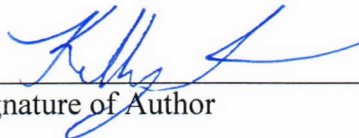
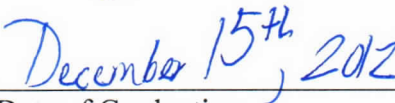


THE ROLE OF SELF-EFFICACY IN COPING SELECTION  
IN RESPONSE TO PEER VICTIMIZATION

Kelly D. Cromer

Permission is granted to Auburn University at Montgomery to make copies of this thesis at its discretion, upon requests of individuals or institutions and at their expense. The author reserves all publication rights.

  
\_\_\_\_\_  
Signature of Author

  
\_\_\_\_\_  
Date of Graduation

**THE ROLE OF SELF-EFFICACY IN COPING SELECTION  
IN RESPONSE TO PEER VICTIMIZATION**

by

Kelly Diane Cromer

A thesis submitted to the Graduate Faculty of  
Auburn University at Montgomery  
in partial fulfillment of the  
requirements for the Degree of  
Master of Science

Montgomery, Alabama  
December 15<sup>th</sup>, 2012

[Peer Victimization, Coping, Self-Efficacy, Social Information Processing]

Copyright 2012 by Kelly Diane Cromer

Approved by

Dr. Bridgette Harper, Chair, Associate Professor of Psychology  
Dr. Peter Zachar, Professor of Psychology  
Dr. Regina Kakhnovets, Assistant Professor of Psychology

## VITAE

Kelly Diane Cromer, daughter of Kenneth W. Cromer and Joy D. Cromer, was born September 6<sup>th</sup>, 1985, in Demopolis, Alabama. She graduated from Victory Christian School as Salutatorian in 2004. She attended Auburn University Montgomery, graduating as a Chancellor's Scholar with a Bachelor of Science in Psychology in Spring 2009. In August of 2009, she entered Graduate School at Auburn University Montgomery. She earned a Masters in Clinical Psychology in Fall 2012.

## **Abstract**

The current thesis focuses on self-efficacy as a factor that may impact adolescent coping selection in response to peer victimization within the social information processing (SIP) framework. Fifth and eighth grade adolescents ( $n = 166$ ) completed self-report measures of self-efficacy and coping response selection (i.e., aggressive, cognitive approach, cognitive distancing, and help-seeking coping). A self-report social experience questionnaire was used to determine whether students perceived themselves as victimized or nonvictimized (Crick & Grotpeter, 1996). Hierarchical regression analyses examined adolescent responses in terms of overall coping trends. Bivariate analyses were used to identify differences by victimization status. Peer victimization was predictive of only aggressive coping. Self-efficacy was predictive of all four coping types. Correlational analyses also revealed significant relationships between self-efficacy and coping selection with one exception. For victimized adolescents self-efficacy in help-seeking strategies was not significantly related to help-seeking coping selection. Thus, self-efficacy beliefs do have a bearing on coping selection, but further research is needed to identify factors that influence help seeking coping among victimized adolescents. These findings have important theoretical and practical implications in terms of bullying intervention programs in educational institutions.

*Keywords:* Peer victimization, social information processing, coping response selection, self-efficacy beliefs, social status, adolescence

## Acknowledgements

Dr. Bridgette Harper was an exemplary mentor during my undergraduate and graduate education at Auburn University at Montgomery. It was a pleasure to learn from a professor who not only shares my research interests, but also is a true kindred spirit. Dr. Harper made time for constructive feedback each step of the way in the construction of this thesis. I am grateful to have learned from her as my mentor, and now enjoy her company as a dear friend. Thank you sincerely for your patient guidance Bridgette.

I sincerely thank my parents and siblings for their unconditional faith in my abilities. I would like Ken, Joy, Pamela, Randi, Kimberly, and William to know they are continual sources of inspiration and encouragement. I am grateful to my 'inspired' family as well for their unconditional positive regard and for kindly listening to my many complaints. May we continue to meet challenges in life with mutual support and prayer. Last but certainly not least, I thank my considerate husband Nathan for his patience and emotional support during happy and hectic times. One day we shall relax in Germany and look back on these times fondly.

Lastly, I thank my Auburn Montgomery cohort for their comradery. As our paths now diverge, I hold dear the memories we made together. Your friendship and shared ambition motivated me to fulfill my individual potential. I am thankful our friendships have extended beyond graduate school and look forward to keeping up with each of you in years to come.

## Table of Contents

Vitae .....	ii
Abstract .....	iii
Acknowledgements .....	iv
Chapter 1, Review of Literature .....	1
Introduction .....	1
Correlates of Peer Victimization .....	1
Peer Victimization and Coping Response Evaluation .....	3
Social Information Processing (SIP) .....	7
Self-Efficacy and Coping .....	10
SIP Model and Self-Efficacy Research .....	11
Present Study .....	12
Chapter 2, Methods .....	14
Participants .....	14
Sample Demographics .....	15
Procedures .....	15
Measurement: Social Experience Questionnaire .....	16
Measurement: Coping Scale .....	17
Measurement: Self-Efficacy Scale .....	18
Chapter 3, Results .....	20

Bivariate Analyses .....	20
Bivariate Analyses by Level of Peer Victimization .....	21
Multiple Regression .....	23
Chapter 4, Discussion .....	26
Peer Victimization Status and Coping Selection .....	26
Self-Efficacy Beliefs and Coping Selection .....	27
Conclusions .....	29
Limitations .....	29
Future Directions .....	30
Appendixes .....	32
Appendix A: Social Experience Questionnaire .....	32
Appendix B: Self-Report Coping Scale .....	34
Appendix C: Self-Efficacy Scale .....	35
Appendix D: Factor Loadings for Coping Measure .....	36
Appendix E: Means and Standard Deviations for All Variables .....	37
Appendix F: Means and Standard Deviations for Victimized Adolescents .....	38
Appendix G: Means and Standard Deviations for Nonvictimized Adolescents .....	39
Appendix H: Bivariate Correlations Among All Variables .....	40
Appendix I: Results of Regression Analyses for Predictors of Coping Selection .....	41
Appendix J: Peer Victimization and Coping Self-Efficacy .....	42
Appendix K: Coping Self-Efficacy and Coping Responses .....	43
Appendix L: Self-Efficacy and Coping Response by Level of Victimization .....	44
Appendix M: Predictors of Aggressive Coping .....	45

Appendix N: Predictors of Cognitive Approach Coping .....	46
Appendix O: Predictors of Cognitive Distancing Coping .....	47
Appendix P: Predictors of Help-Seeking Coping .....	48
References .....	49



## Review of Literature

### **Introduction**

Many theorists believe that coping affects the developmental trajectory of adolescents who experience peer victimization. Research suggests coping response selection is modestly to moderately correlated with immediate and long-term psychological adjustment of victimized adolescents (Carver, Scheier, & Weintraub, 1989; Endler & Parker, 1990; Kochenderfer-Ladd & Skinner, 2002). Yet less is known about why adolescents choose some strategies over others. The current thesis focuses on identifying factors that could bear on adolescent coping response selection. In particular, it focuses on how adolescent self-efficacy beliefs in relation to possible coping strategies influence coping response selection. The introduction will begin with a brief review of peer victimization and its correlates. The current state of empirical research on coping and peer victimization will then be presented. Third, the possible role of self-efficacy as a predictor of coping responses will be discussed. The introduction will conclude with an outline of the goals of the current study.

### **Correlates of Peer Victimization**

Adolescents who have been subjected to maltreatment by their peers are at a greater risk of peer rejection and serious adjustment difficulty (Cole, Maxwell, Dukewich, & Yosick, 2010; Perry, Kusel, & Perry, 1988; Slee, 1994). Peer rejection can result in negative academic, psychological, and social outcomes for some adolescents (Boulton & Underwood, 1992; Graham, 2005; Hawker & Boulton, 2000). Adolescents

who are victimized frequently report experiencing more psychological suffering including loneliness, low-self esteem, social inhibition, depression, and anxiety than adolescents who do not frequently experience victimization (Cole, Maxwell, Dukewich, & Yosick, 2010; Olweus, 1992). Victimized adolescents are also more likely to exhibit behavioral problems, both externalizing and internalizing, than their nonvictimized peers (Olweus, 1992). Some adolescents endure multiple years of peer victimization due to financial or administrative limitations in separating adolescents from their harassers (Kochenderfer-Ladd & Wardrop, 2001; Smith, Talamelli, Cowie, Naylor, & Chauhan, 2004). However, it is important to note that not all adolescents who are victimized experience negative adjustment outcomes (Graham, 2005; Hoover, Oliver & Hazler, 1992). Some victimized adolescents show no signs of consequential adjustment difficulties, whereas others who experience relatively low levels of peer victimization suffer considerable adjustment difficulty (Juvonen & Graham, 2001). Researchers have theorized that adolescent coping strategies could play a role in their differential adjustment to peer victimization (Compas, Connor-Smith, Saltzman, Thomsen, & Wadsworth, 2001; Kochenderfer-Ladd & Skinner, 2002). Recent research has found some support for these theories (Goodman & Southam-Gerow, 2010; Biggs, Nelson & Sampilo, 2010; Spence, De Young, Toon, & Bond, 2009). In fact some studies find a modest to moderate link between adolescent coping responses and subsequent adjustment to peer victimization (Kochenderfer-Ladd, 2004; Terranova, Boxer & Morris, 2010). However, less is known about the factors that could contribute to why adolescents choose certain coping strategies. Therefore, future research should focus on identifying possible factors that contribute to adolescent coping response selection.

## **Peer Victimization and Coping Response Evaluation**

Harassing and sometimes even aggressive behavior among adolescents was once considered a largely harmless adolescent rite of passage. Recent research has revealed the teasing and social ostracism adolescents commonly experience in school can lead to negative psychosocial adjustment for some adolescents (Cole, Maxwell, Dukewich, & Yosick, 2010; Graham, 2005; Olweus, 1992; Perry, Kusel, & Perry, 1988). According to self-report surveys, anywhere from 40-80% of adolescents report they are subjected to peer victimization at school (Juvonen & Graham, 2001). For the current study peer victimization is defined as the repeated exposure over time to negative actions on the part of one or more other students (Olweus, 1991).

The 'negative actions' involved in peer victimization can be any of a number of social or overt aggressive actions including physical harm, the threat of physical harm, exclusion from social activities or friend groups, spreading rumors, or being given the 'silent treatment' (Crick & Bigbee, 1998; Juvonen & Graham, 2001; Crick & Grotpeter, 1995; Pronk & Zimmer-Gembeck, 2010). The behavioral strategies adolescents enact in response to peer victimization are referred to as coping responses (Kochenderfer-Ladd & Skinner, 2002).

Coping responses are behavioral efforts that address victimization stressors including social exclusion, embarrassment, and fear for personal safety. Coping efforts are directed towards maintaining or gaining control over the self and the environment (Compas et al., 2001). Lazarus and Folkman (1984) proposed a popular model in which coping responses are separated into two categories, problem-focused coping and emotion-focused coping. Coping strategies that are problem-focused attempt to alter the

environment in order to reduce stress. For example, if a adolescent's lunch money is stolen, those who report the incident to a teacher have used a problem-focused coping strategy. If the adolescents are given back their lunch money, the environment is then less stressful and the coping strategy was successful. Conversely, coping strategies that are emotion-focused attempt to change one's response to or perception of the stressful situation. If adolescents hear a vicious rumor circulating about them, those who hide in a bathroom stall and cry would be enacting an emotion-focused coping mechanism. This response actually increases stress because it is ineffective in preventing further victimization (Lazarus & Folkman, 1984).

It is important to note that some research in peer relations suggests emotion-focused coping is ineffective specifically in preventing future incidents of peer victimization, even though there is evidence that in other areas of adolescents lives emotion-focused coping is quite adaptive for alleviating current stressful situations (Lazarus & Folkman, 1984; Kochenderfer-Ladd & Skinner, 2002). For example, research on cognitive-affective processing and cognitive-social personality theory has demonstrated emotion-focused coping is effective in responding to psychological stressors (Miller, Green & Bales, 1999; Smith & Shoda, 2009). For adolescents facing threats to health in medical settings, emotion-focused coping is imperative to psychological self-protection (Miller, Green & Bales, 1999). For example, an adolescent who focuses on the pain of an impending vaccination will experience greater levels of anxiety than an adolescent who avoids the stressful thoughts by instead concentrating on her favorite television program. The temporary use of avoidant coping strategies in this type of situation is quite adaptive. However, adolescents who experience high levels of

peer victimization encounter hurtful and humiliating harassment on a daily basis often for several years (Kochenderfer-Ladd & Wardrop, 2001; Smith, Talamelli, Cowie, Naylor, & Chauhan, 2004). While some adolescents are able to withstand victimization without long-term psychosocial damage, peer victimization is still an unnecessary danger to the adolescent developmental trajectory. Successfully enacted approach coping strategies that reduce or eliminate further peer abuse are a more adaptive solution than avoidant strategies that temporarily alleviate negative emotional reactions (Lazarus & Folkman, 1984; Kochenderfer-Ladd & Skinner, 2002). Within peer victimization research, avoidant coping is considered ineffective in reducing further incidents of peer victimization and for improving long-term emotional adjustment (Miller, Green & Bales, 1999).

Based upon Lazarus and Folkman's (1984) model of coping, Kochenderfer-Ladd and Skinner (2002) proposed a model of coping response selection specific to peer victimization in which coping responses are divided into two categories of approach or avoidant responses. Approach coping responses are what Lazarus and Folkman (1984) would consider problem-focused responses, whereas avoidant responses are similar to emotion-focused responses (Kochenderfer-Ladd & Skinner, 2002). For example, if an adolescent is punched in the arm during a soccer game at recess, she could enact an approach response of seeking social support by telling her teacher or her friends. Avoidant coping responses would involve cognitive distancing attempts such as attempting to push thoughts of the victimization experience away, feeling sorry for herself, or even ignoring the situation (Causey & Dubow, 1992). Pertaining to peer victimization, the approach coping responses are generally considered to be the more adaptive of the two categories if carried out successfully (Kochenderfer-Ladd & Skinner,

2002). Kochenderfer-Ladd and Skinner (2002) found that while nonvictimized adolescents utilized approach coping successfully and reduced victimization, victimized adolescents who enacted approach coping strategies encountered further peer harassment. Overall the findings suggest that avoidant coping responses may temporarily alleviate negative psychological experiences, but approach coping responses are more likely to prevent future incidents of peer victimization when enacted successfully (Miller, Green & Bales, 1999; Kochenderfer-Ladd & Skinner, 2002).

Studies on outcomes of coping strategies contain moderate evidence to support a relationship between problem-focused or approach coping strategies and the de-escalation of peer victimization (Andreou, 2001; Bijttebier & Vertommen, 1998; Kochenderfer-Ladd & Skinner, 2002; Phelps, 2001; Smith, Shu & Madsen, 2001; Smith, Talemelli, Cowie, Naylor, & Chauhan, 2004). Overall, research indicates the content or type of coping response pattern a victimized adolescent enacts is directly correlated with an increase or decrease in subsequent victimization. Yet Kochenderfer-Ladd & Skinner (2002) found adolescents with the highest levels of peer victimization find little success whether they choose to enact avoidant or approach coping strategies. They theorized that adolescents who are frequently victimized have experienced substantial failure in the past when attempting to protect themselves from their harassers. This lack of failure may translate into a feeling of hopelessness that undermines the confidence needed to successfully enact a direct approach strategy (Kochenderfer-Ladd & Skinner, 2002). Further research is needed to help explain why victimized adolescents are less able than nonvictimized adolescents to successfully enact more adaptive approach strategies.

## **Social Information Processing**

One theory that attempts to explain how adolescents make decisions about social situations is the social information processing (SIP) theory. The SIP theory proposes an adolescent's behavioral responses to situations are influenced by their understanding and interpretation of the situations to which they are exposed (Lemerise & Arsenio, 2000). In more basic terminology, the SIP theory describes how adolescents utilize their past experiences to interpret social cues and decide how to respond in social situations. According to Crick and Dodge (1994), adolescents have biological resources along with a database of memories from previous social interactions available for use in processing and responding to social cues. Crick and Dodge (1994) proposed that the SIP theory involves 6 distinct steps between the initial onset of an event and the enactment of a behavioral response: encoding of social cues, interpretation of social cues, clarification of goals, response access or construction, response decision, and behavioral enactment.

Step 1 of the social information processing (SIP) model is encoding of social cues. In this step, adolescents use attention and encoding to process what has taken place. The adolescents must first be oriented to the event that has taken place before they can begin any subsequent steps to a behavioral response. Researchers hypothesize that adolescents pay attention to select internal and external social cues during this step. The manner in which an adolescent attends to the myriad of social cues available varies between individual adolescents (Crick & Dodge, 1994). Adolescents experience many social events in rapid succession in a school setting, and must decide which cues to attend to. According to theorists this is the step where adolescents use past experiences and biological resources to attend to social cues perceived as imperative to their best interest.

Step 2 of the social information processing (SIP) model is interpretation of social cues. In this step, the adolescent interprets the event that has occurred. Multiple components of the event may require separate interpretations, including (a) a mental model of the social cues involved in the event to be stored into long-term memory; (b) causal attributions of what the specific cause or goal of the event was and if it was successfully implemented; (c) attributions regarding the intention and perspectives of others involved in the event; (d) a search for any links between the current event and past events; (e) a self-efficacy evaluation regarding one's performance during the current or previous event(s); and (f) the meaning of the event that has occurred both for one's self and others involved in the event.

Step 3 of the SIP model is clarification of goals. In this step, the adolescent determines his or her desired outcome or goal in this situation. A goal is defined as a focused arousal step that is oriented towards creating a particular outcome. The goal is dependent upon the interpretation made during step 2 of the SIP model. Crick and Dodge (1994) propose that different adolescents have differing tendencies in the types of goals they are most likely to select. However, social cues particular to the immediate social situation may influence goal selection. For example, an adolescent may have a tendency to select goals involving revenge. After determining the object of revenge is an adolescent who is much older and stronger, the adolescent may change her goal to staying out of trouble instead of seeking revenge.

Step 4 of the social information processing (SIP) model is response access or construction. In this step, possible strategies to respond to the social situation at hand are generated. The responses in this step can be recalled from memory or new behaviors



constructed to meet the demands of a novel situation. The coping responses generated in this step are likely dependent upon the goal determined during step 3.

Step 5 of the social information processing (SIP) model is response decision. In this step, the responses generated in step 4 are evaluated. Multiple factors may be considered when evaluating responses including, (a) the expected outcomes of the response; (b) the amount of self-efficacy or confidence the adolescent has in their ability to implement the response successfully; and (c) how socially appropriate each response will be viewed by one's self and others. The evaluations an adolescent contemplates in step 5 are theorized to directly influence the decision an adolescent makes in the final step. Step 6 of the SIP model is behavioral enactment. In this step, the coping response an adolescent perceives as most favorable is selected and enacted.

The following example illustrates the 6 steps of the social information processing (SIP) model in a realistic hypothetical scenario. An adolescent is bumped by a classmate from behind. A brand new yearbook with fresh signatures and messages written by her friends fell out of her hands and now lies in a deep mud puddle. In step 1, the adolescent must orient herself to understand her yearbook is now immersed in mud and is most likely ruined. Second, the adolescent investigates whether the classmate bumped into her accidentally or on purpose and whether others witnessed the event. This adolescent was bumped from behind, so she does not know with certainty if her classmate was unaware of her presence or if the bump was intentional. Personal history between the two adolescents and social status considerations may influence her interpretation of the event. In step 3 if the adolescent believes she was intentionally shoved, her goal may be to get her classmate back for ruining the new book. However, if the adolescent believes she was

bumped accidentally, the goal could be to stay friends with the other student. In step 4, if the goal the adolescent has chosen is to seek revenge on her classmate, she may contemplate wiping the muddy book on the other student's shirt or throwing the book at her classmate. If the adolescent's goal is to preserve a friendship with her classmate, she may contemplate taking the incident in stride by verbally telling the other adolescent the book getting muddy is no big deal or otherwise casually dismiss the incident. In step 5, the adolescent will evaluate the responses available to assess a number of practical factors including her ability to successfully enact a given response. In this example the student believes herself to be incapable of enacting the aggressive responses. In step 6 the adolescent ultimately decides to preserve the friendship, and offers her classmate a reassuring smile. Multiple factors likely influence the coping responses adolescents select in step 6 of the SIP model. Some SIP researchers theorize that self-efficacy plays an intrinsic role in the generation and selection of coping responses (Chesney, Neilands, Chambers, Taylor, & Folkman, 2006).

### **Self-Efficacy and Coping**

Self-efficacy in coping selection refers to a person's perceived ability to enact a specific coping strategy in order to achieve a desired outcome (Bandura, 1997). Higher levels of coping self-efficacy indicate adolescents have a stronger sense of control in responding to peer victimization (Ozer & Bandura, 1990; Benight & Bandura, 2004). Park and Folkman (1997) proposed that self-efficacy beliefs play a pivotal role on appraisals in coping selection. High self-efficacy beliefs have been shown to increase adolescent ability to successfully enact approach coping strategies in reducing peer victimization (Bandura, 1997; Kochenderfer-Ladd & Skinner, 2002). Bandura (1997)

found that positive self-efficacy beliefs are associated with lower levels of distress for adolescents confronted by threatening situations. Adolescents with positive self-efficacy beliefs are more likely to view themselves as proactive agents in processing and responding to negative situations (Bandura, 1997; Kochenderfer-Ladd & Skinner, 2002).

The widely established relationship between self-efficacy and coping suggests that self-efficacy beliefs may play a role in adolescent social information processing (Camodeca, Goossens & Frits, 2005; Crick & Dodge, 1996; Erdley & Asher, 1999). Previous research has revealed a relationship between self-efficacy beliefs and goal formation in step 3 of the SIP model (Erdley & Asher, 1996; Harper, Lemerise & Caverly, 2009). Adolescents are more likely to pursue those social goals they feel most confident in enacting (Bandura, 1981). Therefore, when adolescents are evaluating how to handle being victimized by their peers, it stands to reason self-efficacy evaluations may influence an adolescent's response decision during step 5 of the social information processing (SIP) model. In other areas of adolescent social lives, research pertaining to adolescent coping has revealed adolescents who act aggressively report feeling more confident in acting aggressively than in carrying out prosocial or avoidant coping (Erdley & Asher, 1996; Perry, Perry & Rasmussen, 1986). Further exploration of the influence self-efficacy exerts on coping selection may lead to useful predictive capabilities in the developmental trajectory of victimized adolescents.

### **SIP Model and Self Efficacy Research**

The social information processing (SIP) theory is widely used in conceptualizing adolescent coping response selection (Compas et al., 2001). The SIP model has not yet been used to conceptualize coping in regards to peer victimization. Researchers who

study peer victimization need to better understand why adolescents who are frequently victimized are less able to successfully enact approach coping strategies. Furthermore, some victimized adolescents intentionally enact coping responses they have evaluated as ineffective in preventing future peer victimization (Kochenderfer-Ladd & Skinner, 2002). Self-efficacy beliefs may play a vital role in the coping decision process in step 5 of the SIP model.

Further research on adolescent self-efficacy evaluations may aid in the prediction of coping selection. Self-efficacy beliefs may potentially predict coping response selection, in that adolescents may be less likely to select coping strategies they feel incompetent to successfully enact. The SIP model could serve as a valuable tool in determining the role self-efficacy plays in approach vs. avoidance coping response selection. The current study focuses on step five of the SIP model to examine why adolescents select coping responses that may be ineffectual in preventing future victimization.

### **Present Study**

The primary goal of the current thesis was to investigate the relationship between adolescent self-efficacy beliefs and coping selection in response to peer victimization. The research question addressed was whether self-efficacy beliefs about coping responses are better predictors of adolescent coping selection than level of peer victimization. Past research suggests that peer victimization is a modest predictor of the coping strategies adolescents choose. However, these findings are not strong or consistent (Goodman & Southam-Gerow, 2010; Terranova, 2009). The current thesis predicts that adolescent self-efficacy beliefs will be modestly related to level of peer victimization, and self-efficacy

beliefs will be better predictors of adolescent coping response selection than will level of peer victimization.

In order to investigate this research question, three hypotheses were addressed. The first hypothesis focused on the relationship between level of peer victimization and coping responses and predicts modest relationships between level of peer victimization and coping responses. In particular, it predicts that victimized adolescents will be less likely than nonvictimized adolescents to enact help-seeking and cognitive approach strategies, and more likely to enact aggressive and cognitive distancing strategies. The second hypothesis focuses on the relationship between self-efficacy beliefs and coping responses and predicts moderate to strong correlations between these variables. Specifically, it is predicted that as adolescent self-efficacy beliefs for a coping response increase, the likelihood of choosing that coping response also increases. In addition, it is predicted that victimized adolescents will have lower self-efficacy beliefs for cognitive approach and help-seeking coping strategies, and will be less likely to choose those coping responses than will less victimized adolescents. The third hypothesis predicts that self-efficacy beliefs will account for a significant amount of the variance in the relationship between peer victimization and coping responses.

## **Methods**

The present study expanded upon previous work by utilizing the social information processing (SIP) model to better conceptualize peer victimization (Erdley & Asher, 1999; Camodeca, Goossens, & Frits, 2005; Crick & Dodge, 1996). In particular, the present study investigates whether self-efficacy plays a role in adolescent coping response selection. The primary goal of the present study was to shed light on why some adolescents select coping responses that may be ineffective in reducing peer victimization. To this end, this study investigated the differences in the relationship between self-efficacy beliefs and coping responses of victimized and nonvictimized adolescents.

To accomplish the present study goals, adolescents were first asked to rate how often they believe their peers are nice to them and how often they believe their peers victimize them. Then they were asked to imagine themselves in a realistic, hypothetical peer victimization scenario, in which their classmates did not intervene. After the scenario was read aloud, the adolescents were asked to rate how likely they would be to use each type of coping response. After rating the likelihood of using each type of response, the adolescents rated how competent they felt about enacting each of four types of coping responses.

### **Participants**

I obtained data from 166 adolescents in a small rural public school system in Alabama in the spring of their 5th and 8th grade school year. This age group was carefully selected due to Goodman, Stormshak and Dishion's (2001) finding that peer victimization becomes relatively stable by the 5<sup>th</sup> grade year of school. Upon agreeing to

participate in this study, adolescents were interviewed in their regular classrooms in the spring of 2008.

### **Sample demographics**

The ethnic composition of adolescents in this sample was 60.8% Caucasian, 49% African American, and 8.8% other ethnicities. While the current sample represented the lower to upper middle class, it was not a mirror reflection of the demographics of the city where the data was collected, which is 67% Caucasian, 26.1 % African American, and 7.4% other ethnicities (U.S. Census Bureau, 2010). The current study has a slightly overrepresented African American sample and a slightly underrepresented Caucasian sample.

### **Procedures**

One recruitment procedure was used. This recruitment process began by arranging with the teachers a convenient time to visit the fifth and eighth grade classrooms. Once there, the project was introduced to the adolescents by explaining the contents of the permission form. Adolescents were encouraged to bring the letter home to have their parents sign yes or no and then to return the letter to school. A total of 166 adolescents were recruited through a small rural public school system and completed the in-school interview. The participants were encouraged to bring back the signed consent forms in order to select a small prize; no monetary compensation was provided. Each teacher whose class participated in the study was given a paper bag filled with office supplies including highlighters and pens, an estimated value of approximately ten dollars per bag. Upon returning a signed permission slip, participants chose a prize from this bag.

The measures were administered in small group formats in the late spring of 2008. Seven trained research assistants were responsible for five adolescents. One lead research assistant presented the measures to the entire class, while individual research assistants monitored the progress of the participants in their small groups. The average class size was 20 students. Five research assistants were present for each group interview. The participants were interviewed in their classrooms with their teachers present. The interview sessions began by gaining the participant's assent. A research assistant then administered a series of questionnaires to the adolescents. Upon concluding the interview session, the participants were thanked for participating and all questions they had were answered before the experimenters left.

**Measurement: Social Experience Questionnaire (Crick & Grotpeter, 1996)**

In order to obtain more detailed information regarding frequency of individual perceived peer victimization, we administered the Social Experience Questionnaire (Crick & Grotpeter, 1996). This questionnaire is composed of 15 items designed to assess the frequency of peer victimization adolescents perceive they experience. Each item contains two opposite victimization statements listed side by side that form the center column of the measure. The adolescents indicate which statement they identify with and to what degree using a 4-point Likert scale. Two response boxes are located to either side of the statements. The furthest box reads, "Really True," while the innermost box reads, "Sort of True" (see Appendix A). The adolescent marks one of the boxes located nearest to the statement that is most true for them. For example, question three states, "Some kids are often hit by another kid at school, but some kids are not often hit by another kid at school." Adolescents who are frequently hit by peers marked the "Really True" box on



the right page margin. Each response was scored with 1 indicating the least amount of victimization exposure, and 4 indicating the highest level of victimization. Victimization scores were calculated for each respondent by averaging the 15 items. Scores ranged from 1.75 to 3.70 ( $M = 2.68$ ,  $SD = .41$ ) for adolescents,  $\alpha = .826$ . For the purposes of this study respondents who scored above the median were classified as victimized, while respondents who scored below the median are nonvictimized.

**Measurement: Self-Report Coping Scale (Kochenderfer-Ladd & Skinner, 2002)**

In order to assess preferred coping strategies, the adolescents were administered a brief version of Kochenderfer-Ladd and Skinner's (2002) Self-Report Coping Scale. This questionnaire began with a realistic, hypothetical victimization scenario. The hypothetical scenario was followed by 9 coping options. The coping scale items were collapsed into four subscales including aggressive, cognitive approach, cognitive distancing, and help-seeking (see Appendix B). Aggressive coping is characterized by overt physical or verbal responses such as hitting, kicking, or name-calling. Cognitive approach strategies include proactive ways of reframing the victimization situation such as distracting oneself by thinking of something happy. Cognitive distancing strategies are defined by attempts to distance oneself psychologically from the victimization by ignoring the situation or pretending it did not occur. Lastly, help-seeking coping includes attempts to involve parents, friends, or teachers in dealing with victimization. The adolescents were asked to pretend as if the victimization scenario actually happened to them, and to indicate on a 5 point Likert scale how likely they would be to select each of the coping responses listed.

For example, the adolescents were asked, “If everyone in the hallway saw this happen to you, would you...”; 1) Ignore it, 2) Tell a teacher or adult., 3) Forget the whole thing., 4) Do something to get even., 5) Keep quiet., 6) Fight back so he’ll leave me alone., 7) Talk to my close friend about it., 8) Do something to take my mind off of it., 9) Think about something that makes me happy. Responses were scored with 1 indicating the least likelihood of enacting the coping response, and 5 indicating the highest likelihood of enacting the response. Coping scores were calculated with the average of each scale’s respective items (range = 1.00 to 5.00). The coping items were divided into four categories: aggressive ( $\alpha = .794$ ), cognitive approach ( $\alpha = .725$ ), cognitive distancing ( $\alpha = .689$ ), and help-seeking ( $\alpha = .40$ ) (see Appendix D).

**Measurement: Self-Efficacy Scale (Erdley & Asher, 1996)**

Immediately following the coping scale administration, a self-efficacy scale was administered. Each of the 9 coping responses rated in the coping questionnaire were once again listed in order. The adolescents were asked to indicate using a 4 point Likert scale how hard it would be for them to enact each coping response (See Appendix C). A rating of 1 indicated the response would be ‘very hard’ to enact, while a rating of 4 indicated the coping response would be ‘very easy’ to enact. The responses revealed how confident the participants were in their ability to enact the coping responses listed. The similar formatting enables straightforward comparison between coping selection and self-efficacy data.

For example, the adolescents were asked, “If some kids really took your backpack, laughed at you, and called you mean names in front of everyone, how hard would it be for you to...”: 1) Ignore it, 2) Tell a teacher or adult., 3) Forget the whole

thing., 4) Do something to get even., 5) Keep quiet., 6) Fight back so he'll leave me alone., 7) Talk to my close friend about it., 8) Do something to take my mind off of it., and 9) Think about something that makes me happy. Each response was scored with 1 indicating the least amount of perceived efficacy in enacting the coping response, and 5 indicating the highest amount of perceived efficacy in enacting the coping response. Scores were once again averaged across each scale's items (range = 1.00 to 5.00).

## Results

The results of all statistical analyses are presented in the following three sections. The first section presents the overall correlations for all variables. The second section examined bivariate analyses by level of peer victimization. The third section presents the results of multiple regression analyses.

### Section One: Bivariate Analyses

**Peer victimization and self-efficacy.** Contrary to the prediction of our first hypothesis, peer victimization was not significantly correlated with coping self-efficacy beliefs in bivariate correlation analysis (see Table 1, Appendix J). Peer victimization was not significantly correlated with any of the self-efficacy belief styles. Interestingly, the directionality of the findings were representative of the predicted relationship between peer victimization and each coping response style. However, for this sample level of peer victimization does not bear on adolescent self-efficacy beliefs for specific coping response strategies.

**Peer victimization and coping.** Contrary to the predicted findings in hypothesis one, bivariate correlational analysis revealed three of the four coping styles were not significantly correlated with peer victimization (see Table 2, Appendix K). Aggressive coping was the sole coping strategy significantly related to level of peer victimization,  $r(143) = .219, p < .01$ . Thus as level of victimization increased, adolescent endorsement of aggressive coping strategies also increased. However, no further differences emerged for level of peer victimization and coping response selection in cognitive approach, cognitive distancing, or help-seeking strategies.

**Self-efficacy and coping.** Bivariate correlational analysis was used to examine the relationship between coping self-efficacy beliefs and coping response selections of the adolescents in our sample (see Table 3, Appendix L). As predicted in hypothesis two, self-efficacy beliefs for each of the four coping styles were significantly correlated with the endorsement of the corresponding coping response selections. Specifically, self-efficacy and coping were significantly related for aggressive,  $r(163) = .397, p < .01$ ; cognitive approach,  $r(165) = .329, p < .01$ ; cognitive distancing,  $r(166) = .455, p < .01$ ; and help-seeking,  $r(163) = .273, p < .01$ , coping strategies. Furthermore, higher levels of self-efficacy beliefs in cognitive approach,  $r(163) = .261, p < .01$ , and help-seeking coping,  $r(165) = .297, p < .01$ , result in decreased endorsement of aggressive coping strategies. Thus coping self-efficacy appears to be a viable predictor of coping response selection, especially in aggressive coping strategies.

## **Section Two: Bivariate Analyses by Level of Peer Victimization**

**Coping by level of peer victimization.** Correlational relationships between selections of different coping strategies were analyzed by level of peer victimization. For nonvictimized adolescents, the negative relationship between help-seeking and aggressive coping selection was significant,  $r(65) = -.345, p < .01$ . In other words nonvictimized adolescents who endorsed the use of help-seeking coping were less likely to select aggressive coping responses. Nonvictimized adolescents who selected help-seeking strategies were more likely to select cognitive approach strategies,  $r(65) = .421, p < .01$ .

For victimized adolescents, the strength of the relationship between help-seeking and aggressive coping was insufficient to meet significance, but the direction of the

relationship was still negative  $r(75) = -.191, p = .101$ . However, the relationship between help-seeking coping and cognitive approach coping selection was positive for the victimized adolescents as well,  $r(75) .239, p < .05$ . Thus, adolescents indicated concurrent use of both help-seeking and cognitive approach coping regardless of level of victimization.

**Coping and self-efficacy by level of peer victimization.** The final bivariate correlational analysis conducted examined the relationship between self-efficacy beliefs and coping response selection for victimized and nonvictimized adolescents separately. Overall there were many strong correlations between self-efficacy beliefs and coping selection, but this varied considerably by level of victimization (See table 4, Appendix M). For nonvictimized adolescents, self-efficacy beliefs in aggressive coping was negatively related to help-seeking coping selection,  $r(66) = -.263, p < .05$ . Practically speaking, nonvictimized adolescents who feel they can successfully resolve peer victimization through aggressive means are least likely to ask for help from teachers, parents or friends. However, help-seeking coping was positively related to self-efficacy beliefs in help-seeking for nonvictimized adolescents,  $r(66) = .318, p < .01$ . Thus nonvictimized adolescents who feel competent in their abilities to ask for help are indeed likely to select help-seeking coping in response to clear episodes of peer victimization.

One specific finding in this analysis was significant for both victimized and nonvictimized adolescents. Cognitive approach self-efficacy beliefs were negatively related to the endorsement of aggressive coping strategies in victimized adolescents,  $r(76) = -.238, p < .05$ , and nonvictimized adolescents,  $r(67) = -.346, p < .01$ . Basically, adolescents who felt competent to enact cognitive approach coping strategies

were less likely to resort to overtly aggressive reactions in response to peer victimization, regardless of the frequency that the adolescents have been exposed to such victimization.

Hypothesis two is supported in that adolescents were significantly more likely to choose the coping response strategies they felt competent to enact, with one exception (see Table 4, Appendix M). For victimized adolescents self-efficacy in help-seeking strategies was not significantly related to endorsement of help-seeking coping responses,  $r(77) = .158, p = .171$ . This finding suggests even when victimized adolescents feel confident in their abilities to seek help, they may choose not to do so. This particular finding is counterintuitive considering victimized adolescents are those in most need of help. This analysis revealed two more findings exclusive to victimized adolescents. Self-efficacy in cognitive distancing was negatively correlated with help-seeking for victimized adolescents,  $r(77) = -.432$ . Thus, adolescents may prefer to distance themselves mentally by ‘forgetting’ or ‘ignoring’ peer victimization rather than seeking help if they perceive themselves as frequently victimized. Self-efficacy in aggressive coping strategies was negatively related to the endorsement of cognitive approach strategies for victimized adolescents,  $r(77) = -.259, p < .05$ . Thus cognitive approach and help-seeking coping appeared to be generally incompatible with aggressive coping selection in terms of self-efficacy.

### **Section Three: Multiple Regression**

Hierarchical regression analyses were conducted to identify predictors of coping response selection. The predictor variables were peer victimization, coping self-efficacy, and the interaction between peer victimization and self-efficacy in that order. The results of these analyses are presented below for all four coping response strategies. In

accordance with the predictions of hypothesis three, the findings indicated that while peer victimization influences aggressive coping selection, self-efficacy is a better predictor of all four coping response strategies (see Table 5, Appendix N). However, the regression of coping response selection on the interaction between self-efficacy and peer victimization accounted for no additional variance.

**Aggressive coping.** In model one, aggressive coping selection was significantly predicted by level of peer victimization,  $\beta = .22$ ,  $t(142) = 2.67$ ,  $p < .01$ . Peer victimization accounted for a significant amount of variance in aggressive coping,  $R^2 = .95$ ,  $F(1, 141) = 7.14$ ,  $p < .01$ . The second level of the regression model revealed that aggressive coping was significantly predicted by aggressive self-efficacy beliefs,  $\beta = .43$ ,  $t(142) = 5.76$ ,  $p < .001$ . Self-efficacy beliefs for aggressive coping explained a significant proportion of the variance in the endorsement of aggressive coping,  $R^2 = .23$ ,  $F(2, 140) = 20.95$ ,  $p < .001$ . The third model of this regression analysis revealed that the interaction variable of peer victimization and aggressive self-efficacy was not a significant predictor of aggressive coping selection (see Table 5, Appendix N).

**Cognitive approach coping.** The regression of cognitive approach coping selection on level of peer victimization was not significant (see Table 6, Appendix O). In level two of the regression model, self-efficacy beliefs regarding cognitive approach coping significantly predicted the endorsement of cognitive approach coping,  $\beta = .34$ ,  $t(144) = 4.42$ ,  $p < .001$ . The regression of cognitive approach coping selection on cognitive approach self-efficacy beliefs explained a significant proportion of variance,  $R^2 = .14$ ,  $F(2, 142) = 11.80$ ,  $p < .001$ . The third model revealed the interaction between peer



victimization and cognitive approach coping self-efficacy was not a significant predictor of cognitive approach coping selection (see Table 6, Appendix O).

**Cognitive distancing coping.** The regression of cognitive distancing coping selection on level of peer victimization was not significant (see Table 7, Appendix P). In level two of this regression model, self-efficacy beliefs for cognitive distancing coping significantly predicted the endorsement of cognitive distancing coping,  $\beta = .48$ ,  $t(145) = 6.52$ ,  $p < .001$ . Cognitive distancing self-efficacy beliefs also explained a significant proportion of the variance for cognitive distancing coping,  $R^2 = .23$ ,  $F(2, 143) = 21.26$ ,  $p < .001$ . The third model revealed the interaction between peer victimization and cognitive distancing self-efficacy was not a significant predictor of cognitive distancing coping selection (see Table 7, Appendix P).

**Help-seeking coping.** The regression of help-seeking coping selection on level of peer victimization was not significant (see Table 8, Appendix Q). The second level of this regression model revealed that the regression of help-seeking coping on help-seeking self-efficacy beliefs was significant,  $\beta = .23$ ,  $t(142) = 2.83$ ,  $p < .01$ . Help-seeking self-efficacy beliefs also explained a significant proportion of variance in the endorsement of help seeking coping,  $R^2 = .05$ ,  $F(2, 140) = 4.01$ ,  $p < .05$ . The third model of this regression analysis, the interaction variable of peer victimization and help-seeking self-efficacy was not a significant predictor of help-seeking coping response styles (see Table 9, Appendix Q).

## **Discussion**

For victimized adolescents, coping strategy selection is one of the most important factors in reducing subsequent peer victimization (Lazarus & Folkman, 1984; Kochenderfer-Ladd & Skinner, 2002). The findings of this study hold important implications about the effects of peer victimization and self-efficacy beliefs on the coping strategies adolescents select. This section begins with a brief discussion of the relationship between perceived peer victimization and coping selection in this sample. Next, findings related to the effect of self-efficacy on adolescent coping response selection will be discussed. The section will conclude with a summary of the strengths and weaknesses of this study along with thoughts for future directions in peer victimization research.

### **Peer Victimization Status and Coping Response Selection**

Level of victimization had some bearing on coping responses selected. The current study found a significant relationship between peer victimization and aggressive coping. This finding partially supported the first hypothesis, in that victimized adolescents are more likely to select aggressive coping responses. However, peer victimization was not related to any of the other coping strategies measured. Overall, the hypothesized relationship between peer victimization and coping was not supported. A larger sample size or more reliable coping measures may have revealed stronger relationships between peer victimization and individual coping strategies. However, it may be that peer victimization is simply not related to coping selection. Counterintuitive as it may appear, these findings merely reflect the inconsistent relationship extant

research has found between peer victimization and coping selection (Goodman & Southam-Gerow, 2010; Terranova, 2009).

These findings suggest aggressive coping responses may have a negative impact on adolescent social status. More research is needed to verify this relationship. If our results are substantiated by future research, the data suggests useful implications for intervention programs focused on reducing peer victimization. If aggressive coping increases the likelihood of experiencing peer victimization, reducing aggressive coping in turn may decrease future episodes of victimization.

### **Self-Efficacy Beliefs and Coping Response Selection**

The results of this study indicate that self-efficacy beliefs influence adolescent coping response selection. Overall, adolescents who rated high in self-efficacy beliefs for a coping type were significantly likely to select coping responses of that specific style. The only exception to this trend was for victimized adolescents in help-seeking coping. Victimized adolescents were no more likely to engage in help-seeking coping selection as self-efficacy beliefs for help-seeking increased. Thus, victimized adolescents may be suffering from a form of learned helplessness in which they feel they will not receive help, even if they believe they could ask for help. This is a powerful finding that could indicate school administrators and parents need to take a more active role in helping adolescents who frequently experience peer victimization.

For victimized adolescents cognitive approach and aggressive self-efficacy coping beliefs are negatively related to aggressive and cognitive coping respectively. Victimized adolescents with high self-efficacy in cognitive approach coping are less likely to choose aggressive responses, whereas victimized adolescents with high self-efficacy in

aggressive coping are less likely to select cognitive approach coping responses. These results have significant implications for future intervention programs for victimized adolescents. An intervention designed to increase self-efficacy in cognitive approach coping may reduce aggressive coping strategies and increase the likelihood of using the approach coping responses that are more likely to effectively reduce peer victimization.

Moreover, for victimized adolescents high self-efficacy in cognitive distancing strategies reduces the use of help-seeking for victimized adolescents. The adolescents who need help the most are less likely to seek it if they use techniques to psychologically avoid thoughts regarding their experiences. While cognitive distancing is protective for adolescents in some situations, namely medical settings, (Miller, Green & Bales, 1999; Smith & Shoda, 2009), preventing further victimization is the best solution for victimized adolescents (Lazarus & Folkman, 1984; Kochenderfer-Ladd & Skinner, 2002). Help-seeking and cognitive approach coping are more likely to accomplish this goal (Andreou, 2001; Bijttebier & Vertommen, 1998; Phelps, 2001; Smith, Shu & Madsen, 2001; Smith, Talemelli, Cowie, Naylor, & Chauhan, 2004).

This pattern of results suggests self-efficacy beliefs are especially important for the response decision step of the social information processing model (SIP), and that adolescent self-efficacy beliefs may influence the following SIP step of enacting coping responses. Previous work on coping and SIP has shown that level of perceived peer victimization is related to coping response selection (Goodman & Southam-Gerow, 2010; Terranova, 2009). The present study revealed similar results, and also shows that self-efficacy is a predictor of coping selection. Furthermore in this study self-efficacy is a more strongly related to coping response selection than level of peer victimization.

## **Conclusions**

The present study contributes to the existing body of peer victimization knowledge in several ways. The results support other studies such as Camodeca, Goossens, Schuengel, and Terwogt (2003) that found peer victimization does affect adolescent response decision in step five of the SIP model. Our results support and extend previous research suggesting that factors indicative of competency may be more related to adolescent coping selection than is peer victimization (Kochenderfer-Ladd & Skinner, 2002). Our findings revealed that self-efficacy appears to be unrelated to level of perceived peer victimization; however, self-efficacy is related to the manner in which adolescents cope in response to peer victimization. Understanding the relationship between adolescent self-efficacy beliefs and coping response selections is important, because adolescent coping response selection is somewhat related to level of perceived peer victimization and to subsequent episodes of peer victimization (Goodman & Southam-Gerow, 2010; Lazarus & Folkman, 1984; Kochenderfer-Ladd & Skinner, 2002; Terranova, 2009). These findings have significant potential in developing interventions focused on changing adolescent social status from victimized to nonvictimized.

## **Limitations**

Four limitations exist within the current study. First of all, the sample had few participants who qualify as extreme in perceived peer victimization. Although we found differences in the way relatively victimized and nonvictimized adolescents select coping strategies, the majority of our participants experienced moderate to mild levels of peer victimization, between 1 and 4 on a Likert scale of 1 to 5. Second, the current study may have lacked adequate power to reveal an existing relationship between peer victimization

and self-efficacy. In the future more research participants could help create a greater sensitivity to draw out all existing relationships. Next, more reliable coping scales would greatly benefit peer victimization research. The current reliability of the scales used is adequate for our purposes, but are moderate at best. Researchers need to look into creating scales to better differentiate coping response styles and reduce multicollinearity. Lastly, our findings suggest that no significant difference exists between the way victimized and nonvictimized adolescents use cognitive distancing coping responses. Other research suggests that victimized adolescents are more likely to select cognitive distancing coping responses (Kochenderfer-Ladd & Skinner, 2002; Lazarus & Folkman, 198). This discrepancy in findings may be partially explained by the self-efficacy as a predictor model proposed in the current study.

### **Future directions**

First of all, the most curious finding in this study is the lack of a significant relationship between self-efficacy in help-seeking and the selection of help-seeking coping strategies for victimized adolescents. Help-seeking coping strategies may be enacted dependent on an external factor. Coping efficacy, which is the adolescent's assessment of the likelihood a coping response will effectively reduce peer victimization in the future (Singh & Bussey, 2011), may have a significant role in help-seeking behavior in victimized adolescents. Moreover, a prior study of ethnic minority adolescents in an urban high school found that the use of help-seeking coping was positively correlated with perceptions of teacher competency in responding to peer victimization (Aceves, Mendoza-Denton, & Page-Gould, 2009). While our results have established self-efficacy as a significant predictor of many forms of coping selection,

further research is needed to identify factors that may increase the use of help-seeking coping for the adolescents who most frequently experience peer victimization.

Secondly, coping efficacy could potentially be a predictor of other types of coping strategy selection. The current study did not include measures of coping efficacy. Coping efficacy may be similar to self-efficacy in that it may influence coping response selection. Perhaps adolescents select the coping response they believe will help them reduce future peer victimization, in addition to the response they can most adequately perform.

Additionally, coping efficacy may play an important role in the formation and modification of self-efficacy beliefs over time. For instance an adolescent who enacts an ineffective coping response may lose confidence in their ability to successfully enact the same coping response as a later date. Whether adolescents attribute subsequent victimization to characterological self-blame or other-blame may have a bearing on their self-efficacy beliefs as well. Hence, studies that research the role of coping efficacy and coping attributions in self-efficacy belief formation is also needed.

Because coping response selection is not a stable variable, it may be influenced by a number of other factors. Such factors may include but are not limited to coping efficacy, coping attributions, goal selection, and parental input. The extent of parental involvement and the content of parental advice are likely to influence adolescent responses to peer victimization. Furthermore, the quality of the parent-adolescent relationship may have a bearing on peer relations, and vice versa. Because very little is known regarding coping selection in response to peer victimization, future research should investigate this area.

## **Appendix A**

### **Social Experience Questionnaire (SEQ)**

1. Some kids often have something nice said to them. BUT Often other kids don't have something nice said to them.
2. Some kids often are left out on purpose when it is time to play or do an activity. BUT Other kids are often not left out on purpose when it is time to play or do an activity.
3. Some kids are often hit by another kid at school. BUT Other kids are often not hit by another kid at school.
4. Some kids are often given help when they need it. BUT Other kids are often not given help when they need it.
5. Some kids are often yelled at or called mean names. BUT Other kids are often not yelled at or called mean names.
6. Some kids are often left out of a group when another kid is mad at them. BUT Other kids are often not left out of a group when another kids is mad at them.
7. Some kids are often pushed or shoved by another kid at school. BUT Other kids are often not pushed or shoved by another kid at school.
8. Some kids are often made to feel happy by another kid. BUT Other kids are not made to feel happy by another kid.
9. Some kids often have lies told about them to make other kids not like them anymore. BUT Often other kids do not have lies told about them to make other kids not like them anymore.
10. Some kids often are kicked or have their hair pulled by another kid. BUT Other kids are often not kicked or have their hair pulled by another kid.
11. Some kids often have another kid say they won't like them unless the kid does what they want. BUT Often other kids do not have another kid say they won't like them unless the kid does what they want.
12. Some kids often have other kids try to keep others from liking them by saying mean things about them. BUT Often some kids do not have other kids try to keep others from liking them by saying mean things about them.
13. Some kids often have another kid try to cheer them up when they feel sad or upset. BUT Often some kids do not have another kid try to cheer them up when they feel sad or upset.



14. Some kids often have another kid say they will beat them up if they do not do what they want them to do.  
BUT Often some kids do not have another kid say they will beat them up if they do not do what they want them to do.
15. Some kids often have another kid let them know they care about them. BUT Often some kids do not have another kid let them know they care about them.

## Appendix B

### Self-Report Coping Scale

Vignette:

Imagine that you set your backpack down on the floor while you open your locker in between classes. Everyone is in the hallway on the way to their next class. Just then, a student comes up to you and slams your locker shut. Another student grabs your backpack. The two students play keep away with your backpack, tossing it back and forth. You try to get it from them, but they just laugh and call you bad names in front of everyone. Now everyone is laughing and pointing at you. When the bell rings, they rush down the hall. On their way to class, they throw your backpack into a trash can that was filled up with all the garbage from lunch.

Below are some things other kids say they would do in this situation.

If everyone saw this happen, would you...

	Definitely would do	Probably would do	Not sure	Probably would NOT do	Definitely would NOT do
1. Ignore it.					
2. Tell a teacher or another adult.					
3. Forget the whole thing.					
4. Do something to get even.					
5. Keep quiet.					
6. Fight back so he'll leave me alone.					
7. Talk to my close friend about it.					
8. Do something to take my mind off of it.					
9. Think about something that makes me happy.					

## Appendix C

### Self-Efficacy Scale

Vignette:

Imagine that you set your backpack down on the floor while you open your locker in between classes. Everyone is in the hallway on the way to their next class. Just then, a student comes up to you and slams your locker shut. Another student grabs your backpack. The two students play keep away with your backpack, tossing it back and forth. You try to get it from them, but they just laugh and call you bad names in front of everyone. Now everyone is laughing and pointing at you. When the bell rings, they rush down the hall. On their way to class, they throw your backpack into a trash can that was filled up with all the garbage from lunch.

If someone really took your backpack, laughed at you and called you mean names in front of everyone, how hard would it be for you to...

	Very Hard	Hard	A little hard sort of easy	Not hard at all-very easy
1. Ignore it.				
2. Tell a teacher or another adult.				
3. Forget the whole thing.				
4. Do something to get even.				
5. Keep quiet.				
6. Fight back.				
7. Talk to my close friend about it.				
8. Do something to take my mind off of it.				
9. Think about something that makes me happy.				

## Appendix D

### Factor Loadings for Coping Measure

Factor*	III	IV	I	II
<b>Aggressive (<math>\alpha = .794</math>)</b>				
Item 4			.52	
Item 6			.54	
<b>Cognitive Approach (<math>\alpha = .725</math>)</b>				
Item 8			.41	
Item 9			.41	
<b>Cognitive Distancing (<math>\alpha = .689</math>)</b>				
Item 1				.43
Item 3				.41
Item 5				.44
<b>Help-Seeking (<math>\alpha = .40</math>)</b>				
Item 2				
				.55
Item 7				
				.47

## Appendix E

### Means and Standard Deviations for All Variables

	Means	Standard Deviations
Perceived Peer Victimization	2.31	.70
<i>Coping Responses</i>		
Aggressive	3.18	1.40
Cognitive Approach	3.48	1.27
Cognitive Distancing	2.56	1.14
Help-Seeking	3.84	1.07
<i>Self-Efficacy Beliefs</i>		
Aggressive	2.58	1.15
Cognitive Approach	2.45	1.18
Cognitive Distancing	1.96	.91
Help-Seeking	3.00	.98

## Appendix F

### Means and Standard Deviations for Victimized Adolescents

	Means	Standard Deviations
<i>Coping Responses</i>		
Aggressive	3.35	1.36
Cognitive Approach	3.72	1.24
Cognitive Distancing	2.52	1.12
Help-Seeking	3.91	1.02
<i>Self-Efficacy Beliefs</i>		
Aggressive	2.72	1.14
Cognitive Approach	2.47	1.10
Cognitive Distancing	1.81	.83
Help-Seeking	3.04	.88

## Appendix G

### Means and Standard Deviations for Nonvictimized Adolescents

	Means	Standard Deviations
<i>Coping Responses</i>		
Aggressive	2.74	1.36
Cognitive Approach	3.32	1.27
Cognitive Distancing	2.50	1.08
Help-Seeking	3.91	1.06
<i>Self-Efficacy Beliefs</i>		
Aggressive	2.40	1.36
Cognitive Approach	2.42	1.23
Cognitive Distancing	1.97	.87
Help-Seeking	3.05	1.02

## Appendix H

### Bivariate Correlations Among All Variables

EHS	PV	CAGG	CACA	CPCD	CHS	EAGG	EACA	EPCD
Perceived Victimization (PV)	-							
<i>Coping Responses</i>								
Aggressive (CAGG)	.219**	-						
Cognitive Approach (CACA)	.157	-.166*	-					
Cognitive Distancing (CPCD)	.010	.005	.255**	-				
Help-Seeking (CHS)	.00	-.237**	.361**	-.058	-			
<i>Self-Efficacy Beliefs</i>								
Aggressive (EAGG)	.138	.397**	-.198*	.109	-.168*	-		
Cognitive Approach (EACA)	.020	-.261**	.329**	.269**	.035	.076	-	
Cognitive Distancing (EPCD)	-.097	-.034	.124	.455**	-.202**	.206**	.497**	-
Help-Seeking (EHS)	-.003	-.297**	.108	-.011	.273**	.163*	.360**	.304**
-								

\*\*  $p < 0.01$  level (2-tailed).

\*  $p < 0.05$  level (2-tailed).



## Appendix I

### Bivariate Analysis for Peer Victimization and Coping Self-Efficacy

Table 1  
*Peer victimization and coping self-efficacy*

	Self-efficacy type							
	Aggressive		Cognitive approach		Cognitive distancing		Help-seeking	
	R	P	r	p	r	p	r	P
Peer Victimization	.138	.094	.020	.806	-.097	.239	-.003	.971

\* $p < .05$ . \*\* $p < 0.01$ .

## Appendix J

### Bivariate Analysis for Peer Victimization and Coping Responses

Table 2  
*Peer victimization and coping responses*

	Coping type							
	Aggressive		Cognitive approach		Cognitive distancing		Help-seeking	
	r	p	r	p	r	p	r	p
Peer Victimization	.219**	.008*	.157	.059	.010	.904	.000	1.00

\* $p < 0.05$ . \*\*  $p < 0.01$ .

## Appendix K

### Bivariate Analysis for Coping Self-Efficacy and Coping Responses

Table 3  
*Coping Self-Efficacy and Coping Responses*

Self-efficacy	Coping response type			
	1	2	3	4
<i>Response type</i>				
1. Aggressive	.397**	-		
2. Cognitive approach	-.261**	.329**	-	
3. Cognitive distancing	-.034	.124	.455**	-
4. Help-seeking	-.297**	.108	-.011	.273**

\* $p < 0.05$ . \*\* $p < 0.01$ .

## Appendix L

### Bivariate Analysis for Self-Efficacy and Coping Response by Level of Victimization

Table 4  
*Self-Efficacy and Coping Response by Level of Victimization*

<i>Self-efficacy type</i>	<i>Coping type</i>			
	1	2	3	4
<i>Victimized</i>				
1. Aggressive	.571**	-.259**	-.027	-.185
2. Cognitive approach	-.238*	.428**	.231*	-.091
3. Cognitive distancing	-.034	.207	.450**	-.432**
4. Help-seeking	-.214	.106	.031	.158
<i>Nonvictimized</i>				
1. Aggressive	.278*	-.159	.238	-.263*
2. Cognitive approach	-.346**	.264*	.210	.087
3. Cognitive distancing	-.179	.128	.514**	.077
4. Help-seeking	-.393**	.076	-.042	.318**

\* $p < 0.05$ . \*\* $p < 0.01$ .

## Appendix M

### Predictors of Aggressive Coping

Table 5

*Summary of Heirarchal Regression Analysis for Variables Predicting Aggressive Coping (N = 142)*

Predictor	Model 1			Model 2			Model 3		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	<i>B</i>	<i>B</i>	<i>SE B</i>	<i>B</i>
Peer victimization	0.61	0.23	0.22**	0.48	0.21	.17*	-0.38	0.52	-0.14
Self-efficacy beliefs				0.54	0.09	.43***	0.02	0.30	0.01
PV x SD							0.33	0.19	0.56
R2		0.05			0.23			0.25	
<i>F</i>		7.14**			20.95***			15.27***	

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

## Appendix N

### Predictors of Cognitive-Approach Coping

Table 6

*Summary of Hierarchical Regression Analysis for Variables Predicting Cognitive Approach Coping (N = 144)*

Predictor	Model 1			Model 2			Model 3		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	<i>B</i>	<i>B</i>	<i>SE B</i>	$\beta$
Peer victimization	0.40	0.21	0.16	0.41	0.20	.16*	-0.08	0.48	-0.03
Self-efficacy beliefs				0.39	0.09	.34***	0.09	0.28	0.08
PV x SD							0.20	0.17	0.34
R <sup>2</sup>		0.25			0.14			0.15	
<i>F</i>		3.63			11.80***			8.31***	

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

## Appendix O

### Predictors of Cognitive-Distancing Coping

Table 7

*Summary of Heirarchal Regression Analysis for Variables Predicting Cognitive Distancing Coping (N =145)*

Predictor	Model 1			Model 2			Model 3		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
Peer victimization	0.02	0.28	0.01	0.16	0.16	0.07	0.32	0.41	0.15
Self-efficacy beliefs				0.64	0.10	.48***	0.76	0.32	.56*
PV x SD							-0.08	0.20	-0.11
R2		0.00			0.23			0.23	
<i>F</i>		0.02			21.26***			14.14***	

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

## Appendix P

### Predictors of Help-Seeking Coping

Table 8

*Summary of Hierarchal Regression Analysis for Variables Predicting Help-Seeking Coping (N =142)*

Predictor	Model 1			Model 2			Model 3		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	<i>B</i>
Peer victimization	0.00	0.17	0.00	0.03	0.17	0.02	0.66	0.62	0.32
Self-efficacy beliefs				0.27	0.10	0.23**	0.58	0.31	0.50
PV x SD							-0.20	0.19	-0.40
R2		0.00			0.05			0.06	
<i>F</i>		0.00			4.01*			3.03*	

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



## References

- Andreou, E. (2001). Bully/victim problems and their association with coping behavior in conflictual peer interactions among school-age children. *Educational Psychology, 21*, 59-66.
- Bandura, A. (1981). In search of pure unidirectional determinants. *Behavior Therapy, 12*(1), 30-40.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York, NY, US: W H Freeman/Times Books/ Henry Holt & Co.
- Benight, C. C., & Bandura, A. (2004). Social cognitive theory of posttraumatic recovery: The role of perceived self-efficacy. *Behaviour Research and Therapy, 42*(10), 1129-1148.
- Biggs, B. K., Nelson, J. M., & Sampilo, M. L. (2010). Peer relations in the anxiety-depression link: Test of a mediation model. *Anxiety, Stress & Coping: An International Journal, 23*(4), 431-447.
- Bijttebier, P., & Vertommen, H. (1998). Coping with peer arguments in school-age children with bully/victim problems. *British Journal of Educational Psychology, 68*(3), 387-394.
- Boulton, M. J., & Underwood, K. (1992). Bully victim problems among middle school children. *British Journal of Educational Psychology, 62*(1), 73-87.
- Camodeca, M., Goossens, F. A., Schuengel, C., & Terwogt, M. M. (2003). Links between social information processing in middle childhood and involvement in bullying. *Aggressive Behavior, 29*(2), 116-127.

- Camodeca, M., Goosens, F. A. (2005). Children's opinions on effective strategies to cope with bullying: The importance of bullying role and perspective. *Educational Research, 47*(1), 93-105.
- Carver, C. S., Scheier, M. F., & Weintraub, J. K. (1989). Assessing coping strategies: A theoretically based approach. *Journal of Personality and Social Psychology, 56*(2), 267-283.
- Causey, D. L., & Dubow, E. F. (1992). Development of a self-report coping measure for elementary school children. *Journal of Clinical Child Psychology, 21*(1), 47-59.
- Chesney, M. A., Neilands, T. B., Chambers, D. B., Taylor, J. M., & Folkman, S. (2006). A validity and reliability study of the Coping Self-Efficacy scale. *British Journal of Health Psychology, 11*(3), 421-437.
- Cole, D. A., Maxwell, M., Dukewich, T. L., & Yosick, R. (2010). Targeted peer victimization and the construction of positive and negative self-cognitions: Connections to depressive symptoms in children. *Journal of Clinical Child and Adolescent Psychology, 39*(3), 421-435.
- Compas, B. E., Connor-Smith, J. K., Saltzman, H., Thomsen, A. H., & Wadsworth, M. E. (2001). Coping with stress during childhood and adolescence: Problems, progress, and potential in theory and research. *Psychological Bulletin, 127*(1), 87-127.
- Crick, N. R., & Bigbee, M. A. (1998). Relational and overt forms of peer victimization: A multiinformant approach. *Journal of Consulting and Clinical Psychology, 66*(2), 337-347.

- Crick, N. R., & Dodge, K. A. (1994). A review and reformulation of social information-processing mechanisms in children's social adjustment. *Psychological Bulletin*, *115*(1), 74-101.
- Crick, N. R., & Dodge, K. A. (1996). Social information-processing mechanisms on reactive and proactive aggression. *Child Development*, *67*(3), 993-1002.
- Crick, N. R., & Grotpeter, J. K. (1995). Relational aggression, gender, and social psychological adjustment. *Child Development*, *66*(3), 710-722.
- Crick, N. R., & Grotpeter, J. K. (1996). Children's treatment by peers: Victims of relational and overt aggression. *Developmental and Psychopathology*, *8*(2), 367-380.
- Endler, N. S., & Parker, J. D. (1990). State and trait anxiety, depression and coping styles. *Australian Journal of Psychology*, *42*(2), 207-220.
- Erdley, C. A., & Asher, S. R. (1996). Children's social goals and self-efficacy perceptions as influences on their responses to ambiguous provocation. *Child Development*, *67*(4), 1329-1344.
- Erdley, C. A., & Asher, S. R. (1999). A social goals perspective on children's social competence. *Journal of Emotional and Behavioral Disorders*, *7*(3), 156-167.
- Goodman, K. L., & Southam-Gerow, M. A. (2010). The regulating role of negative emotions in children's coping with peer rejection. *Childhood Development*, *41*(5), 515-534.
- Goodman, M. R., Stormshak, E. A., & Dishion, T. J. (2001). The significance of peer victimization at two points in development. *Journal of Applied Developmental Psychology*, *22*(5), 507-526.

- Graham, S. (2005). Attributions and peer harassment. *Social Behavior and Communication in Biological and Artificial Systems*, 6(1), 119-130.
- Harper, B. D., Lemerise, E. A., & Caverly, S. L. (2010). The effect of induced mood on children's social information processing: Goal clarification and response decision. *Journal of Abnormal Psychology: An official publication of the International Society for Research in Child and Adolescent Psychopathology*, 38(5), 575-586.
- Hawker, D. S., & Boulton, M. J. (2000). Twenty years' research on peer victimization and psychosocial maladjustment: A meta-analytic review of cross-sectional studies. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 41(4), 441-455.
- Hoover, J. H., Oliver, R., & Hazler, R. J. (1992). Bullying: Perceptions of adolescent victims in the Midwestern USA. *School Psychology International*, 13(1), 5-16.
- Juvonen, J., & Graham, S. (2001). *Peer harassment in school: The plight of the vulnerable and victimized*. New York, NY, US: Guilford Press.
- Kochenderfer-Ladd, B. (2004). Peer victimization: The role of emotions in adaptive and maladaptive coping. *Social Development*, 13(3), 329-349.
- Kochenderfer-Ladd, B., & Skinner, K. (2002). Children's coping strategies: Moderators of the effects of peer victimization? *Developmental Psychology*, 38(2), 267-278.
- Kochenderfer-Ladd, B., & Wardrop, J. L. (2001). Chronicity and instability of children's peer victimization experiences as predictors of loneliness and social satisfaction trajectories. *Child Development*, 72(1), 134-151.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer.

- Lemerise, E. A., & Arsenio, W. F. (2000). An integrated model of emotion processes and cognition in social information processing. *Child Development, 71*(1), 107-118.
- Miller, S. M., Green, V. A., & Bales, C. B. (1999). What you don't know can hurt you: A cognitive-social framework for understanding children's responses to stress. In Lewis, Michael, & Ramsay, Douglas (Eds.), *Soothing and stress* (pp. 257-292). Mahwah, NJ, US: Lawrence Erlbaum Associates Publishers.
- Olweus, D. (1991). Bully/victim problems among schoolchildren: Basic facts and effects of a school based intervention program. In Pepler, Debra, & Rubin, Kenneth H. (Eds.), *The development and treatment of childhood aggression* (pp. 411-448). Hillsdale, NJ, England: Lawrence Erlbaum Associates, Inc.
- Olweus, D. (1992). Victimization among schoolchildren: Intervention and prevention. In Albee, George W., Bond, Lynne A., & Monsey, Toni V. Cook (Eds.), *Improving children's lives: Global perspectives on prevention* (pp. 279-295). Thousand Oaks, CA, US: Sage Publications, Inc.
- Ozer, E. M., & Bandura, A. (1990). Mechanisms governing empowerment effects: A self-efficacy analysis. *Journal of Personality and Social Psychology, 58*(3), 472-486.
- Park, C. L., & Folkman, S. (1997). Meaning in the context of stress and coping. *Review of General Psychology, 1*(2), 115-144.
- Perry, D. G., Kusel, S. J., & Perry, L. C. (1988). Victims of peer aggression. *Developmental Psychology, 24*(6), 807-814.
- Perry, D. G., Perry, L. C., & Rasmussen, P. (1986). Cognitive social learning mediators of aggression. *Child Development, 57*(3), 700-711.

- Phelps, C. E. R. (2001). Children's responses to overt and relational aggression. *Journal of Clinical Child Psychology, 30*(1), 240-252.
- Pronk, R. E., & Zimmer-Gembeck, M. J. (2010). It's "mean," but what does it mean to adolescents? Relational aggression described by victims, aggressors, and their peers. *Journal of Adolescent Research, 25*(2), 175-204.
- Singh, P., & Bussey, K. (2011). Peer victimization and psychological maladjustment: The mediating role of coping self-efficacy. *Journal of Research on Adolescence, 21*(2), 420-433.
- Slee, P. T. (1994). Situational and interpersonal correlates of anxiety associated with peer victimization. *Child Psychiatry and Human Development, 25*(2), 97-107.
- Smith, P. K., Shu, S., & Madsen, K. (2001). Characteristics of victims of school bullying: Developmental changes in coping strategies and skills. In Juvonen, Jaana, & Graham, Sandra (Eds.), *The plight of the vulnerable and victimized* (pp. 332-351). New York, NY, US: Guilford Press.
- Smith, P. K., Talamelli, L., Cowie, H., Naylor, P., & Chauhan, P. (2004). Profiles of non-victims, escaped victims, continuing victims and new victims of school bullying. *British Journal of Educational Psychology, 74*(4), 565-581.
- Smith, R. E., & Shoda, Y. (2009). Personality as a cognitive-affective processing system. In Corr, Philip J., & Matthews, Gerald (Eds.), *The Cambridge handbook of personality psychology* (pp. 473-487). New York, NY, US: Cambridge University Press.
- Spence, S. H., De Young, A., Toon, C., & Bond, S. (2009). Longitudinal examination of the associations between emotional dysregulation, coping responses to peer

provocation, and victimisation in children. *Australian Journal of Psychology*, 61(3), 145-155.

Terranova, A. M. (2009). Factors that influence children's responses to peer victimization. *Child Youth Care Forum*, 38(5), 253-271.

Terranova, A. M., Boxer, P., & Morris, A. S. (2010). Responding to peer victimization in middle childhood: What is a victim to do? *Journal of Aggression, Conflict and Peace Research*, 2(4), 15-24.

U.S. Census Bureau (2010, January 12). *State and county Quickfacts: Allegany County, N.Y.* Retrieved October 30, 2011, from <http://quickfacts.census.gov>.