteem.

CHAPTER 5

BELIEF IN A JUST WORLD

Belief in a just world has also been found to predict bullying behavior. Fox, Elder, Gater, and Johnson (2010) found that 11 to 16-year-olds (mean age was 13.18) who scored higher on the Belief in a Just World Scale were more likely to have strong anti-bullying attitudes (e.g., recommend harsher punishments for bullies). People with high levels of belief in a just world (people get what they deserve and deserve what they get) were also less tolerant of perceived injustices and more likely to take action against them. Fox and colleagues found this makes them less likely to bully and more likely to defend victims of bullying. However, other researchers have found the opposite. For example, Ireland and Clarkson (2007) found that males who observed bullying were hostile towards the victims of bullying. They found a positive correlation between witnessing bullying and the belief that victims deserved to be bullied for being unable to defend themselves. Observers believed that if the world is a just place, then the victims must have done something to deserve being treated that way. Ireland and Clarkson posit that adolescents with low empathy and a high belief in a just world will be more likely to blame the victim while adolescents high in both traits will be less tolerant of bullying and thus less likely to bully. The authors recommended that researchers study the interaction between empathy and belief in a just world in predicting bullying, as I did in the current study.

Belief in a just world was expected to predict bullying such that those who were high in belief in a just world would be less likely to bully. I also expected this effect to be more apparent in males than in females. Participants low in belief in a just world would think that the world is a chaotic and negative place and there would be no negative repercussions for their actions.

CHAPTER 6

IMPULSIVITY

Warden and MacKinnon (2003) concluded that 9 to10-year-old children bully others because they are unable to control their behavior. They found that bullies, as defined as relationally and physically anitsocial (Social Behavior Questionnaire), are more likely to act without thinking of the negative consequences of their actions. Because of their higher levels of impulsivity, as measured by the Social Problem-Solving Task, they are more awkward and often do not know how to behave in social situations. These researchers also compared bullies and nonbullies and found that bullies were more impulsive than their nonbullying peers.

Ando, Asakura, and Simons-Morton (2005) surveyed Japanese students in the seventh and ninth grade. They found that poor self-control (inability to control one's actions) and impulsivity (to act without thinking) significantly positively correlated with both physical (e.g., hitting) and verbal (e.g., gossiping) bullying behaviors. Using path analyses, the researchers found that impulsiveness directly affected physical, verbal and indirect bullying. They also found an indirect effect of serious attitude in school (dedication to academic achievement) in all three models predicting bullying. The authors concluded that impulsivity increased adolescents' vulnerability to peer pressure, which often led to bullying and other aggressive behaviors.

In the current study, I expected higher levels of impulsivity to predict bullying behavior for both genders. Many bullies may have poor impulse control and this may lead to the failure to inhibit bullying behaviors. Also, bullies may not consider the negative consequences of their actions.

CHAPTER 7

COPING

Coping is considered to be an exploratory variable as the research is limited. I expected there may be a relationship between bullying and coping because of research conducted by Warden and MacKinnon (2003) and Elliott and Faupel (1997). Warden and Mackinnon found that how students handle social conflict predicted their likelihood of bullying others. Participant's problem solving strategies were scored as directly assertive (addressing the problem), indirectly assertive (seeking someone else's assistance with the problem), passive (ignoring the problem), aggressive (having a physically or verbally aggressive response) or vague (other solutions not classified by the previous categories) with the Social Problem-Solving Task. These categories are similar to how one's coping strategy is categorized with the Brief COPE (Carver, 1997) which includes subscales of active coping (addressing the problem), using instrumental support (asking others for a solution), denial (ignoring the problem) and venting (expressing unpleasant feelings, including aggression). I believe coping to be similar to social problem solving except that coping is the internal and personal processing of the problem while social problem solving is the external and interpersonal processing of a problem.

Elliott and Faupel (1997) taught 8-14 year-old children interpersonal problem solving skills (understanding all perspectives during a conflict and working to reach a compromise). They found that participants who received this intervention produced three times as many solutions to a bullying incident as did participants who did not participate in the intervention. The authors suggest that problem solving abilities can decrease bullying in schools. This study showed that being able to handle problems and conflicts in a productive way will decrease social conflicts and bullying.

I believed coping skills would affect how participants handle social problem solving. Because of this relationship, I expected those with higher levels of adaptive coping strategies would not bully others. Those with maladaptive coping strategies would be more likely to bully others because they do not handle problems in an effective manner. Bullies would be unable to manage their problems and so would redirect their frustration at others.

CHAPTER 8

MEDIA INFLUENCE

Media influence is also an exploratory variable as research in this area is also limited

(especially for the relationship between media influence and social and relational bullying). Lee

and Kim (2004) collected data from 560 Korean students, aged 12 to 16 years. They assessed

exposure to media violence, contact with delinquent friends, anger, and bullying at school. Using

Structural Equation Modeling, the researchers constructed a model to predict bullying. They

found that exposure to media violence directly predicted bullying. This relationship was

mediated by contact with delinquent friends and anger. They concluded that the direct

relationship between exposure to media violence and bullying was due to social learning and

desensitization. They stated that the mediation they found with contact with delinquent friends

would probably be less prominent in a western culture (i.e., more individualistic). I replicated

this comparison with a sample of American students.

Bushman and Huesman (2006) also investigated the effect of media violence on

aggressive behaviors. They conducted a meta-analysis with studies relevant to aggression and the

media. They included a total of 431 studies involving a total of 68,463 participants. They found

that adults were more likely to experience short-term effects from media violence, whereas

children (age < 18–years-old) were more likely to experience long-term effects from exposure to

media violence, including aggressive behavior, aggressive ideas, arousal, and anger. Bushman

and Huesman concluded that media violence gives children scripts about violence that they then

apply to the real world.

As it has been shown that children mimic behavior they see in the media, I expected

exposure to media that depicts social, physical, or relational aggression to predict bullying. If

participants watched certain behaviors in the media, they would believe those behaviors to be

acceptable and may have applied them in a real world, social setting. I expected to find a

significant relationship between the types of programs participants watch and their likelihood of

bullying others.

CHAPTER 9

THE CURRENT STUDY

It is important to point out that several of the previously reviewed studies included participants from various cultures. The nature of bullying may vary from culture to culture. Cultural differences may result in different responses between the current sample and the previous samples. However, all samples were from modern cultures, although not all of them were from western cultures.

I expected each predictor variable (aggression, empathy, self-esteem, belief in a just world, impulsivity, coping and media influence) to significantly correlate with bullying. I also expected exploratory variables of coping, empathy, and belief in a just world would significantly add to the prediction of bullying above and beyond the contributions of aggression, self-esteem, and impulsivity. I also expected gender differences: I expected males to be more physically aggressive while females would display more socially aggressive behavior.

CHAPTER 10

PARTICIPANTS

Participants were 59 students (age range = 11-18, mean age = 13.6) from a private school in the Southeast region of the United States (please see Table 1). Of the participants, 27 (45.8%) were males and 32 (54.2%) were females. Twenty-four (40.7%) participants were in high school and 35 (59.3%) were in middle school. Their ethnicity included European American (56), Latino American (1), and African American (2). This gender and ethnic composition was reflective of the school from which data were collected. Participants completed the study in exchange for extra credit and an alternative for extra credit was made available to students who did not wish to participate or who did not turn in a parental consent form.

CHAPTER 11

MATERIALS

Criterion variables.

The Peer Interaction in Primary School Scale. The Peer Interaction in Primary School

(PIPS) (see Appendix A) scale was used to measure bullying behaviors (Tarshis & Huffman,

2007). This scale allows researchers to score participants on both a bully scale and a victim scale.

Sample items from each scale include: "Other students make me cry" (victim) and "I tease other

students" (bully). Chronbach's alpha for this scale was .90. Test-retest reliability was high for

both scales (bullying, .84; victimization, .88). A comparison of PIPS to the BVQ found adequate

concurrent validity (r = .72 for victim scales; r = .63 for bully scales). The scale has a total of 22

items, 11 for each subscale, and participants answer if they exhibit these behaviors always,

sometimes or never. Answers range from zero (never) to three (a lot). The range of possible

scores is 0 to 66.

The Cyberbullying and Online Aggression Survey. The Cyberbullying and Online

Aggression Survey (Patchin & Hinduja, 2006) (see Appendix B) is an 18-item scale with two

subscales to measure cyberbullying perpetration and victimization. Sample items include "In the

last 30 days, have you sent someone a computer text message to make them angry or to make fun

of them?" (perpetration) and "In the last 30 days, has someone posted something on another web

page that made you upset or uncomfortable?" (victimization). The Chronbach's alpha for each

survey is adequate: Victimization – 0.74, Perpetration – 0.76 (Hinduja, & Patchin, 2009).

Participants are asked for the frequency of each occurrence. Answers range from zero (never) to

five (everyday). The range of possible scores is 0 to 90.

Predictor variables.

  Indirect/Social/Relational Aggression Scale. The Indirect/Social/Relational Aggression scale (Coyne et al, 2006) (see Appendix C) was used to measure aggression. This scale consists of 28 items and includes five different subscales: Indirect, Direct Relational, Social, Verbal, and Physical Aggression. Sample items from each scale include: "Trying to get other people in the group to dislike them" (direct relational), "Gossiping about another person behind their back" (indirect), "Giving someone a dirty look" (social), "Destroy someone's property in front of them" (physical), and "Insulting someone" (verbal). Chronbach's alpha for each subscale is at an adequate level: Indirect (.84), Direct relational (.79), Social (.50), Verbal (.81) and Physical (.75). Total reliability is also adequate (.93). For each item, participants answer how frequently they engage in each behavior (e.g., hitting, gossiping, insulting, ignoring, etc.) using a five point likert scale. Answers range from zero (never) to five (almost always). Scores can range from 0 to 270.

  Interpersonal Reactivity Index. The Interpersonal Reactivity Index was used to assess empathy (see Appendix D). This scale contains 28 items and answers range from one (does not describe me well) to five (describes me very well). There are four subscales. Sample items include: "After seeing a play or movie, I have felt as though I were one of the characters" (fantasy), "I believe that there are two sides to every question and try to look at them both" (perspective-taking), "I am often quite touched by things that I see happen" (empathic concern), "I tend to lose control during emergencies" (personal distress). Each subscale has been found to have satisfactory internal consistency with Chronbach's alpha values including: Fantasy (Males, .78; Females, .79), Perspective-taking (Males, .71; Females, .75), Empathetic Concern (Males,

.68; Females, .73), and Personal Distress (Males, .77; Females, .75). The scale also has strong test-retest reliability, ranging from .61 to .79 for males and from .62 to .81 for females (Davis, 1980). Scores can range from 0 to 140.

Rosenberg's Self-Esteem Scale. Rosenberg's Self-Esteem scale (Rosenberg, 1989) (see Appendix E) was used to assess self-esteem. This scale consists of ten items that are rated using a four point likert scale ranging from strongly agree to strongly disagree. Five of the items are positively worded and five are negatively worded (reverse scored). A sample positive item is "On the whole, I am satisfied with myself" and a sample negative item is "I feel I do not have much to be proud of" (Rosenberg, 1989). Analyses have found the scale to have adequate test-retest reliability correlations of .82 to .88. The Chronbach's alpha for this scale has been found to range from .77 to .88 (Rosenberg, 1989). Scores can range from 0 to 40.

Belief in a Just World Scale. The Belief in a Just World scale was used to measure belief in a just world (see Appendix F). The six items in this measure are rated on a six point likert scale, answers may range from 1 (disagree strongly) to 6 (agree strongly). A sample item is "I am confident that justice always prevails over injustice." The Chronbach's alpha for this scale is .88 with an internal reliability of .82 (Montada, Schmitt, & Dalbert, 1986). Dalbert and Schneider (1995) found the scale to have adequate test-retest reliability with a correlation of .73. As this is a single factor scale that is easily understandable it is popular for use with children and adolescents. Scores can range from 6 to 36.

Barratt Impulsivity Scale. The Barratt Impulsivity Scale (Barratt, Patton & Stanford, 1995) (see Appendix G) was used to measure impulsiveness. This is a 30-item measure where items are rated on a four point likert scale, ranging from one (rarely/never) to four (almost/always). There are six subscales. Sample items from each subscale include "I cannot

stand still at movies or school" (attention), "I do things without thinking" (motor), "I say things without thinking" (self-control), "I get easily bored when solving thought problems" (cognitive complexity), "I often change my mind" (perseverance), and "My thoughts are racing too fast" (cognitive instability) (Barratt, Patton & Stanford, 1995). The total Chronbach's alpha for this scale is .83. The Chronbach's alpha for each of the six first order subscales are: Attentional (.72), Motor (.64), Self-Control (.72), Cognitive Complexity (.48), Perseverance (.27), and Cognitive Instability (.55) (Stanford, Mathias, Dougherty, Lake, Anderson, & Patton, 2009). Scores on this measure can range from 30 to 120.

   Brief COPE. The Brief COPE was used to measure coping. This is a 28-item scale (Carver, 1997) (see Appendix H) with 14 subscales. This is a self-report scale and answers range from one (I haven't been doing this at all) to four (I've been doing this a lot). Sample items from each subscale include: "I have been taking action to try to make the situation better" (active), "I've been thinking hard about what steps to take" (planning), "I've been looking for something good in what is happening" (positive reframing), I've been learning to live with it" (acceptance), "I've been making jokes about it" (humor), "I've been praying or meditating" (religion), "I've been getting emotional support from others" (using emotional support), "I've been getting help and advice from other people" (using instrumental support), "I've been turning to work to other activities to take my mind off things" (self-distraction), "I've been refusing to believe this is happening" (denial), "I've been expressing my negative feelings" (venting), "I've been using alcohol or other drugs to make myself feel better" (substance use), "I've been giving up trying to deal with it" (behavioral disengagement), "I've been criticizing myself" (self-blame). Chronbach's alpha for each subscale is: Active (.68), Planning (.73), Positive Reframing (.64), Acceptance (.57), Humor (.73), Religion (.82), Using Emotional Support (.71), Using

Instrumental Support (.64), Self-Distraction (.71), Denial (.54), Venting (.50), Substance Use (.90), Behavioral Disengagement (.65), and Self-Blame (.69). Rather than an overall score, participants are scored on the individual subscales. Subscale scores can range from two to eight.

  Media Exposure. I developed a brief survey to explore which television shows were popular among the participants (see Appendix I). Each participant was asked to list the five shows he or she watches the most and the network on which it airs (in case I needed to verify the name of the show). They also reported how many hours per week they spend watching the show. They may have choosen either 10+ hours, 7-10 hours, 4-6 hours, or 1-3 hours.

  Demographics. Participants were given a brief questionnaire about their age, gender, and ethnicity (see Appendix J). They also reported their GPA, current year in school and religious background.

CHAPTER 12

PROCEDURE

Students received envelopes containing parental informed consent forms and were asked by their teachers to ask their parents sign the forms if they wish to participate. Participants completed the surveys in class, during a regular elective class period. All participants were given an informed assent form at the time of data collection. The order of the measures was counterbalanced to prevent order effects, with the exception that the Peer Interaction in Primary School bullying scale was always given last. This prevented the participants from being primed into thinking about bullying behavior while answering the other questionnaires. This took no more than one hour. After they completed their questionnaires they were given a debriefing form with contact information informing them that they would be made aware of the purpose of the study after data collection was completed. If the participants did not have any questions, they proceeded to their next class.

CHAPTER 13

RESULTS

A multivariate analysis of variance (MANOVA) was used to analyze gender differences on the bullying and aggression scales. The results showed no significant gender differences on the PIPS or Cyberbullying scales. There were also no significant gender differences on the verbal and physical aggression subscales. However, there were two significant findings. Males ($M =$ 14.38, $SD = 4.48$) and females ($M = 11.75$, $SD = 3.89$) significantly differed on the direct aggression subscale, $F(1, 57) = 5.84$, $p < .02$, *partial eta²* $= .09$. Males ($M = 20.36$, $SD = 6.26$) and females ($M = 16.97$, $SD = 5.62$) also significantly differed on indirect aggression subscale, $F(1, 57) = 4.79$, $p < .03$, *partial eta²* $= .08$.

A series of chi-square analyses were used to examine the influence of television programming on bullying. The following programs were included in these analyses: Say Yes To The Dress (reality fashion show), American Idol (reality singing competition), VicTorious (Nickelodeon middle/high school show), Toddlers and Tiaras (reality beauty pageant competition), Shake It Up (scripted performing arts show). These were the television shows that were nominated most often by the participants. None of these chi-square analyses revealed a significant influence of programming on bullying.

Correlation analyses were conducted with all the variables included in the following regression analysis. Correlations were conducted with the overall sample (see Table 2) and also broken down by gender (see Tables 3 and 4 for males and females, respectively). As indicated in Table 2, some of the overall correlations were statistically significant (further regression analysis was conducted that only included variables that significantly correlated with the criterion variable; these will be reported at the end of this section). As seen in Table 5, correlation

analyses were also conducted with the subscales of the overall measures used as the regression predictors.

Proposed Regression Analyses

The current study had a very low sample size (n = 59). This resulted in very low statistical power. This affected the strength and possibly the direction of the correlation and regression analyses. The significance of the beta weights was probably most affected by the low statistical power.

A series of multiple regressions were conducted to predict bullying. Predictors were entered into the model in three blocks with either PIPS or cyberbullying scores as the criterion variable. A total of six regressions were conducted; three predicting PIPS and three predicting cyberbullying. For all of the regressions, the first block included age and gender and the second block included self-esteem, aggression, and impulsivity. These blocks were determined based on previous research and existing theory concerning these variables (Ando et al, 2005; Andreou 2000; Fox et al, 2010; Jagers et al, 2007; Lee, 2009; Warden & MacKinnon, 2003). The third block for each regression varied and included variables less established by research/theory.

The first regression included cyberbullying scores as the criterion and belief in a just world was entered in the third block. Both the variance inflation factors (all less than 1.5) and the collinearity tolerances (all greater than .69) for gender, age, self-esteem, impulsivity, and belief in a just world indicated that the independent variables were not highly correlated and thus the beta weights were stable. For the aggression subscales, the variance inflation factors ranged from 2.65 to 4.26 and the collinearity tolerances ranged from .24 to .38. As seen in Table 6, Block 1 of the model with age and gender as contributors was significant, R^2 = .17, $F(2, 56)$ = 5.67, p = .006. In Block 2, the addition of self-esteem, impulsivity, and the aggression subscales as

contributors did not result in a significant increase in the variance accounted by the model. The ΔR^2 was also not significant, $R^2 = .24$, $\Delta F(6, 50) = .82$, $p = $ ns. Block 3 of the model was also not significant and also did not result in a significant increase in the variance accounted by the model, $R^2 = .25$, $\Delta F(1, 49) = .26$, $p = $ ns.

The second regression was the same as the first except PIPS was the criterion and belief in a just world was entered in the third block. The independent variables were examined for multicollinearity. Both the variance inflation factors (all less than 1.5) and the collinearity tolerances (all greater than .69) indicated that the independent variables were not highly correlated and thus the beta weights were stable. As displayed in Table 7, Block 1 of the model with age and gender was not significant, $R^2 = .09$, $F(2, 56) = 2.71$, $p = $ ns. In Block 2, the addition of self-esteem, impulsivity and the aggression subscales resulted in a significant model, $F(8, 50) = 2,71$, $p = .01$. Block 2 also resulted in a significant increment in R^2, $R^2 = .30$, $\Delta F(6, 50) = 2.56$, $p = .03$. In Block 3, the addition of belief in a just world resulted in a significant model, $F(9, 49) = 3.02$, $p = .01$. Block 3 also resulted in a significant increment in R^2, $R^2 = .36$, $\Delta F(1, 49) = 4.15$, $p = .05$. The total model accounted for 35.7% of the variance in PIPS bullying.

The third regression included cyberbullying scores as the criterion and positive and negative coping was entered in the third block. The independent variables were examined for multicollinearity. Both the variance inflation factors (all less than 1.5) and the collinearity tolerances (all greater than .69) for gender, age, self-esteem, impulsivity, negative coping and positive coping indicated that the independent variables were not highly correlated and thus the beta weights were stable. For the aggression subscales, the variance inflation factors ranged from 2.65 to 4.21 and the collinearity tolerances ranged from .24 to .38. As seen in Table 8, Block 1 of the model with age and gender as contributors was significant, $R^2 = .17$, $F(2, 56) = 5.67$, $p = $

.006. In Block 2, the addition of self-esteem, impulsivity, and the aggression subscales as contributors did not result in a significant increase in the variance accounted by the model. The ΔR^2 was also not significant, $R^2 = .24$, $\Delta F(6, 50) = .82$, p = ns. Block 3 of the model was also not significant and also did not result in a significant increase in the variance accounted by the model, $R^2 = .24$, $\Delta F(1, 49) = .04$, p = ns.

The fourth regression used PIPS bullying scores as the criterion and again positive and negative coping was entered in the third block. The independent variables were examined for multicollinearity. Both the variance inflation factors (all less than 1.5) and the collinearity tolerances (all greater than .69) indicated that the independent variables were not highly correlated and thus the βs were stable. As displayed in Table 9, Block 1 of the model with age and gender was not significant, $R^2 = .09$, $F(2, 56) = 2.71$, p = ns. In Block 2, the addition of self-esteem, impulsivity and the aggression subscales resulted in a significant model, $F(6, 50) = 2.71$, $p = .02$. Block 2 also resulted in a significant increment in R^2, $R^2 = .30$, $\Delta F(6, 50) = 2.56$, $p = .03$. In Block 3, the addition of belief in a just world resulted in a significant model, $F(10, 48) = 2.17$, $p = .04$. Block 3 did not result in a significant increment in R^2, $R^2 = .31$, $\Delta F(2, 48) = .29$, $p = ns$. The total model accounted for 31.1% of the variance in PIPS bullying.

The fifth regression included cyberbullying scores as the criterion and empathy was entered in the third block. The independent variables were examined for multicollinearity. Both the variance inflation factors (all less than 1.5) and the collinearity tolerances (all greater than .69) for gender, age, self-esteem, impulsivity, negative coping and positive coping indicated that the independent variables were not highly correlated and thus the βs were stable. For the aggression subscales, the variance inflation factors ranged from 2.65 to 4.30 and the collinearity tolerances ranged from .23 to .38. As seen in Table 10, Block 1 of the model with age and gender

as contributors was significant, $R^2 = .17$, $F(2, 56) = 5.67$, $p = .006$. In Block 2, the addition of

self-esteem, impulsivity, and the aggression subscales as contributors did not result in a

significant increase in the variance accounted by the model. The ΔR^2 was also not significant, R^2

$= .24$, $\Delta F(6, 50) = .82$, $p = $ ns. Block 3 of the model was also not significant and also did not

result in a significant increase in the variance accounted by the model, $R^2 = .25$, $\Delta F(1, 49) = .04$,

$p = $ ns.

The sixth regression used PIPS bullying scores as the criterion and again empathy was

entered in the third block. The independent variables were examined for multicollinearity. Both

the variance inflation factors (all less than 1.5) and the collinearity tolerances (all greater than

.69) indicated that the independent variables were not highly correlated and thus the βs were

stable. As displayed in Table 11, Block 1 of the model with age and gender was not significant,

$R^2 = .09$, $F(2, 56) = 2.71$, $p = $ ns. In Block 2, the addition of self-esteem, impulsivity and the

aggression subscales resulted in a significant model, $F(6, 50) = 2.71$, $p = .02$. Block 2 also

resulted in a significant increment in R^2, $R^2 = .30$, $\Delta F(6, 50) = 2.56$, $p = .03$. In Block 3, the

addition of belief in a just world resulted in a significant model, $F(10, 48) = 2.17$, $p = .04$. Block

3 did not result in a significant increment in R^2, $R^2 = .31$, $\Delta F(2, 48) = .49$, $p = ns$. The total model

accounted for 30.9% of the variance in PIPS bullying.

Further Regression Analysis

Further regression analysis was conducted only including variables which significantly

correlated with the criterion variables. These variables were entered in the same steps as the

proposed regression analysis.

The seventh regression included cyberbullying scores as the criterion. Age and negative

coping were the only predictor variables that significantly correlated with cyberbullying. The

independent variables were examined for multicollinearity. Both the variance inflation factors (all less than 1.5) and the collinearity tolerances (all greater than .69) indicated that the independent variables were not highly correlated and thus the βs were stable. As seen in Table 12, Step 1 of the model with age as a contributor was significant, $F(1, 57) = 11.38$, $p = .001$, $R^2 = .17$. In Step 2, the addition of negative coping as a contributor also resulted in a significant model, $F(2, 56) = 6.39$, $p = .003$. Step 2 did not result in a significant increment in R^2.

The eighth regression used PIPS bullying scores as the criterion. Age, self-esteem, physical aggression, and negative coping significantly correlated with PIPS bullying. The independent variables were examined for multicollinearity. Both the variance inflation factors (all less than 1.5) and the collinearity tolerances (all greater than .69) indicated that the independent variables were not highly correlated and thus the βs were stable. As displayed in Table 13, Step 1 of the model with age as a contributor was significant, $F(1, 57) = 5.52$, $p = .02$, $R^2 = .09$. In Step 2, the addition of self-esteem and physical aggression as contributors also resulted in a significant model, $F(3, 55) = 6.97$, $p < .01$. Step 2 also resulted in a significant increment in R^2, $\Delta F(2, 55) = 7. 10$, $\Delta R^2 = .19$. In Step 3, the addition of negative coping resulted in a significant model, $F(4, 54) = 5.25$, $p = .001$. Step 3 did not result in a significant increment in R^2. The total model accounted for 28% of the variance in PIPS bullying.

CHAPTER 14

DISCUSSION

Gender Differences

Males and females differed on direct and indirect aggression, both of which are forms of social aggression, but did not differ on physical and verbal aggression. These analyses revealed that males were significantly more aggressive in both direct and indirect ways. This differs from previous research (Crapanzano et al., 2010; Lee, 2009) which found males more likely to be physically aggressive and females more likely to be socially aggressive. The difference in the findings may show a shift in aggressive behavior in males. With the recent emphasis on preventing and punishing bullying, physical bullying may get more attention and thus be less tolerated, forcing male bullies to alter their behavior. It is possible that males are adapting and subsequently using more relationally aggressive strategies in order to bully.

Television Programming

The chi-square analyses did not reveal any significant relationships between bullying and the reported television programs. This may be due to the nature of the measure as it had participants self-report shows, many of which were not relevant to bullying (e.g., Swamp People, Mythbusters). Media has been shown to affect aggression (Bushman & Huesman, 2006) and it may or may not affect bullying. Recently, several networks have aired PSA's intended to discourage bullying. These PSA's may negate any observational learning from the programs they are shown with. However, as some of the results approached significance, this variable needs to be explored further. A better assessment of exposure to specific television programs may reveal a relationship between certain television shows and bullying.

Proposed Regression Analyses

Belief in a Just World. One interesting finding was that belief in a just world was significantly and negatively correlated with self-esteem for males but not for females. Current literature does not offer an explanation for this relationship. It could be that belief in a just world affects how adolescents interpret criticism. During adolescence, individuals are constantly instructed and often criticized and corrected by parents, teachers, peers, coaches, etc. They may think that if the world is just then they have done something to deserve every criticism they receive. Over time, this may lower their self-esteem. Females may be more likely to discuss these feelings with others; whereas males may internalize their feelings of guilt and shame. This is one possible explanation for this interesting finding. Due to the strength of this correlation, I believe this relationship should be explored in future studies.

The first regression did not reveal belief in a just world to be a significant predictor of cyberbullying. Age was the only significant predictor in the model. With a larger sample, one may be able to establish a relationship between belief in a just world and cyberbullying.

The second regression revealed that the addition of belief in a just world resulted in a significant model predicting PIPS and belief in a just world was a unique predictor. Since the variables are positively correlated, the results show that adolescents who believe in a just world are more likely to bully. This is inconsistent with Correia and Dalbert's (2008) research with Portuguese students. They found belief in a just world to significantly and negatively correlate with bullying. This may be due to cultural differences. To my knowledge, there is no research on the effect of belief in a just world on North American students' bullying behavior.

Fox, Elder, Gater, and Johnson (2010) found that belief in a just world has two dimensions: belief in a just world for self and belief in a just world for others. Since the scale

used in the current study does not separate belief in a just world into these two factors, the current study cannot analyze these differences. However, it may explain why the current results differ from Correia and Dalbert's findings. The effect belief in a just world has on bullying attitudes may depend on the type of belief. Perhaps bullies who believe the world is just for others feel their victims did something which deserves punishment and so they bullying them. This raises the question of why individuals feel it is their job to punish others.

Perhaps a current trend is a possible explanation for this occurrence. Twenge and Foster (2008) found that narcissism rates have risen dramatically since 2002. If adolescents become more narcissistic, they may be more likely to attack behaviors or actions they perceive as offensive. If they also believe the world to be just, they may feel that it is their right, and possibly even their duty, to punish others for perceived wrongs in order to maintain justice. A combination of narcissism and belief in a just world may create bullies who believe they are simply punishing wrongdoers. As belief in a just world is a relatively new construct which has not been well explored in the literature, future research should focus on better understanding the relationship between belief in a just world and bullying. Once this relationship is understood, it may wise to include belief in a just world in bullying intervention or prevention programs. To my knowledge, no intervention programs include belief in a just world. If belief in a just world is found to predict bullying, intervention programs can seek to alter this belief in order to reduce bullying rates.

Coping. The third regression revealed age as a significant predictor of cyberbullying. Adding the other variables, including positive and negative coping, did not create a significant model. The fourth regression found that positive and negative coping contributed to a significant model predicting PIPS. This supports my prediction that bullies would use more maladaptive

coping styles and less adaptive ones. Coping has not yet been explored in relation to bullying, but the results suggest that teaching positive coping strategies may be an effective component of bullying intervention programs.

Empathy. The fifth regression predicting cyberbullying revealed that the addition of the other variables after the first step did not significantly contribute to the model. This was not consistent with Steffgen, König, Pfetsch, and Melzer (2011) who found that lower empathy was predictive of cyberbullying. The current correlational results could be evidence of the possibility of a relationship between cyberbullying and empathy. Though it was not statistically significant, the correlation between empathy and both types of bullying was in the expected negative direction. This is consistent with Viding et al. (2009) and Jagers et al. (2007) who also found bullies to lack overall empathy. Perhaps with a larger sample, the results would have been consistent with past literature.

The sixth regression revealed empathy did contribute to a significant model predicting PIPS bullying scores. This is consistent with previous findings (Viding et al., 2009). The results indicate that empathy is related to traditional bullying, which usually involves face to face interactions. This supports current interventions that use empathy training to discourage bullying (Ttofi & Farrington, 2011).

Cyberbullying. Cyberbullying was not found to correlate strongly enough with the PIPS measure of traditional bullying to be considered the same construct. Also, variables that were predictive of PIPS were not predictive of cyberbullying. Only the first step of the regression models was significant for cyberbullying and the second and third steps were significant for PIPS. For the regressions predicting cyberbullying, age was the only variable with a significant beta. This may be because older adolescents have more access to technology.

Variables that significantly and positively correlated with cyberbullying included age and negative coping. König, Gollwitzer, and Steffgen (2010) found that most cyberbullies were victims of traditional bullying. They also found that cyberbullies targeted people who previously bullied them. Using this to interpret the results, it may be that cyberbullies are victims of traditional bullying who have developed negative coping strategies to handle being bullied. Instead of coping through positive ways, such as social support, they use access to technology to fight back. It is possible that students are bullied, so they develop negative coping skills and this leads to them bullying others through technology.

It is also possible that students develop negative coping strategies, such as withdrawing, which make them an easy target for bullying; subsequently they fight back through cyberbullying. Or there is the possibility that there is a third variable, such as difficult home life, which links both negative coping and bullying. Further research is needed to better understand the relationship between cyberbullying and negative coping at various ages.

Smith, Mahdavi, Carvalho, Fisher, Russell, and Tippett (2008) found that bullying is spreading beyond the school setting. With the increase in internet and cell phone use, bullying is no longer confined to school grounds. Social media has given us constant contact with others and that means bullies have constant access to their victims. Students who are cyberbullied often find escape to be impossible. More research in this field is needed to combat this growing problem.

Further Regression Analyses

The seventh regression included the significant correlates of cyberbullying (age and negative coping). Even though negative coping correlated with cyberbullying, it did not uniquely contribute to the model predicting cyberbullying above and beyond the influence of the previously entered variable (age). Age accounted for most of the variance. Newman and

Newman (1976) noted that adolescence can be divided into early and late adolescence. During this time, adolescents experience many psychosocial conflicts, including the development of autonomy, identity and coping processes. The authors note that early adolescence is marked by the search for peer acceptance. The success of this search impacts behavior in late adolescence. It is possible that cyberbullies act out because of issues with their psychosocial development. This may explain why cyberbullying was only predicted by age. Coping through cyberbullying may be a behavior that develops over time.

The eighth regression predicted PIPS with the variables that significantly correlated with it (self-esteem, physical aggression and negative coping). The results revealed that these variables predicted bullying at all steps and this is consistent with previous research on self-esteem (Crapanzano et al 2010), physical aggression (O'Moore & Kirkham, 2001), and negative coping (Warden & MacKinnon, 2003). Negative coping's contribution to the model suggests more bullying interventions should teach positive coping strategies as a way to combat this behavior. Many current interventions already address the relationship between traditional bullying and self-esteem and physical aggression (Ttofi & Farrington, 2011). In addition, the findings reveal that addressing coping should be a component of bullying intervention programs.

CHAPTER 15

IMPLICATIONS FOR INTERVENTIONS

Current bullying interventions have been limited in their success. One popular program

was created by Aronson and is called the "Jigsaw Classroom" (Aronson & Bridgeman, 1979).

This technique uses cooperative learning in classrooms to encourage peer affability and

discourage peer rejection. Students work together on a project and must communicate

information with each other in order to succeed. Aronson used this technique following the

desegregation of a school system (Aronson, 1990). He found that Jigsaw Classrooms reduced the

amount of out-group fighting and bullying. The students were forced to collaborate and

cooperate with members of other races and backgrounds and this created better relationships

between them. The students learned that cooperation was essential for success and in response

they learned to accept, encourage and even respect one another. This program resulted in higher

levels of empathy and decreased levels of aggression.

However, not all research has supported the effectiveness of the Jigsaw Classroom. Bratt

(2008) found that a Jigsaw Classroom intervention did not improve intergroup relations. Bratt

compared the relationships of members of Nordic, Asian and African cultures in two different

quasi-experiments. For one of the classrooms, two teachers implemented the intervention. For

the other, there was only one teacher. Five questionnaires were given before and after the

intervention. They measured empathy and attitudes towards classmates and other racial groups.

The study was repeated later with 11 more classrooms that contained more ethnic minorities.

Only one of 13 classrooms showed any improvement in group relations. However, this was the

group with an extra instructor and Bratt theorized that this decrease in conflict was due to the

extra supervision and not to the intervention. Bratt's data questioned the effectiveness of the

Jigsaw Classroom at decreasing conflict and improving relations in a classroom setting. However, Bratt did note that even in the more diverse classrooms, percentages of ethnic minorities remained extremely low; perhaps the more diverse the groups, the more effective the intervention.

Another popular program was created by Olweus by applying the concept of cognitive dissonance. Olweus Bullying Prevention Program involves every member of the school as participants. Students, teachers, staff, principals, and parents are encouraged to reach out the instant see bullying. Olweus implemented his intervention in over 450 schools in Norway and found a 32-49% decrease in bullying (Olweus, 2010). Students also reported improved attitudes towards school and an increase in academic achievement. By involving literally everyone, the program reported great success. This program has also been successful in some schools in the United States. However, most of the schools are upper/middle class schools with many resources. Research in low socioeconomic areas has not been as encouraging (Hong, 2009).

Bauer, Lozano and Rivera (2007) compared bullying rates at ten schools, seven with the Olweus Bullying Prevention Program and three without. Regression analysis, controlling for baseline prevalence and school characteristics, revealed no overall effect. Some bullying rates remained just as high as the pre-intervention rates. There was a slight trend of European American students reporting reduced interracial violence, but this was not reported by the African American or Latino American students. The authors attributed the failure of the intervention to low socioeconomic status and a poorly funded school.

Aronson's Jigsaw Classroom and Olweus' Bullying Prevention Program are two of the most popular and successful bullying interventions, but even they have limits to their success, particularly in low socioeconomic school systems. One thing they both have in common is their

holistic approach to the problem. This can be very time consuming and may require more resources than schools have access to, specifically time and money. Since bullying is such a multifaceted behavior, successful interventions will have to incorporate several important variables related to the behavior. Research is needed to determine which variables should be included. By creating as effective and streamlined an intervention as possible, schools with fewer resources may have more success at preventing bullying.

Fortunately, several of the variables found to be important in relation to bullying are teachable traits. In the next several paragraphs, I discuss programs that have been found to increase empathy, bolster coping skills, and decrease aggression and impulsivity. Integrating these programs into current bullying interventions may result in more effective anti-bullying programs.

Results from the current study suggest coping is an important variable that should be included in future intervention and prevention programs. Problem solving therapy (D'Zurilla & Goldfried, 1971) has been found to effectively teach students better coping strategies. This program reduces rates of maladaptive coping strategies. This effect may also reduce bullying as bullying may be a form of maladaptive coping strategy. Adding problem solving therapy to current anti-bullying programs could help them be more effective.

Results from the current study also suggest aggression is an important variable related to bullying. The addition of anger control training (Azrin, Donohue, Teichner, Crum, Howell, & Decato, 2001) might help prevent adolescents from bullying each other out of anger for some annoyance or perceived wrong-doing. This training also teaches impulse control, which may further prevent bullying behavior. The addition of anger control training to bully prevention and

intervention programs could increase their effectiveness and help participants to control their emotions.

Results from the current study also suggest belief in a just world as an important variable related to bullying. This variable is relatively new and has only recently being studied in relation to bullying. Unfortunately, there are currently no programs pertaining to belief in a just world. However, students should be made aware of the possible maladaptive thought process that may stem from holding the belief that the world is a just place. Perhaps just reminding students that they are not the ones who should be punishing each other will curb their attempts to do so.

It is important that school policy address these issues. These programs may also be helpful for informing school staff. School policy should reflect research findings in this area and incorporate anti-bullying programs. Since current school policy may not be very good at stopping bullying, school staff should also participate in the interventions so that they can learn about the problem. Some policies may include unhelpful practices such as trying to make the bully and the victim "friends" by forcing them to spend more time together. Also, current school policies may discourage students from intervening for fear of also being punished. Perhaps it is the case that bystander intervention could reduce or prevent bullying. School staff should be educated about how to effectively prevent bullying.

CHAPTER 16

LIMITATIONS/FUTURE DIRECTIONS

The most glaring limitation of the current study was sample size. Considering the size of the regressions used in this study, a larger sample size was required. Some of the relationships that approached significance may be established with a larger sample. With a larger sample size, I might have been able to find predictors with greater significance for predicting bullying behavior. Another limitation may be the nature of some of the measures used. The ISRA Aggression Index used in this study is relatively new. It asks participants to rate how harmful a behavior is in order to gauge their likelihood of participating in it. A more traditional scale, asking children to recall past aggressive actions, might have revealed different results. This may have especially been the case for gender differences.

Participants were told prior to completing the measures that the purpose of the study was to better understand bullying. This may have primed them to be more self-conscious about bullying and they may have altered their answers due to social desirability. Parents were also told the purpose of the study. This may have created a biased sample as parents who believed their children to have bullied others in the past may have refused to allow their child to participate. In the future, concealing the nature of the study and then debriefing the participants after they complete the surveys may help researchers recruit a more generalizable sample.

Future research should asses bullying outside of elementary, middle, and high school settings. Bullying also occurs in college and work place settings and the nature of bullying should be understood within these contexts as well. Bullies do not simply stop when they graduate high school. Research should asses how bullying tactics may change, who is targeted, and if behaviors are still considered bullying with those who engage in them being identified as

bullies. It would also be interesting to determine whether or not bullies in college and work place settings were bullies when they were younger or if this behavior is new. Perhaps some individuals continue to bully while others begin or stop within different contexts or at different times.

Future studies should also examine variables such as socioeconomic status, parenting styles, attachment, and other similar factors as they relate to bullying. The current study assessed traits that are modifiable. However, variables that are less likely to change may also impact bullying. Other studies should asses more stable traits to create a complete understanding of bullies, victims, and bystanders.

Although more challenging, using qualitative data might add important insights. In the current study, some participants took it upon themselves to write in additional thoughts on bullying and anecdotally that information was fascinating. Some comments were written out of clear discomfort and were an attempt to justify their actions. For example, one participant wrote in the margins that s/he had only engaged in the bullying behavior once and another participant wrote in the margins that his/her victim deserved to be bullied. Other comments were attempts to draw attention to the bullying problem at the school. Using qualitative data would provide more insight into the students' minds and help researchers better understand how students perceive the problem.

CHAPTER 17

CONCLUSIONS

Boulton (1997) surveyed teachers and found that the majority believed bullying to be a problem in their schools. However, the teachers were not confident in their ability to deal with bullying, regardless of how long they had been teaching. A large percentage of teachers (87%) wanted more training on how to prevent bullying. Though they felt responsible for preventing bullying, many did not intervene because they felt they were unqualified to handle the problem because they did not fully understand the problem. In this study, I tried to address this issue by creating a comprehensive explanation of bullying. These results can help to create effective and efficient bullying prevention programs that focus only on important predictors of bullying.

There are still many unanswered questions about bullying that need to be explored. This is the first study to provide a comprehensive assessment of bullying behaviors, including both established variables and less explored variables. The results further supported the relationships between bullying and aggression, impulsivity, and self-esteem. Relationships were also established with the less understood variables of empathy, belief in a just world, and coping to create a more complete understanding of bullying. Future research should expand on these findings in order to build an even better model that predicts bullying. This will help inform the process of creating interventions that focus on the important aspects of bullying and help decrease rates of the behavior.

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APPENDIX A

Tarshis TP, & Huffman LC. (2007). Psychometric properties of the Peer Interaction in Primary

School (PIPS) questionnaire. *Journal of Developmental and Behavioral Pediatrics,*

28:125-32.

PIPS Scoring

Column values are:

2 "A lot"

1 "Sometimes"

0 "Never"

Victim Scale:

Add items from question numbers:

1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 20, 22

Bully Scale:

Add Items for question numbers:

2, 4, 6, 8, 10, 12, 14, 16, 18, 21

Directions: Please choose which answer best describes you

	0	1	2
	Never	Sometimes	A lot

1. Other students make me cry _____

2. I tease other students _____

3. Other students take things from me that I do not want to give them _____

4. I push or slap other students _____

5. Other students look at me in a mean way _____

6. I tell other students I will hit or hurt them ____

7. At recess I play by myself ____

8. I say mean things about a student to make other kids laugh ____

9. Another student tells me they will hurt me ____

10. I make other students feel sad on purpose ____

11. I am hit or kicked by other students ____

12. I call other students bad names ____

13. Other students tease me ____

14. I am mean to other students ____

15. Other students ignore me on purpose ____

16. I hit or kick other students ____

17. Other students make me feel sad ____

18. I feel bad because I am mean to other students ____

19. Other students make fun of me ____

20. I want to stay home from school because students are mean to me ____

21. I give other students mean or "dirty" looks ____

22. Other students leave me out of games on purpose ___

APPENDIX B

Patchin, J.W., & Hinduja, S. (2006). Bullies move beyond the schoolyard: A preliminary look at cyberbullying. Youth Violence and Juvenile Justice, 4, 148–169.

Scoring: A = 1, B = 2, C = 3, D = 4, C = 5, E = 6

Directions: Please answer the following questions using answers provided.

How often in the last 30 days have you experienced the following?:

A - Never

B – Once or Twice

C – A few times

D – Many times

E – Every day

1. In the last 30 days, have you been made fun of in a chat room?

2. In the last 30 days, have you received an email from someone you know that made you really mad?

3. In the last 30 days, have you received an email from someone you didn't know that made you really mad? This does not include "spam" mail.

4. In the last 30 days, has someone posted something on your My Space page that made you upset or uncomfortable?

5. In the last 30 days, has someone posted something on another web page that made you upset or uncomfortable?

6. In the last 30 days, have you received an instant message that made you upset or uncomfortable?

7. In the last 30 days, have your parents talked to you about being safe on the computer?

8. In the last 30 days, has a teacher talked to you about being safe on the computer?

9. In the last 30 days, have you been bullied or picked on by another person while online?

10. In the last 30 days, have you been afraid to go on the computer?

11. In the last 30 days, has anyone posted anything about you online that you didn't want others to see?

12. In the last 30 days, has anyone emailed or text messaged you and asked questions about sex that made you uncomfortable?

How often in the last 30 days have you done the following?

13. In the last 30 days, have you lied about your age while online?

14. In the last 30 days, have you posted something online about someone else to make others laugh?

15. In the last 30 days, have you sent someone a computer text message to make them angry or to make fun of them?

16. In the last 30 days, have you sent someone an email to make them angry or to make fun of them?

17. In the last 30 days, have you posted something on someone's MySpace, Xanga, or Friendster page to make them angry or to make fun of them?

18. In the last 30 days, have you taken a picture of someone and posted it online without their permission?

APPENDIX C

Coyne, S. M., Archer, J., & Eslea, M. (2006). 'We're Not Friends Anymore! Unless...': The

Frequency and Harmfulness of Indirect, Relational, and Social Aggression. *Aggressive

Behavior*, 32(4), 294-307.

Think about all the other members of your year and the way they treated each other in the past

week. Now circle the number of times that you either <u>heard about</u> or <u>watched</u> the following

behaviors taking place in the past week.

Example:

Hearing someone say something nice about someone else

Think about the last week. How many times did you hear about or saw someone saying nice

about someone else? Circle the number of times that this happened in the last week.

<div align="center">0   1   2   3   4   5+</div>

Now go on to the rest of the questionnaire. Do the same thing as you did for the example

question for the rest of the items.

Gossiping about another person behind their back

Spreading Rumors (either true or untrue)

Breaking someone's trust by telling their secrets

Making fun of a person so it makes them look stupid in front of other people.

Becoming friends with a person to make someone else feel left out

Making fun of others' clothes or personality to their face

Making fun of others' clothes or personality behind their back

Ignoring someone who is supposed to be in their group of friends

Leaving people out of the group or conversation on purpose.

Writing mean notes or leaving mean messages in secret.

Taking part in mean prank phone calls

Getting other people (older sibling,   someone stronger, etc.) to help be unkind to a person.

Sitting close together with other people to make someone else feel left out.

Trying to break up someone else's friendship for their gain (ex. boyfriend/girlfriend, best friends,

etc.)

Giving someone else a dirty look.

Calling someone a mean name (ex. slut, chicken, etc.)

Yelling at someone

Insulting someone

Teasing someone

Hitting or punching someone

Biting someone

Scratching someone

Destroying someone else's property behind their back

Destroying someone else's property in front of them.

Threatening to end the friendship unless the other person does what they want.

Trying to get other people in the group to dislike them

Not inviting someone to their party to make the other person feel bad.

Now think about how a person would feel if someone else did the following behaviors to them.

Please circle how much you think that each of the behaviors would make a person feel sad or hurt.

If you circle a:

1=They would NOT feel sad or hurt at all.

2= They would not really feel sad or hurt.

3= They would feel somewhat sad or hurt.

4= They would feel REALLY sad or hurt.

Example:

Hearing someone say something nice about them.

Think about how this would make someone feel. Would it make them feel sad or hurt? Or would it not make them feel sad at all? Or would it only kind of make them feel sad? Or, maybe it would not really make them sad too much? Look at the table above to see what the numbers equal. Circle the number that you think represents how sad it would make someone feel if they heard someone say something nice about them.

<div align="center">1   2   3   4</div>

Now, do the same thing for the rest of the questions on the test.

Being gossiped about behind their back

Having Rumors spread about them (either true or untrue)

Having someone who they thought they could trust tell their secrets to other people.

Being made fun of in front of other people so that they look stupid

Having their friend becomes friends with a person to make them feel left out

Having their clothing or personality made fun of behind their back

Being ignored by someone who is supposed to be in their group of friends.

Being left out of the group or conversation on purpose.

Finding mean notes or messages about them.

Getting a mean prank phone call

Having other people (older sibling,   someone stronger, etc.) to help be unkind to them

Seeing other people sit really close together to make them feel left out.

Having their friendship with someone else being broken up on purpose. (boyfriend/girlfriend,

best friend, etc.)

Getting a dirty look from someone

Being called a mean name (e.g. slut, chicken, etc.)

Being yelled at by another person

Being insulted by someone

Being teased by someone

Being hit or punched by someone

Being bitten by someone

Being scratched by someone

Having their hair pulled

Having their property destroyed behind their back by someone

Having their property destroyed by someone while they watch

Being threatened that their friendship will end unless they do what the other person wants them

to do.

Having someone try to get other people in the group to dislike them

Finding out that they were not invited to someone's party, simply because the other person

wanted to hurt them.

APPENDIX D

de Wied, M., Maas, C., van Goozen, S., Vermande, M., Engels, R., Meeus, W., & ... Goudena, P.

(2007). Bryant's Empathy Index: A closer examination of its internal structure. *European*

Journal of Psychological Assessment, 23(2), 99-104.

Scoring Information: yes = 1; no = 0

Directions: Please circle yes or no to answer the following questions

1.	It makes me sad to see a girl who can't find anyone to play with	yes	no
2.	People who kiss and hug in public are happy	yes	no
3.	Boys who cry because they are happy are silly	yes	no
4.	I really like to watch people open presents, even when I don't		
	get a present myself	yes	no
5.	Seeing a boy who is crying makes me feel like crying	yes	no
6.	I get upset when I see a girl being hurt	yes	no
7.	Even when I don't know why someone is laughing, I laugh too	yes	no
8.	Sometimes I cry while watching TV	yes	no
9.	Girls who cry because they are happy are silly	yes	no
10.	It's hard for me to see why someone else gets upset	yes	no
11.	I get upset when I see an animal being hurt	yes	no
12.	It makes me sad to see a boy who can't find anyone to play with	yes	no
13.	Some songs make so sad I feel like crying	yes	no
14.	I get upset when I see a boy being hurt	yes	no
15.	Grown-ups sometimes cry, even when they have nothing to be sad about	yes	no

16. It's silly to treat dogs and cats as though they have feelings like people   yes   no

17. I get mad when I see a classmate pretending to need help from the teacher

all the time   yes   no

18. Kids who have no friends probably don't want any   yes   no

19. Seeing a girl who is crying makes me feel like crying   yes   no

20. I think it is funny that some people cry during a sad movie or while

reading a book   yes   no

21. I am able to eat all my cookie even when I see someone looking at me

wanting one   yes   no

22. I don't feel upset when I see a classmate being punished by a teacher for   yes   no

not obeying school rules

APPENDIX E

Rosenberg, Morris. 1989. *Society and the Adolescent Self-Image.* Revised edition. Middletown,

     CT: Wesleyan University Press.

1) While designed as a Guttman scale, the SES is now commonly scored as a Likert scale. The

    10 items are answered on a four point scale ranging from strongly agree to strongly disagree.

2) The original sample for which the scale was developed in the 1960s consisted of 5,024

    high school juniors and seniors from 10 randomly selected schools in New York State and

    was scored as a Guttman scale. The scale generally has high reliability: test-retest

    correlations are typically in the range of .82 to .88, and Cronbach's alpha for various

    samples are in the range of .77 to .88 (see Blascovich and Tomaka, 1993 and Rosenberg,

    1986 for further detail). Studies have demonstrated both a unidimensional and a two-

    factor (self-confidence and self-deprecation)structure to the scale. To obtain norms for a

    sample similar to your own, you must search the academic literature to find research using

    similar samples.

3) To score the items, assign a value to each of the 10 items as follows:

      • For items 1,2,4,6,7: Strongly Agree=3, Agree=2, Disagree=1, and Strongly

    Disagree=0.

      • For items 3,5,8,9,10 (which are reversed in valence, and noted with the asterisks**

    below): Strongly Agree=0, Agree=1, Disagree=2, and Strongly Disagree=3.

4) The scale ranges from 0-30, with 30 indicating the highest score possible. Other scoring

    options are possible. For example, you can assign values 1-4 rather than 0-3; then scores

    will range from 10-40. Some researchers use 5- or 7-point Likert scales, and again, scale

    ranges would vary based on the addition of "middle" categories of agreement.

Present the items with these instructions. *Do not print* the asterisks on the sheet you provide to respondents.

BELOW IS A LIST OF STATEMENTS DEALING WITH YOUR GENERAL FEELINGS ABOUT YOURSELF. IF YOU<u>STRONGLY AGREE</u>, CIRCLE <u>SA</u>. IF YOU <u>AGREE</u> WITH THE STATEMENT, CIRCLE <u>A</u>. IF YOU <u>DISAGREE</u>, CIRCLE <u>D</u>. IF YOU <u>STRONGLY DISAGREE</u>, CIRCLE <u>SD</u>.

1. On the whole, I am satisfied with myself. SA -A -D -SD

2.* At times, I think I am no good at all. SA -A -D -SD

3. I feel that I have a number of good qualities. SA -A -D -SD

4. I am able to do things as well as most other people. SA -A -D -SD

5. * I feel I do not have much to be proud of. SA -A -D -SD

6. * I certainly feel useless at times. SA -A -D -SD

7. I feel that I'm a person of worth, at least on an equal plane with others. SA -A -D -SD

8. * I wish I could have more respect for myself. SA -A -D -SD

9. * All in all, I am inclined to feel that I am a failure. SA -A -D –SD

10. I take a positive attitude toward myself. SA -A -D –SD

APPENDIX F

Dalbert, C. & Schneider, A. (2008). Distribution of the belief in a just world: Norms for the general belief in a just world scale. *Diagnostica*, *54,* 150-163.

Please complete the following questionnaire using this scale:

1- Disagree Strongly

2- Disagree Moderately

3- Disagree Slightly

4- Agree Slightly

5-Agree Moderately

6- Agree Strongly

1. I am confident that justice always prevails over injustice. _____

2. I think basically the world is a just place. _____

3. I am convinced that, in the long run, people will be compensated for injustices. _____

4. I firmly believe that injustices in all areas of life (e.g. professional, family, politics) are the exception rather than the rule. _____

5. I believe that, by and large, people get what they deserve. _____

6. I think that people try to be fair when making important decisions. _____

APPENDIX G

Patton, J. H., Stanford, M. S. and Barratt, E. S. (1995). Factor structure of the Barratt

impulsiveness scale. *Journal of Clinical Psychology, 51,* 768-774.

DIRECTIONS: People differ in the ways they act and think in different situations. This is a test to measure some of the ways in which you act and think. Read each statement and choose the answer that best describes you. Do not spend too much time on any statement. Answer quickly and honestly.

1	2	3	4
Rarely/Never	Occasionally	Often	Almost Always/Always

1. I plan what I have to do. _____

2. I do things without thinking. _____

3. I make up my mind quickly. _____

4. I am happy-go-lucky. _____

5. I do not "pay attention." _____

6. My thoughts are racing too fast. _____

7. I plan my spare time. _____

8. I am self-controlled. _____

9. I concentrate easily. _____

10. I am a "saver." _____

11. I cannot stand still at movies or school. _____

12. I like to think carefully about things. _____

13. I plan for my future. _____

14. I say things without thinking. _____

15. I like to think about complex problems. _____

16. I often change my mind. _____

17. I act "on impulse." _____

18. I get easily bored when solving thought problems. _____

19. I act on the spur of the moment. _____

20. I am a great thinker. _____

21. I change friends. _____

22. I buy things on impulse. _____

23. I can think about one problem at a time. _____

24. I change hobbies and sports. _____

25. I spend more than I should. _____

26. When I think about something, other thoughts pop-up in my mind. _____

27. I am restless at the movies or lectures. _____

28. I am future oriented. _____

APPENDIX H

Carver, C. S. (1997). You want to measure coping but your protocol's too long: Consider the

Brief COPE. *International Journal of Behavioral Medicine*, 4, 92-100.

Scoring: Scales are computed as follows (with no reversals of coding):

Self-distraction, items 1 and 19

Active coping, items 2 and 7

Denial, items 3 and 8

Substance use, items 4 and 11

Use of emotional support, items 5 and 15

Use of instrumental support, items 10 and 23

Behavioral disengagement, items 6 and 16

Venting, items 9 and 21

Positive reframing, items 12 and 17

Planning, items 14 and 25

Humor, items 18 and 28

Acceptance, items 20 and 24

Religion, items 22 and 27

Self-blame, items 13 and 26

Directions: Obviously, different people deal with things in different ways, but I'm interested in

how you've tried to deal with it. Each item says something about a particular way of coping. I

want to know to what extent you've been doing what the item says. How much or how

frequently. Don't answer on the basis of whether it seems to be working or not – just whether or

not you're doing it. Use these response choices. Try to rate each item separately in your mind from the others. Make you answers as true FOR YOU as you can.

1 = I haven't been doing this at all

2 = I've been doing this a little bit

3 = I've been doing this a medium amount

4 = I've been doing this a lot

1. I've been turning to work or other activities to take my mind off things. _____

2. I've been concentrating my efforts on doing something about the situation I'm in. _____

3. I've been saying to myself "this isn't real." _____

4. I've been using alcohol or other drugs to make myself feel better. _____

5. I've been getting emotional support from others. _____

6. I've been giving up trying to deal with it. _____

7. I've been taking action to try to make the situation better. _____

8. I've been refusing to believe that it has happened. _____

9. I've been saying things to let my unpleasant feelings escape. _____

10. I've been getting help and advice from other people. _____

11. I've been using alcohol or other drugs to help me get through it. _____

12. I've been trying to see it in a different light to make it seem more positive. _____

13 I've been criticizing myself. _____

14. I've been trying to come up with a strategy about what to do. _____

15. I've been getting comfort and understanding from someone. _____

16. I've been giving up attempt to cope. _____

17. I've been looking for something good in what is happening. _____

18. I've been making jokes about it. _____

19. I've been doing something to think about it less, like watching TV/movies, reading,

daydreaming, sleeping or shopping. _____

20. I've been accepting the reality of the fact that it has happened. _____

21. I've been expressing my negative feelings. _____

22. I've been trying to find comfort in my religion or spiritual belief. _____

23. I've been trying to get advice or help from other people about what to do. _____

24. I've been learning to live with it. _____

25. I've been thinking hard about what steps to take. _____

26. I've been blaming. myself for things that happened. _____

27. I've been praying or meditating. _____

28. I've been making fun of the situation. _____

APPENDIX I

Directions: Please answer the following questions

Do you regularly watch tv ?   Yes   No

If yes, please list the five (5) television shows that you watch the most during the week, name the

network on which it appears and answer the following questions about the show.

1. Name:_____ Network: _____

    How often do you watch this show per week? (please circle one)

    10+ hours   7-10 hours   4-6 hours   1-3 hours

2. Name:_____ Network: _____

    How often do you watch this show per week? (please circle one)

    10+ hours   7-10 hours   4-6 hours   1-3 hours

3. Name:_____ Network: _____

    How often do you watch this show per week? (please circle one)

    10+ hours   7-10 hours   4-6 hours   1-3 hours

4. Name:_____ Network: _____

    How often do you watch this show per week? (please circle one)

    10+ hours   7-10 hours   4-6 hours   1-3 hours

5. Name:_____ Network: _____

    How often do you watch this show per week? (please circle one)

    10+ hours   7-10 hours   4-6 hours   1-3 hours

APPENDIX J

Please answer the following questions:

1. What is your gender? (please circle one)   Male   Female

2. Age: _____ (write in)

3. Race: (please circle one)

      White or Caucasian   Black or African American   Hispanic/Latino

      Native American   Asian American   Other:

_____(write in)

4. Grade Point Average (4.0 = "A", 3.0 = "B", etc): _____(write in)

5. In what Religion were you raised? (please circle one)

        None   Catholic   Jewish

        Protestant – if so please circle the denomination

        Southern Baptist   Pentecostal

        Lutheran   Methodist

        Episcopalian   Presbyterian

        Other: _____ (write in)

6. How important is your religion to you? (please circle one)

      Not important   Mildly important   Moderately important   Very important

7. What grade are you? _____ (write in)

Table 1

Participants broken down by age and grade

Grade	6th	7th	8th	9th	10th	11th	12th	
	21	13	5	3	5	9	3	

Age	11	12	13	14	15	16	17	18
	8	16	11	5	5	6	7	1

Table 2

Descriptive Statistics and Correlations among Variables

Variable	M	SD	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. PIPS	2.21	2.43	.32*	-.02	.30*	.30*	.09	.14	-.05	.26*	.16	.20	.13	.32*	.12	.22
2. Cyber	5.71	1.19		.01	.41**	.11	.00	.18	-.04	.28*	.06	-.07	.03	.15	.00	.02
3. Gender	0.54	0.50			-.09	-.02	.20	.12	.38**	-.01	-.10	-.28*	-.31*	-.14	-.24	-.27*
4. Age	13.58	2.05				.15	-.19	.01	-.04	.38**	.14	-.11	.01	.03	.00	-.03
5. Self-Esteem	18.11	4.38					-.27*	.20	.10	.08	.21	-.25	-.24	-.13	-.28*	-.25
6. BJW	23.55	4.25						.00	.04	-.14	.13	-.01	.04	.01	0.03	.02
7. Impulsivity	60.79	8.58							-.07	.35**	-.20	-.01	.06	.21	.07	.09
8. Empathy	13.78	3.71								-.07	.16	-.54**	-.56**	-.41**	-.45**	-.56**
9. Neg. Cope	7.91	2.33									.23	-.05	-.05	.24	.04	.05
10. Pos. Cope	14.74	4.67										-.07	-.06	.10	.06	.00
11. Indirect Agg.	18.52	6.11											.81**	.71**	.725**	.93**
12. Direct Agg.	12.95	4.34												.61**	.73**	.89**
13. Physical Agg.	10.88	4.65													.70**	.85**
14. Verbal Agg.	9.00	3.36														.87**
15. Total Agg.	51.36	16.43														

Note. *p < .05. **p < .01.

Table 3

Descriptive Statistics and Correlations among Variables for Males

Variable	M	SD	2	3	4	5	6	7	8	9	10	11	12	13	14
1. PIPS	2.27	2.62	.31	-.02	.22	.14	-.08	.04	-.06	.38*	.21	.15	.35	.15	.25
2. Cyber	5.70	1.32		.35	.11	.04	.35	-.08	.07	.10	.12	.29	.22	.18	.23
3. Age	13.78	2.08			-.03	-.30	-.07	-.12	.43*	.23	-.13	.06	.04	-.00	-.03
4. Self-Esteem	18.22	4.65				-.51**	.05	.09	.35	.39*	-.23	-.25	-.13	-.46*	-.29
5. BJW	22.64	4.61					-.03	-.05	-.37	-.02	.17	.25	-.02	.31	.19
6. Impulsivity	59.68	8.23						.07	.26	-.27	-.11	-.07	.03	-.20	-.09
7. Empathy	12.27	4.00							.01	.21	-.42*	-.41*	-.27	-.39*	-.43*
8. Neg. Cope	7.94	2.18								.19	-.34	-.223	-.15	-.32	-.30
9. Pos. Cope	15.24	4.59									-.05	.06	.03	-.03	.00
10. Indirect Agg.	20.36	6.26										.73**	.70**	.63**	.92**
11. Direct Agg.	14.38	4.48											.57**	.68**	.86**
12. Physical Agg.	11.59	4.41												.61**	.84**
13. Verbal Agg.	9.89	2.93													.80**
14. Agg. Total	56.22	15.69													

Note. *p < .05. **p < .01.

Table 4

Descriptive Statistics and Correlations among Variables for Females

Variables	M	SD	2	3	4	5	6	7	8	9	10	11	12	13	14
1. PIPS	2.16	2.30	.33	.61**	.38*	.05	.34	-.17	.54**	-.04	.20	.10	.30	.09	.20
2. Cyber	5.72	1.08		.48**	.10	-.06	.03	-.01	.49**	.02	-.29	-.28	.10	-.14	-.17
3. Age	13.41	2.05			.33	-.05	.09	.12	.35	.06	-.15	-.09	-.01	-.03	-.08
4. Self-Esteem	18.02	4.21				.00	.34	.15	-.13	.05	-.30	-.26	-.15	-.18	-.25
5. BJW	24.31	3.84					-.02	-.03	.05	.32	-.09	-.06	.09	-.10	-.04
6. Impulsivity	61.72	8.90						-.34	.43*	-.14	.15	.26	.37*	.30	.29
7. Empathy	15.06	2.95							-.16	.24	-.57**	-.62**	-.54**	-.42*	-.60**
8. Neg. Cope	7.88	2.49								.26	.18	.07	.51**	.26	.29
9. Pos. Cope	14.31	4.77									-.14	-.25	.12	.08	-.06
10. Indirect Agg.	16.97	5.62										.86**	.71**	.78**	.94**
11. Direct Agg.	11.75	3.89											.64**	.74**	.90**
12. Physical Agg.	10.29	4.83												.75**	.87**
13. Verbal Agg.	8.25	3.57													.90**
14. Agg. Total	47.26	16.14													

Note. *p < .05. **p < .01.

Table 5

Descriptive Statistics and Correlations for Subscales (see key below)

	M	SD	A	SE	BJW	AT	MT	NP	I	UT	FS	TR	ET	NC	PC	IA	DA	PA	VA	AT	C	P
G	.54	.50	-.09	-.02	.20	.06	-.03	.20	.12	.29*	.25	.30*	.38**	-.01	-.10	-.28	-.31	-.14	-.24	-.27	.01	-.02
A	13.58	2.05		.15	-.19	.10	.17	-.21	.01	-.09	-.11	.16	-.04	.38**	.14	-.11	.01	.03	.00	-.03	.41**	.30*
SE	18.11	4.38			-.27	.35**	.00	.07	.20	.09	.08	.08	.10	.08	.21	-.25	-.24	-.13	-.28	-.25	.11	.30*
BJW	23.55	4.25				-.02	.12	-.09	.00	-.09	.10	.08	.04	-.14	.13	-.01	.04	.01	.03	.02	.00	.09
AT	16.78	3.92					.21	.26*	.68**	-.13	.03	.22	.04	.345**	.04	-.16	-.03	.03	-.08	-.07	.02	.18
MT	23.95	3.81						.27*	.68**	-.13	-.13	-.01	-.11	.29*	-.01	.08	.15	.20	.16	.16	.29*	.13
NP	20.05	4.43							.75**	-.02	-.07	-.10	-.08	.14	-.42	.06	.02	.21	.07	.10	.08	-.01
I	60.79	8.58								-.12	-.08	.04	-.07	.35**	-.20	-.01	.06	.21	.07	.09	.18	.14
UT	5.39	1.60									.45**	.22	.74**	-.22	.06	-.36	-.43	-.42	-.34	-.43	-.19	-.11
FS	5.01	1.59										.32*	.78**	.03	.18	-.43	-.53	-.35	-.37	-.47	-.06	-.07
TR	3.18	1.63											.70**	.03	.14	-.44	-.31	-.19	-.29	-.36	.16	.05
ET	13.78	3.71												-.07	.16	-.54	-.56	-.41	-.50	-.56	-.04	-.05
NC	7.91	2.33													.23	-.05	-.05	.24	.04	.05	.28*	.26*
PC	14.74	4.67														-.07	-.06	.10	.06	.00	.06	.16
IA	18.52	6.11															.81**	.71**	.73**	.93**	-.07	.20
DA	12.95	4.34																.61**	.73**	.89**	.03	.13
PA	10.88	4.65																	.70**	.85**	.15	.32*
VA	9.00	3.36																		.87**	.00	.12
AT	51.36	16.43																			.02	.22
C	5.71	1.19																				.32*
P	2.21	2.43																				

Note. *p < .05. **p < .01.
G = Gender; A = Age; SE = Self-Esteem; BJW = Belief in a Just World; AT = Attentional Impulsivity; MT = Motor Impulsivity; NP = Non-Planning Impulsivity; I = Impulsivity Total; UT = Understanding Empathy; FS = Feelings of Sadness Empathy; TR – Tearful Reaction Empathy; ET = Empathy Total; NC = Negative Coping; PC = Positive Coping; IA = Indirect Aggr; DA = Direct Aggr; PA = Physical Aggr; VA = Verbal Aggr; AT = Aggr Total; C = Cyberbullying; P = PIPS Bullying

Table 6

Summary of Block Regression Analysis for Variables Predicting Cyberbullying (N = 59)

Variable	Model 1 B	Model 1 SE B	Model 1 β	Model 2 B	Model 2 SE B	Model 2 β	Model 3 B	Model 3 SE B	Model 3 β
Gender	0.10	0.29	0.04	0.01	0.32	0.00	-0.02	0.32	-0.01
Age	0.24	0.07	0.41**	0.21	0.07	0.37**	0.22	0.08	0.38**
Self-Esteem				0.00	0.04	0.00	0.00	0.04	0.01
Impulsivity				0.02	0.02	0.11	0.02	0.02	0.11
Indirect Agg.				-0.05	0.05	-0.28	-0.05	0.05	-0.26
Direct Agg.				0.04	0.06	0.14	0.03	0.06	0.12
Physical Agg.				0.08	0.05	0.32	0.08	0.05	0.32
Verbal Agg.				-0.05	0.07	-0.13	-0.05	0.07	-0.13
BJW							0.02	0.04	0.07

Note. $R^2 = .17**$ for Step 1; $\Delta R^2 = .08$ for Step 2; $\Delta R^2 = .00$ for Step 3.

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

Table 7

Summary of Block Regression Analysis for Variables Predicting PIPS Bullying (N = 59)

Variable	Model 1			Model 2			Model 3		
	B	*SE B*	*β*	*B*	*SE B*	*β*	*B*	*SE B*	*β*
Gender	0.03	0.62	0.01	0.32	0.62	0.07	0.10	0.61	0.02
Age	0.35	0.15	0.30*	0.34	0.15	0.28*	0.38	0.14	0.32*
Self-Esteem				0.17	0.07	0.30*	0.20	0.07	0.36**
Impulsivity				0.00	0.04	0.02	0.00	0.04	0.01
Indirect Agg.				0.12	0.10	0.29	0.14	0.09	0.35
Direct Agg.				-0.07	0.12	-0.12	-0.10	0.12	-0.17
Physical Agg.				0.17	0.10	0.32	0.16	0.10	0.31
Verbal Agg.				-0.09	0.15	-0.13	-0.09	0.14	-0.13
BJW							0.14	0.07	0.25*

Note. $R^2 = .09$ for Step 1; $\Delta R^2 = .21^*$ for Step 2; $\Delta R^2 = .05^*$ for Step 3.

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

Table 8

Summary of Block Regression Analysis for Variables Predicting Cyberbullying (N = 59)

Variable	Model 1			Model 2			Model 3		
	B	*SE B*	*β*	*B*	*SE B*	*β*	*B*	*SE B*	*β*
Gender	0.10	0.29	0.04	0.01	0.32	0.00	-0.02	0.32	-0.01
Age	0.24	0.07	0.41**	0.21	0.07	0.37**	0.22	0.08	0.38*
Self-Esteem				0.00	0.04	0.00	0.00	0.04	0.01
Impulsivity				0.02	0.02	0.11	0.02	0.02	0.11
Indirect Agg.				-0.05	0.05	-0.28	-0.05	0.05	-0.26
Direct Agg.				0.04	0.06	0.14	0.03	0.06	0.12
Physical Agg.				0.08	0.05	0.32	0.08	0.05	0.32
Verbal Agg.				-0.05	0.07	-0.13	-0.05	0.07	-0.13
Neg. Cope							0.02	0.08	0.05
Pos. Cope							0.00	0.04	-0.02

Note. R^2 = .17** for Step 1; ΔR^2 = .08 for Step 2; ΔR^2 = .00 for Step 3.

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

Table 9

Summary of Block Regression Analysis for Variables Predicting PIPS Bullying (N = 59)

Variable	Model 1			Model 2			Model 3		
	B	*SE B*	*β*	*B*	*SE B*	*β*	*B*	*SE B*	*β*
Gender	0.03	0.62	0.01	0.32	0.62	0.07	0.40	0.63	0.07
Age	0.35	0.15	0.30*	0.33	0.15	0.28*	0.30	0.16	0.25
Self-Esteem				0.17	0.07	0.30*	0.16	0.08	0.29*
Impulsivity				0.00	0.04	0.02	0.00	0.04	0.01
Indirect Agg.				0.12	0.10	0.29	0.12	0.10	0.31
Direct Agg.				-0.07	0.12	-0.12	-0.10	0.13	-0.10
Physical Agg.				0.17	0.10	0.32	0.14	0.11	0.27
Verbal Agg.				-0.09	0.15	-0.13	-0.10	0.15	-0.14
Neg. Cope							0.09	0.16	0.08
Pos. Cope							0.03	0.07	0.06

Note. $R^2 = .09$ for Step 1; $\Delta R^2 = .21*$ for Step 2; $\Delta R^2 = .01$ for Step 3.

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

Table 10

Summary of Block Regression Analysis for Variables Predicting Cyberbullying (N = 59)

Variable	Model 1			Model 2			Model 3		
	B	*SE B*	*β*	*B*	*SE B*	*β*	*B*	*SE B*	*β*
Gender	0.10	0.29	0.04	0.01	0.32	0.00	0.03	0.33	0.01
Age	0.24	0.07	0.41**	0.21	0.07	0.37**	0.21	0.08	0.37**
Self-Esteem				0.00	0.04	0.00	0.00	0.04	0.00
Impulsivity				0.02	0.02	0.11	0.02	0.02	0.11
Indirect Agg.				-0.05	0.05	-0.28	-0.06	0.05	-0.28
Direct Agg.				0.04	0.06	0.14	0.04	0.06	0.13
Physical Agg.				0.08	0.05	0.32	0.08	0.05	0.32
Verbal Agg.				-0.05	0.07	-0.13	-0.05	0.08	-0.13
Empathy							-0.01	0.05	-0.03

Note. R^2 = .17** for Step 1; ΔR^2 = .08 for Step 2; ΔR^2 = .00 for Step 3.

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

Table 11

Summary of Block Regression Analysis for Variables Predicting PIPS Bullying (N = 59)

Variable	Model 1			Model 2			Model 3		
	B	*SE B*	*β*	*B*	*SE B*	*β*	*B*	*SE B*	*β*
Gender	0.03	0.62	0.01	0.32	0.62	0.07	0.20	0.65	0.04
Age	0.35	0.15	0.30*	0.33	0.15	0.28*	0.34	0.15	0.29*
Self-Esteem				0.17	0.07	0.30*	0.17	0.07	0.30*
Impulsivity				0.00	0.04	0.02	0.01	0.04	0.02
Indirect Agg.				0.12	0.1	0.29	0.13	0.10	0.32
Direct Agg.				-0.07	0.12	-0.12	-0.05	0.13	-0.10
Physical Agg.				0.17	0.10	0.32	0.17	0.10	0.32
Verbal Agg.				-0.09	0.15	-0.13	-0.09	0.15	-0.13
Empathy							0.07	0.10	0.11

Note. R^2 = .09 for Step 1; ΔR^2 = .21* for Step 2; ΔR^2 = .01 for Step 3.

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

Table 12

Summary of Block Regression Analysis for Variables Predicting Cyberbullying with Only Significantly Correlated Variable (N = 59)

Variable	Model 1			Model 2		
	B	*SE B*	*β*	*B*	*SE B*	*β*
Age	0.24	0.07	.41**	0.2	0.08	.35**
Neg. Cope				0.08	0.07	0.15

Note. R^2 = .17** for Step 1; ΔR^2 = .02* for Step 2.

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

Table 13

Summary of Block Regression Analysis for Variables Predicting PIPS Bullying with Only Significantly Correlated Variable (N = 59)

	Model 1			Model 2			Model 3		
Variable	*B*	*SE B*	*β*	*B*	*SE B*	*β*	*B*	*SE B*	*β*
Age	0.35	0.15	.30*	0.29	0.14	.24*	0.25	0.25	0.21
Self-Esteem				0.17	0.07	.31*	0.17	0.07	.30*
Physical Agg.				0.19	0.06	.35**	0.18	0.06	.34**
Neg. Cope							0.08	0.14	0.08

Note. R^2 = .09* for Step 1; ΔR^2 = .19** for Step 2; ΔR^2 = .01 for Step 3.

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