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Long-Term Effects of Bullying: Exploring the Relationships among Recalled Experiences with Bullying, Current Coping Resources, and Reported Symptoms of Distress

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ACCEPTANCE

This dissertation, LONG-TERM EFFECTS OF BULLYING: EXPLORING THE RELATIONSHIPS AMONG RECALLED EXPERIENCES WITH BULLYING, CURRENT COPING RESOURCES, AND REPORTED SYMPTOMS OF DISTRESS, by COURTNEY CHAMBLESS, was prepared under the direction of the candidate's Dissertation Advisory Committee. It is accepted by the committee members in partial fulfillment of the requirements for the degree Doctor of Philosophy in the College of Education, Georgia State University.

The Dissertation Advisory Committee and the student's Department Chair, as representatives of the faculty, certify that this dissertation has met all standards of excellence and scholarship as determined by the faculty. The Dean of the College of Education concurs.

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ABSTRACT

LONG-TERM EFFECTS OF BULLYING: EXPLORING THE RELATIONSHIPS AMONG RECALLED EXPERIENCES WITH BULLYING, CURRENT COPING RESOURCES, AND REPORTED SYMPTOMS OF DISTRESS

by

Courtney B. Chambless

Retrospective studies of college students who recall experiencing bullying during childhood and/or adolescence have found that being the target of bullying may place one at greater risk for depression (Roth, Coles, & Heimburg, 2002; Storch et al., 2001), anxiety disorders (McCabe, et al., 2003; Roth et al.) and interpersonal relationships (Schafer et al., 2004) in comparison to peers who do not recall a history of bullying during childhood or adolescence. However, researchers have found that not all targets of bullying develop such problems in adulthood (Schafer et al., 2004; Dempsey & Storch, 2008). Little attention has been devoted to understanding resiliency among adults who experienced bullying during childhood and/or adolescence (Davidson & Demaray, 2007). The purpose of this dissertation was to 1). Explore gender and racial/ethnic differences in recall of perceived seriousness of past bullying experiences 2). Replicate past findings regarding the association between past experiences with bullying and depression, anxiety, and loneliness in college students 3). Explore whether coping resources accounted for differences in symptoms of distress. A total of 211 college students completed the Retrospective Bullying Questionnaire (Schaefer, et al, 2004); The Brief Symptom Inventory (Derogatis, 1982); UCLA Loneliness Scale (Russell, 1996) and the Coping Resources Inventory for Stress-Short form (CRIS-SF; Matheny, Curlette, Aycock, & Curlette, 1993). Multivariate analysis of variance (MANOVA) was used to investigate gender and racial/ethnic differences in perceived seriousness of bullying. Hierarchical

linear regression was used to test whether coping resources moderated the relationship between psychosocial distress in adults and past experiences with bullying. Females in this study reported that they perceived their experiences with relational bullying during middle/high school to be more serious than males. There were no significant differences between males and females in perceived seriousness of physical bullying during elementary or middle/high school, verbal bullying during elementary or middle/high school or relational bullying during elementary school. Males and females did not differ significantly in the duration of bullying experiences. White students reported that they perceived their experiences with relational and verbal bullying during middle/high school in middle/high school to be more serious. There were no significant differences between the racial/ethnic groups in perceived seriousness of physical, verbal, or relational bullying during elementary school. There also were no significant differences among the racial/ethnic groups duration of bullying. Implications for future research and clinical practice are addressed. Perceived seriousness of bullying and duration of bullying during childhood and adolescence was found to predict depression, anxiety, and loneliness. Coping resources were not found to be significant moderators of distress.

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ABBREVIATIONS

ANX	Anxiety
BSI	Brief Symptom Inventory
CONF	Confidence
CRIS-SF	Coping Resources Inventory for Stress-Short Form
CRE	Coping Resource Effectiveness
DEP	Depression
LONE	Loneliness
CRIS-SF	Coping Resource Inventory for Stress, Short Form
RBQ	Retrospective Bullying Questionnaire
SS	Social Support
UCLA	University of California, Loneliness Scale

CHAPTER 1

A PROPOSED FRAMEWORK FOR UNDERSTANDING LONG-TERM EFFECTS OF BULLYING: IMPLICATIONS FOR COLLEGE COUNSELING CLINICIANS

Retrospective studies (e.g., Chapell et al., 2006; Chapell et al., 2008) of past bullying experiences among college students have documented that up to 72% (Chapell et al., 2006) recalled that they were the target of bullying at least once during their elementary or middle school years. These experiences may be of concern to college counselors as bullying during the childhood and adolescent years has been found to be associated with a greater risk for mental health and relational problems during the college years (e.g., Dempsey & Storch, 2008; Hawker & Boulton, 2000; Jantzer, Hoover, & Narloch, 2006; Newman, Holden, & Delville, 2005; Olweus, 1993; Schafer et al., 2004; Tritt & Duncan, 1997).

Researchers also have found that not all targets of bullying develop such problems in adulthood (Hawker & Boulton, 2000; Jantzer et al., 2006; Newman et al., 2005; Olweus, 1993; Schafer et al., 2004). Despite the mounting evidence that school-aged bullying may have implications for psychosocial functioning during the college years (Dempsey & Storch, 2008; Hawker & Boulton, 2000; Jantzer et al., 2006; Newman et al., 2005; Olweus, 1993; Schafer et al., 2004; Tritt & Duncan, 1997) there is limited information in the college counseling literature for understanding why some college students who were targets in elementary through high school may experience problems while others do not. The purpose of this article is to address this gap in the literature by synthesizing the research on potential long-term effects of bullying and considering how

the literature in positive psychology and cognitive theory may help explain resiliency among former victims of bullying. Suggestions for future research and implications for college mental health practitioners also are discussed.

Bullying

Definitions of Bullying

In order to be able to accurately assess for past bullying experiences, it is important for college counselors to have an understanding of what behaviors constitute bullying. A commonly referenced definition of bullying posits that bullying is a chronic form of victimization involving unprovoked attempts to harm the other person (Olweus, 1993). Building on Olweus's initial definition of bullying, many researchers examining bullying behaviors acknowledged the following five features of bullying (Griffin & Gross, 2004; Roth, Coles, & Heimburg, 2002; Tritt & Duncan, 1997): (1) bullying consists of behavior that is directed towards a victim with the intention to harm or instill fear in the victim; (2) the behavior occurs without provocation from the victim; (3) the aggression occurs repeatedly over a period of time (4) the behavior occurs within the context of a social group; and (5) an imbalance of power exists between the aggressor and victim. Bullying can take the form of physical attacks (hitting, kicking, or shoving); direct verbal attacks (calling a student names, saying hurtful or unpleasant things); or relational aggression (purposely excluding a student, starting rumors).

Long-term Effects of Bullying.

Researchers have begun to establish a literature base documenting the long-term effects of childhood/adolescent bullying among college students (Dempsey & Storch, 2008; Hawker & Boulton, 2000; Jantzer et al., 2006; Newman et al., 2005; Olweus, 1993;

Schafer et al., 2004; Tritt & Duncan, 1997). Adequate assessment of the nature of clients' presenting problems, as well as factors contributing to these problems is critical to providing effective treatment (Hood & Johnson, 2002). Understanding the aspects associated with the long-term effects of bullying may strengthen the initial assessment phase of counseling by assisting college mental health professionals to identify former victims of bullying and determining if further assessment of associated consequences is needed. Retrospective studies of college students who experienced bullying during childhood and/or adolescence were more likely than non-bullied peers to experience depression (Roth et al. 2002; Storch et al., 2001), anxiety disorders (McCabe, et al., 2003; Roth, Cole, &Heimburg) and problems in interpersonal relationships (Ledley et al, 2006; Schafer et al., 2004). College students who recalled a history of bullying during school age years reported more symptoms of depression in comparison to adults who did not recall experiencing bullying during their primary and secondary school years (Hawker & Boulton; Jantzer et al.; Olweus, 1993). Additionally, college students who reported being former victims of school-aged bullying were more likely to endorse feeling that they had little control over outcomes in their lives (Dempsey & Storch, 2008) and lower self-esteem (Olweus). These factors also have been found to be associated with a greater risk for depression (Orth, Robins, Trzesniewski, Maes, & Schmitt, 2009; Robbins & Hayes, 1995).

In addition to symptoms related to depression (Roth et al., 2002; Storch et al., 2001), college mental health clinicians hould also be aware that college students who recalled a history of bullying reported more symptoms of anxiety in comparison to non-bullied peers (Dempsey & Storch, 2008; Gladstone, Parker, & Malhi, 2006; McCabe et

al, 2003). In studies examining retrospective recall of bullying experiences, college students who reported being the target of school-age bullying were more likely to endorse items related to anxiety in comparison to non-bullied peers (Dempsey & Storch; Gladstone et al.; McCabe et al). Similarly, in a study of adult males who reported being the target of weekly bullying for five or more years during adolescence, participants attributed their current symptoms of anxiety to their former bullying victimization. (Gladstone et al.). In addition to reporting more symptoms of anxiety (e.g., Dempsey & Storch; Gladstone et al.; McCabe et al), McCabe and colleagues found that college students who recalled a history of bullying during childhood and/or adolescence reported an earlier onset of anxiety disorders and increased anxiety in social situations than those who did not recall a history of bullying. In the same study, formerly bullied college students were more likely than non-bullied peers to report viewing the world as a dangerous place (McCabe et al.), a cognitive pattern also related to anxiety disorders (Hawker & Boulton, 2000).

There also is at least one study that provides evidence indicating a potential link link between school-age bullying and post-traumatic stress during childhood and adolescence (Rivers, 2004). In a study of 119 lesbian, gay, and bi-sexual men and women who recalled experiencing bullying related to their sexual orientation, Rivers found that 17% of the participants reported experiencing symptoms of post-traumatic stress. Over 25% of participants in this study reported continued distress associated with remembering their bullying experiences and 21% reported that they continued to experience intrusive memories related to bullying events. Because there are no current studies that have replicated this finding with college student populations, it is not clear if the relationship

between post-traumatic stress and bullying is attributable solely to the bullying experiences or if it is connected to additional stressors related to homophobia and heterosexism. Lesbian and gay youth have been found to report higher rates of school-based victimization than heterosexual peers (Berrill, 1992; D'Augelli, Pilkington, & Hershberger, 2002; Poteat & Espelage, 2005) which may lead to greater likelihood of experiencing symptoms associated with post-traumatic stress. Additionally, Poteat and Espelage (2007) and D'Augelli and colleagues have found that homophobic victimization had a significant effect on reported rates of post-traumatic stress and problems with social adjustment and in secondary school students. Further research is needed to explore the relationship between school- In addition to depression (Roth et al., 2002; Storch et al., 2001), anxiety disorders (McCabe et al., 2003; Roth et al.) and symptoms of post traumatic stress (Rivers, 2004), college students who formerly experienced school-age bullying also may be at greater risk than non-bullied peers for experiencing loneliness and difficulty forming secure attachments in romantic relationships (Dempsey & Storch, 2008; Schafer et al., 2004; Tritt & Duncan, 1997). A history of bullying has been found to be a significant predictor of high levels of loneliness in college students (Dempsey & Storch; Schafer et al.; Tritt & Duncan). In addition, college students who recalled being the target of school aged bullying also were more likely than non-bullied students to endorse items regarding apprehension of others' evaluation of them; greater expectations that others would evaluate them negatively; more distress related to perceived negative evaluations; and avoidance of situations in which evaluation might occur (Dempsey & Storch). These cognitive styles have been noted to be correlates of loneliness (Storch & Masia-Warner, 2004). Schafer and colleagues also reported that college students who

were bullied in elementary and high school identified more difficulty maintaining friendships.

There also may be a link between bullying and social phobia (Gladstone et al., 2006), a psychological disorder also associated with loneliness (Neal & Edelmann, 2003). Gladstone and colleagues found that young adults who reported experiencing bullying during childhood or adolescence were more likely to have a diagnosis of social phobia in comparison to adults who were not bullied. However, it should be noted that this study included a community sample rather than a college student population. While the link between social phobia and early experiences with bullying has not been replicated in college student populations, college counselors may need to be aware of the potential link between social phobia and former experiences with bullying as they may want to explore symptoms of social phobia among former victims of bullying during the initial assessment phase.

College students who were bullied during childhood and/or adolescence also may be at greater risk for bullying during the college years (Chapell et al., 2004). While there is an assumption that bullying is rare on college campuses, at least one study have found that that bullying occurred with regularity on college campuses (Chapell et al.). In a survey of 1,025 college students, 60% of respondents reported that they had observed another student being bullied, and over 44% of respondents had witnessed a professor or instructor bully a student (Chapell et al.). Chapell and colleagues (2006) found a significant positive correlation between experiencing bullying during childhood and/or adolescence and being the target of bullying during the college years. This finding is relevant for college clinicians because it indicates that clients who are former victims of

bullying may be at greater risk for current experiences of bullying, which may also have implications for treatment.

Factors of Bullying Associated with Long-term Effects

In addition to understanding the potential symptoms associated with earlier experiences with bullying, it may also be important for college counselors to understand the factors associated with differential effects (Rivers & Cowie, 2006), as this would strengthen the initial assessment phase by providing information about whether bullying experiences are likely to be affecting current functioning. Frequency, duration, and timing of bullying have been identified as potential contributing factors to the development of long-term problems during the college years (Jantzer et al., 2006; Newman et al., 2005; Schafer et al., 2004; Tritt & Duncan, 1997). In a retrospective study of 853 college students, Newman and colleagues found that as the recalled frequency of bullying increased and the recalled duration of bullying during childhood/adolescence increased, symptoms of distress during adulthood also increased. Greater frequency of bullying also has been found to be negatively correlated with trust in relationships and satisfaction with quality of friendships among college students (Jantzer et al.). Tritt and Duncan found that college students who reported greater frequency of bullying also were more likely to report lower levels of self-esteem.

Duration of bullying is another factor that appears influential in the development of long-term effects (Schafer et al., 2004). College students who recalled being the subject of bullying throughout their primary and secondary school years were more likely to report problems with psychological distress than those who were only bullied only during one of these periods of time (i.e., either primary or secondary school) (Schafer et

al.). Perceived isolation during bullying events also has been found to be significantly associated with higher reported levels of distress. More specifically, those who were bullied and perceived themselves as isolated, were more likely to report elevated symptoms of distress than those who were bullied, but did not recall feeling isolated at the time of bullying (Newman et al., 2005).

Age at the time of bullying also may be an important factor associated with long-term effects of bullying (Schafer et al., 2004). There is some evidence that bullying during secondary school may be more influential than bullying during the primary school years. Schafer and colleagues found that young adults who recalled only being bullied during secondary school were more likely to have a fearful attachment style and reported lower self-esteem in relationships than individuals who recalled only being bullied during primary school years. However, duration appeared to be a stronger predictor of these problems than age at the time of bullying.

Understanding Long-term Effects of Bullying

Results of current research support the notion that bullying during childhood and adolescence may have long-term consequences for mental health, including greater risk for depression, anxiety, loneliness, post traumatic stress, and problems with interpersonal functioning (Hawker & Boulton, 2000; Jantzer et al., 2006; Newman et al., 2005; Rivers, 2004; Schafer et al., 2004; Tritt & Duncan, 1997). These patterns of symptoms were similar to symptoms displayed in children who are currently being bullied (e.g., Andreou, 2000; Craig, 1998; Espelage & Swearer, 2003; Slee 1995; Smokwoski & Holland, 2005), suggesting that the effects of bullying may persist into young adulthood. Despite these findings, little attention has been given to understanding the processes that may either

lead to long-term patterns of distress among former victims of bullying (Jantzer et al.; Newman et al.; Schafer et al.) or that may facilitate resilience among former victims of bullying. Applying a resilience framework informed by positive psychology and cognitive theory to the experience of bullying may enhance our understanding of long-term effects and the processes that promote adjustment among former victims of bullying. Furthermore, understanding resiliency within the context of bullying may provide information for college mental health clinicians to guide the initial assessment phase of counseling and to identify appropriate interventions for clients.

Resilience refers to a "phenomena characterized by patterns of positive adaptation in the context of significant adversity or risk" (Masten, 2001, p. 75). A potential framework for understanding resiliency among former victims of bullying is Meyers and Meyers' (2003) revision of Albee's (1988) prevention formula. According to the Meyers and Meyers' model, resiliency can be increased when variables such as subjective well-being, feelings of competence, and educational/social/medical supports are enhanced. Decreasing the strength of variables such as individual predisposition to psychosocial problems, stress, and exploitation (e.g., racism, implications of socio-economic status, abuse) are also likely to increase resilience. Meyers and Meyers suggested that the model could be thought of in terms of a formula, where factors associated with increasing opportunities for positive development/adjustment (e.g., subjective well-being, competence, and supports) were represented in the numerator and factors such as individual predisposition, stress, and exploitation that may have hindered resilience were represented in the denominator (see Figure 1 for a representation of the model).

$$\text{Learning/Adjustment Positive Development} = \frac{\text{Subjective Well-being} + \text{Competence} + \text{Supports}}{\text{Individual Predisposition} + \text{Stress} + \text{Exploitation}}$$

Figure 1. Meyers and Meyers's Model Revised Prevention Formula

In the Meyers and Meyers' (2003) model, factors such as stress, individual predisposition, and exploitation are considered potential hindrances to resiliency. Stress refers to external demands or events that place excessive strain on an individual and exhaust the individual's resources for coping with such demands. Examples of sources stress may include experiences such as parental divorce, death of a loved one, and illness (Meyers & Meyers). Within this model, bullying may serve as a stressor if it is perceived by the victim as an on-going threat to physical safety, emotional well-being, and self-esteem (Newman et al., 2005; Olweus, 1993). Individuals who have experienced additional stressors, are at greater risk for exploitation, and/or who possess predispositions for anxiety, depression, and problems in interpersonal functioning, might be more likely to exhibit problems associated long-term effects of bullying, including depression, anxiety, loneliness, and problems in relationships.

Individual predisposition refers to characteristics of the individual (e.g., a genetic or biological predisposition for anxiety, depression, etc.) that may place a person at risk for problems in psychosocial functioning (Meyers & Meyers, 2003). It also may include tendencies to engage in negative attributions, factors associated with depression and anxiety. Drawing from cognitive theory (Beck, 1964, 1976, 1993; Beck et al., 1985), former victims of bullying who are more prone to negative appraisals of events may be predisposed to problems such as depression, anxiety, loneliness, and relationship difficulties in comparison to those who experienced bullying but did not engage in

negative appraisals. These tendencies also relate to the construct of competence, which are further explained later in this chapter.

Exploitation refers to environmental stress resulting from systematic differences in power between groups that lead to inequities in accessing resources (e.g., health care, education, mental health services) which may result in decreased opportunities for positive adjustment (Meyers & Meyers, 2003). Potential examples of sources of exploitation include social economic status, race/ethnicity, and sexual orientation. Victims of bullying who belong to marginalized groups may face additional challenges such as racism, classism, and limited access to other resources/support which might further hinder resiliency. Conversely, increased access to resources may reduce exploitation, thereby enhancing the opportunity for positive adjustment (Meyers & Meyers).

While individual predisposition, stress, and exploitation are theorized to be potential hindrances to positive adjustment, factors such as subjective well-being, support, and competence may facilitate resilience. Subjective well-being refers to “how well a person likes the life he or she leads” (Veenhoven, 1984, p. 22). It is tied to subjective appraisals of events (i.e., threat appraisals associated with events) and affective responses (Andrews & Withey, 1976). In its simplest form, persons who make more positive appraisals of events are more likely to experience positive affect and therefore, are more likely to report higher subjective well-being (Diener, 1994; Veenhoven; Andrews & Withey). While stressors such as bullying may pose a threat to subjective well-being (Diener, 2000) it also ispossible that those who have other sources that promote subjective well-being will be less likely to develop long-term negative effects.

Competence encompasses the following constructs: emotional competence, social competence, social cognitions, and flow (Meyers & Meyers, 2003). Applying the concept of competence to bullying, victims of bullying who have other activities from which they derive pleasure and a sense of mastery may be more likely to demonstrate resiliency. Those who are high in emotional competence and social competence may also have additional resources to cope with bullying, and therefore, may be less likely to develop long-term effects associated with bullying (Meyers & Meyers). Coping resources (Hobfoll, 1989), which refers to one's ability to successfully navigate stressors, may also fall into the category of competence.

In contrast, those with low competence or fewer opportunities to develop competence, may be more likely to internalize (or attribute) bullying victimization to internal factors. This tendency to internalize may lead to a belief that being the target of bullying is indicative that he or she is flawed. Internalization refers to the tendency to attribute outside events to internal factors. Cognitive theory can provide insight into how the process of internalization of bullying events could potentially contribute to eventual long-term effects such as depression and anxiety. According to cognitive theory, the meaning one ascribes to events determines the affective response (Beck, 1964; 1993). If this tendency toward negative internalization persists, then these individuals may be at greater risk for depression, anxiety, and or problems in relationships (Beck, 1976; Beck, Emery, & Greenberg, 1985; Beck, Rush, Shaw, & Emery, 1979).

In Beck's (1976) example of a young boy being teased by his friends, he provided an illustration of how internal evaluations of an event can be influential in determining emotional responses. In this example, Beck stated that objective meaning

might be that his friends are simply joking with him. The boy's internal evaluation might be that he is "a weakling" or "they don't like me" (Beck, p. 48). Because these internal evaluations, or private meanings, are often regarded as embarrassing, the individual is less likely to examine these beliefs with others. Without the opportunity for others to challenge such thoughts these negative perceptions about the self may persist and continue to influence beliefs about the self. Since children and adolescents who were targets of bullying were more likely to be socially isolated (Boulton, Trueman, & Chau, 1999; Espelage & Swearer, 2003; Olweus, 1993; Wang, Iannotti, & Nansel, 2009) these individuals may be particularly unlikely to have such negative perceptions disconfirmed by others. In contrast, those with other opportunities to build social competence may be more likely to demonstrate resilience as they have additional opportunities to have these negative beliefs dispelled by others.

Also drawing from cognitive theory (Beck, 1976; Beck et al., 1985; Beck et al., 1979) those low in competence or lacking other sources of developing competence may develop negative schemas associated with social experiences. These schemas may have implications for college counselors as they remain with the individual throughout the college years. New social experiences during college that remind one of these earlier, aversive experiences with peers may trigger negative social schemas, eliciting emotions, thoughts, images, and behavioral impulses associated with these earlier, aversive situations (Brewin, 1989). Such interpretations may reinforce anxiety associated with social situations.

Being the target of bullying also may contribute to a sense of learned helplessness (Besag, 1989), a cognitive pattern often displayed by individuals with depression

(Abramson, Seligman, & Teasdale, 1978). Those individuals who do not possess opportunities for developing competence may be more prone to learned helplessness. As victims may believe that they are unable to stop the bullying they may also begin to believe that their efforts to affect the outcomes of other situations will be futile (Roth et al., 2002). If bullying persists for a long period of time, targets of bullying may begin to generalize this sense of incompetence to other areas of their lives which may lead to low self-esteem and a greater likelihood of developing depression and anxiety during the college years (Smokowski & Holland, 2005).

In addition to internal factors such as competence, the Meyers and Meyers model (2003) hypothesized that resiliency may be enhanced by the supports available to bullying victims. Supports include such factors as school organization, school climate, class structure, culturally responsible practices, teacher and peer acceptance, and peer contexts (Meyers & Meyers). For some victims, bullying may represent a form of social rejection (Davidson & Demaray, 2007; Hunter & Boyle, 2004). Those students who have additional sources of supports in the form of teacher and/or peer acceptance may be buffered against the effects of bullying and therefore may be more likely to demonstrate resilience. One study examining the long-term effects of bullying appears to provide support for this hypothesis. Newman and colleagues (2005) found that individuals who perceived themselves as being isolated at the time of bullying were more likely to demonstrate problems during the college years.

A safe school climate during primary or secondary school may also serve as a support that enhances opportunities for resilience. Incorporating classroom meetings where students can learn and practice conflict mediation; providing empathy training for

students; implementing bullying prevention programs; educating teachers on how to recognize and intervene on behalf of bully victims; identifying and monitoring spaces where bullying tends to occur; providing culturally appropriate education practices are some of the techniques that have been recommended to improving school safety in the context of school bullying (Olweus, 1993; Varjas et al., 2009). Employing such practices that improve school safety may have the potential to improve chances that learning and positive adjustment will persist through the college years, even in the context of bullying (Meyers & Meyers, 2003).

Implications for Research and Practice for College Counseling Centers

Research is needed to explore how the components of Meyers and Meyers' (2003) model explain resiliency among college students who are former victims of bullying, as well as to explore what types of interventions are effective for college students who are former victims of bullying. Potential research questions include: How do differences in subjective well-being relate to resiliency in college students? How do differences in subjective well-being relate to resiliency and long-term effects of bullying? What factors promote well-being and competence among former victims of bullying? What is the relationship between environmental supports and resiliency among former victims of bullying? Understanding the factors that contribute to resiliency in college students would be helpful for college mental health clinicians to identify which students are likely to experience long-term effects and in need of counseling services. Additionally, bullying interventions aimed at targeting the immediate effects of bullying may also be applicable for college students who did not receive such interventions during primary or secondary school.

One way to address these questions about the long-term effects of bullying in college students may be to utilize longitudinal research of interventions that incorporate elements of resiliency for current victims of bullying. An example of such efforts to encourage resiliency in children and adolescents experiencing bullying is the Reducing Bullying in an Urban School District project (RBSUD; Varjas et al, 2009; Varjas, et al., 2006). This on-going project utilizes the Participatory Culture Specific Intervention Model (Nastasi, Moore, & Varjas, 2004) which is theoretically rooted in primary prevention and positive psychology. The intervention focuses on facilitating competence by teaching problem focused coping skills and cognitive reframing, helping students identify individual strength, and improving self-image. Supports are enhanced by developing awareness of school resources for those who are being bullied, providing access to a caring adult, and creating a safe space for students to make sense of their experiences with bullying. The program implements culturally relevant practices in order to reduce the potential for additional exploitation in the context of the interventions. Initial evaluation of the project outcomes, acceptability, and treatment integrity are promising (see Varjas et al., 2006; Varjas et al., 2009 for a detailed description of the project and program evaluation). Longitudinal studies of RBSUD and other intervention projects may provide valuable insight about how to foster resiliency among victims of bullying as well as provide information about potential interventions for college students who did not receive such interventions prior to college.

Some of the interventions used by the RBSUD (Varjas et al, 2009) program may be adapted for college students, though additional research is needed to confirm the efficacy of such interventions for this population. For example, coping skills for dealing

with social situations and/or bullying on college campus may still be relevant for college students. Cognitive reframing techniques may also help college students explore the effects of bullying and develop new ways of interacting with others to overcome the effects of bullying.

Group intervention, also a factor included in the RBSUD program (Varjas et al., 2006), may be an effective intervention for college students who are former victims of bullying as it has been found to be an effective mode of therapy for clients who reported feeling isolated (Tritt & Duncan, 1997), were experiencing general anxiety, social anxiety (Kocoviski, Fleming, & Rector, 2009; Stewart & Chambless, 2009) and/or depression (Forman, Herbert, Moitra, Yeomans, & Geller, 2007; Shaw, 1977). Applying the Meyers and Meyers' model (2003), group counseling may represent a form of support for remediation of the potentially harmful effects of bullying. Group counseling during the college years may also assist former victims develop feelings of social competence by learning and practicing new ways of interacting with others. Experiencing a structured, supportive social situation through group counseling may also help former victims learn and practice skills for managing social anxiety. Currently, little is known about the types of group approaches that would be most helpful for college students who have been bullied. For example, some students might benefit from general support groups, while others may benefit more from psychoeducational groups or interpersonal process groups with a focus on developing social skills (Dempsey & Storch, 2008). Research is needed to investigate the efficacy of the different types of group interventions provided by college counseling center clinicians to college student who are former victims of childhood bullying (Newman et al., 2005).

Individual counseling also may facilitate resilience for college students who formerly experienced bullying. Drawing from the Meyers and Meyers' model (2003), individual counseling could facilitate adjustment and well-being by offering offer support, opportunities for developing or improving feelings of competence, and facilitating subjective well-being for former victims of bullying. Currently, there have been no published reports exploring how college counseling center clinicians might best work with former victims of bullying (Schafer et al., 2004). Research is needed to examine which components of individual counseling may be most effective for former victims of bullying. As mentioned previously, it has been suggested that early experiences with bullying may lead to cognitive patterns associated with depression, anxiety, and loneliness (Besag, 1989; McCabe et al., 2003). Therefore, cognitive therapy interventions implemented by college mental health clinicians may be particularly relevant to the treatment of former victims of bullying. Consistent with cognitive therapy (e.g., Beck, 1993; Beck et al., 1985; Beck et al., 1979), it may be helpful for college mental health clinicians who find themselves working with survivors of childhood/adolescent bullying to monitor clients' beliefs about themselves, beliefs about their ability to control outcomes, and concerns regarding relationships with others. Information about these issues may facilitate the development of interventions targeting these patterns. Additional research is needed to determine whether these types of counseling interventions or other types of counseling interventions are efficacious in working with college student who are former victims of bullying.

Research also is needed to determine if elements associated with the college environment might promote resiliency among college students who were bullied as

children and/or adolescents. As suggested by Schafer and colleagues (2004), college environments with a relatively low social hierarchy (e.g., campuses characterized by less social stratification, fewer opportunities for power dynamics, lack of hazing, etc.) could potentially allow for experiences that may help to counteract the negative effects of former bullying experiences. Applying the Meyers and Meyers' (2003) framework to Schafer and colleagues' observation, college campuses lacking in social hierarchy or interventions designed to reduce such hierarchy may provide multiple opportunities for developing a sense of competence in social situations which may potentially improve self-esteem (Schafer et al.). Future research is needed to focus on whether certain characteristics of the college environment temper the effects of bullying during childhood and determine the types of supports offered by college campuses that may facilitate resilience. In addition to evaluating palliative components of the college environment, it may also be important to examine those features of the college setting that may serve to exacerbate social-emotional problems in former victims of bullying.

The literature regarding coping resources may be a relevant line of research for understanding resilience related to bullying (Matheny, Aycock, Pugh, Curlette, & Silva, 1986; Newman et al., 2005). Coping resources refer to personal characteristics and perceived resources that can be drawn upon in the face of stressors (Wheaton, 1985). They differ from coping skills in that they represent a set of resources that are already in existence prior to the onset of a stressor. Coping resources include perceptions about social support, confidence in ability to handle demands, assertiveness, self-control, and so forth. Perceived lack of coping resources has been found to predict anxiety and high levels of psychological distress (Matheny et al.; Wheaton). When one perceives oneself

as not having adequate resources to cope with life stressors, psychological distress may be a likely outcome with symptoms such as depression, anxiety, and perceived loneliness. Understanding the relationship between coping resources and long-term effects of bullying may also have implications for therapeutic interventions particularly cognitive strategies (Matheny et al., 1986).Through assessment of client's current coping resources, college mental health therapists can identify areas that are in need of improvement and assist students in developing positive coping resources.

Practical Implications Considering that up to 72% of college students have been found to report experiencing bullying at some point in their primary, secondary, or college school years (Chapell, 2006), it is almost inevitable that college counselors will encounter clients who have experienced bullying. Further, victims of school-aged bullying may be at greater risk for bullying during the college years (Chapell et al., 2004). Although it is clear that additional research is needed to develop comprehensive interventions for college students who have experienced bullying (Shafer et al., 2004) some implications for the initial assessment phase of counseling can be drawn from the existing literature. For example, treatment planning might be strengthened if college counselors inquire during the intake phase about prior experiences with bullying. Although the experience of bullying may not be recognized as a traumatic event by the Diagnostic and Statistical Manual of Mental Disorders-Text Revision (American Psychiatric Association, 2000), results of research indicate that symptoms associated with trauma are sometimes found in victims of bullying (Carney, 2008; Rivers, 2004; Teharani, 2004). Since college counselors routinely inquire about other traumatic experiences such as physical, emotional, and sexual abuse (Breire & Scott, 2006;

Mitchell & Lacour, 2001) counselors might consider explicitly asking clients about their history of bullying. Consistent with Briere and Scott's recommendation to ask specific questions about trauma in order to increase the likelihood of client disclosure, college counselors may want to ask pointed questions about bullying such as: "Were you ever hit, punched, or kicked by peers during school? Did you experience rejection, taunting, or other hurtful experiences from your peers? Did you ever experience any other situations that you would consider bullying? If so, what were these experiences like for you?" Since students who were bullied during childhood or adolescence might be at greater risk for bullying during adulthood, clinicians may want to assess for current experiences with bullying (Chapell et al.; Schafer et al., 2004).

Frequency and duration of bullying may also be important factors to assess during the initial assessment phase as both of these factors have been found to be associated with a greater likelihood of symptoms and risk for future bullying (Chapell et al., 2006; Schafer et al., 2004). Therefore, it might also be helpful for college counselors to inquire about how often and for how long a period of time the student experienced bullying. Perceptions of isolation and perceptions of social support following bullying experiences are other factors to ask about during the intake process as these factors have also been found to be related to increased distress and problems in relationships among those who have been victims of bullying (Newman et al., 2005). More specifically, counselors may want to consider asking about how long the bullying lasted, what types of other friendships they had during the period of bullying, and how often the bullying occurred. In situations in which a client shares that he or she did experience bullying, counselors may also want to further assess for depression, anxiety, relationship problems and

avoidance of situations that remind them of bullying. In addition to inquiring about specific experiences with bullying and assessing for associated symptoms, college counselors may want to consider assessing for the factors represented in the Meyers and Meyers' framework (2003). More specifically, it may be helpful for college counselors to have an understanding of clients' strengths, sources of efficacy that promote feelings of competence; and supports available to clients. Having an understanding of these resources may help clinicians identify and build on client strengths (Seligman, Parks, & Steen, 2004) during the counseling process.

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CHAPTER 2

LONG-TERM EFFECTS OF BULLYING: EXPLORING THE RELATIONSHIPS AMONG RECALLED EXPERIENCES WITH BULLYING, CURRENT COPING RESOURCES, AND REPORTED SYMPTOMS OF DISTRESS

Retrospective studies of college students have documented that victims of childhood and adolescent bullying may be at greater risk than non-bullied peers for symptoms of depression (Roth, Coles, & Heimburg, 2002; Storch et al., 2004), loneliness (Schafer et al., 2004), anxiety disorders, (McCabe, Antony, Summerfeldt, Liss, & Swinson, 2003; McCabe, et al., 2010; Roth et al.), loneliness (Schafer et al.), relationship problems (Newman, Holden, & Delville, 2005; Roth et al.; Schafer et al.), and low self-esteem (Tritt & Duncan, 1997). While the results of these studies provide evidence that school-aged bullying may have implications for psychosocial functioning during the college years, few studies have attempted to determine why some former victims of bullying experience mental health and relationship problems during college while other former victims do not (Hunter, Mora-Merchan, & Ortega, 2004; Newman et al.; Rivers & Cowie, 2006). Additionally, there is a lack of research examining racial/ethnic and gender differences in perceptions of bullying and long-term effects (Schafer et al.). A potential construct for understanding differences in psychosocial and interpersonal functioning among college students who were bullied as children is coping resources (Newman et al.). The purpose of this study was to investigate gender and racial/ethnic differences in recalled experiences with bullying and to explore if coping resources buffer the effects of bullying experiences on psychosocial functioning in college students.

Before reviewing the literature on the long-term effects of bullying, it is necessary for college mental health clinicians to have an understanding of the types of experiences might constitute bullying so that they can accurately identify bullying experiences among their clients. Olweus (1993) described bullying as a chronic form of victimization characterized by an unprovoked attempt to harm the other person. Building on Olweus's initial definition of bullying, researchers examining bullying behaviors acknowledge the following five features of bullying (Greene, 2000; Griffin & Gross, 2004): (1) bullying consists of behavior that is directed towards a victim with the intention to harm or instill fear in the victim; (2) the behavior occurs without provocation from the victim; (3) the aggression occurs repeatedly over a period of time; (4) the behavior occurs within the context of a social group; and (5) an imbalance of power exists between the aggressor and victim. Bullying can take the form of physical (hitting, kicking, harming), verbal (teasing or threatening), or relational (spreading rumors, excluding from social groups, rejection) aggression (Griffin & Gross).

Review of the Literature

Prevalence of Past Bullying Experiences

Retrospective studies of college students have found that many college students have recalled experiencing school-aged bullying victimization. In a survey of 119 college undergraduates, 48.7% of respondents reported that they had been bullied at least once or twice; 15.1% reported they were bullied occasionally; and 2.5% stated that they were bullied frequently during high school (Chapell et al., 2006). Newman and colleagues (2005) found a higher rate of occasional and frequent bullying victimization than the percentage found in the Chapell and colleagues study. In a sample of 853 college

students, Newman et al. found that 24% of the sample reported that they were occasionally bullied during high school and 9.1% recalled that they were frequently bullied during high school (Newman et al.). The prevalence of recalled bullying experiences in these college samples suggests that past bullying victimization indicates that it is likely that college mental health professionals will encounter clients who have experienced bullying. Therefore, it is important for college counseling center mental health professionals to be aware of the consequences of bullying in late adolescence/adulthood as this might strengthen their understanding of how this early peer experiences might influence current functioning.

Long-term Effects of Bullying

Retrospective studies of college undergraduate students have found that bullying during childhood and/or adolescence may place one at greater risk for general distress, depression, anxiety, loneliness, and problems in interpersonal relationships (Hawker & Boulton, 2000; Jantzer, Hoover, & Narloch, 2006; McCabe et al., 2003; Newman et al., 2005; Rivers, 2001; Schafer et al., 2004). In a study of college undergraduates, participants who recalled experiencing bullying reported higher rates of distress than those who did not recall experiencing bullying (Schafer et al). Those who reported a history of bully victimization in childhood or adolescence were also significantly more likely to report clinical levels of depression than those who did not report past bullying experiences. In addition to higher rates of depression, former victims of bullying have been found to be more likely than non-bullied peers to report feeling that they have little control over the outcomes in their lives, a cognitive pattern often associated with depression (Dempsey & Storch, 2008). Former victims have also been found to report

lower levels of self-esteem (Schafer et al.), also a factor associated with depression (Orth, Robins, Trzesniewski, Maes, & Schmitt, 2009).

There also appears to be a relationship between being the target of school aged bullying and anxiety in adulthood. In retrospective studies of bullying, college undergraduates who recalled being the target of bullying during elementary or middle school endorsed more symptoms of anxiety than those who did not recall a history of bullying (Dempsey & Storch, 2008; Gladstone, Parker, & Malhi, 2006; McCabe et al., 2003). College students who reported a history of school aged bullying were also more likely than non-bullied peers to endorse higher rates of anxiety in social situations (McCabe et al.). In comparison to non-bullied peers, college students who recalled being the victim of school aged bullying were also more likely to report that they view the world as a dangerous place, a cognitive schema associated with anxiety (Hawker & Boulton, 2000).

A history of bullying during childhood or adolescence may also be related to an earlier onset of symptoms of social anxiety (McCabe et al., 2003). In a study of adult outpatient clients with anxiety disorders, a significant portion of individuals with social phobia reported that they experienced bullying during their childhood (McCabe et al.). Across the three the types of anxiety disorders examined in this study (social phobia, panic disorder, and obsessive-compulsive disorder), participants who were the targets of bullying demonstrated an earlier age of onset of the disorder and a greater level of anxiety in social situations than those who did not report a history of bullying (McCabe et al.). Since this study involved a clinical population, additional research is necessary to determine if these findings extend to college undergraduate samples.

There also appears to be a relationship between childhood and adolescent bullying and difficulty in interpersonal relationships. A history of bullying during childhood and/or adolescence has been found to be a significant predictor of loneliness (Schafer et al., 2004; Tritt & Ducan, 1997) and social phobia (Gladstone et al., 2006) among college undergraduates. Schafer and colleagues found that college undergraduates with a history of bullying were more likely to report difficulty maintaining friendships and were more likely to describe having a fearful attachment style than non-bullied peers. Furthermore, students who reported a history of bullying also reported greater difficulty establishing satisfying friendships than those without a history of bullying.

In addition to higher rates of depression, anxiety, loneliness, and problems in relationships, there is some evidence to suggest a connection between school-aged bullying and symptoms associated with posttraumatic stress in adulthood. In a study of 119 lesbian, gay, and bi-sexual individuals in the UK who recalled experiencing bullying related to their sexual orientation, Rivers (2004) found that 17% of the participants reported experiencing symptoms associated with post traumatic stress. Over 25% of participants reported continued distress associated with remembering their bullying experiences and 21% of participants reported that they continue to experience intrusive memories related to bullying events. Currently, researchers have not replicated this finding with non-LGBT populations or college student populations. Therefore, it is not clear if the relationship between post-traumatic stress symptoms and bullying is related solely to bullying experiences or if it is connected to additional stressors related to sexual orientation, or an interaction of the two factors. Other studies have found that being perceived as gay or bisexual may be associated with increased risk for bullying (Berrill,

1992; Rivers & Duncan, 2002) and other types of harassment such as physical assault (Pilkington & D'Augelli, 1995) which may place LGBT individuals at greater risk for symptoms of post-traumatic stress (Rivers & Cowie). Further research is needed to explore the relationship between school-aged bullying and symptoms of post-traumatic stress in the non-LGBT populations and college student populations.

Childhood bullying also may be a precursor to bullying victimization in adulthood. In a study of 119 college undergraduate students, Chapell and colleagues (2006) found a positive correlation between being bullied in high school and/or elementary school and being bullied during college. Smith, Singer, Hoel, and Cooper (2003) surveyed 5,288 adults across a variety of occupations and found that those who experienced bullying during childhood or adolescence reported being the target of more bullying in the workplace than previously non-bullied co-workers. In addition to being at greater risk for future bullying, victims of school-aged bullying also may be at risk for other forms of trauma. In studies of individuals who have experienced bullying during elementary, middle, and/or high school, there were significant positive correlations between bullying victimization and other forms of trauma such as domestic violence (Baldry, 2003; Shields & Cicchetti, 2001), sexual abuse (Shields & Cicchetti), conventional crime (Schwartz & Proctor, 2000), and dating violence (Holt & Espelage, 2005).

Gender and Racial/Ethnic Differences

Few studies have examined gender differences in retrospective recall of bullying victimization among college students. In a retrospective study of undergraduate students, Chapell and colleagues (2006) found that females recalled experiencing more relational

bullying during childhood and adolescence than males (Chapell et al.). In the same study, males were found to report more verbal and physical bullying victimization. Jantzer and colleagues (2006) also found a significant difference in the recall of physical bullying between males and females, with male undergraduates reporting that they experienced more physical bullying than females during childhood and adolescence. Schafer and colleagues (2004) examined gender differences in stability of bullying experiences and age of bullying. In this study, female victims were found to report more bullying during secondary school and longer stability of bullying, but there were no significant differences between male and female bullying experiences in primary school. This finding conflicts with studies of gender differences in current bullying victimization, in which males have been found to report more bullying victimization (e.g., Nansel et al., 2001; Wang, Iannotti, & Nansel, 2009). Additional research is needed to clarify gender differences in retrospective recall of bullying experiences among college undergraduates.

There also have been relatively few studies focusing on gender differences in the long-term effects of bullying in college age students. Newman and colleagues (2005) found no evidence of gender differences in the relationship between school-aged bullying and reported levels of distress among undergraduate students. Dempsey & Storch (2008) found that propensity towards anxiety and depression in former victims of bullying did not differ by gender. Similarly, Schafer and colleagues (2004) did not find any evidence of gender differences in self-esteem among college undergraduates who identified as former victims of school-aged bullying. However, each of these studies has examined bullying as a general constuct rather than examining differences in prevalence rates of the different types of bullying by gender, (i.e., relational, physical, or verbal). Researchers

have also not examined gender differences in loneliness among former victims of bullying. Additional research is needed to investigate whether gender differences in long-term effects emerge when looking at specific forms of bullying (i.e., relational, physical, or verbal) and if there are gender differences in loneliness.

There is also a lack of research regarding ethnic/racial differences in recall of bullying experiences and long-term effects among college age students.. Additionally, the majority of retrospective study samples have been largely White (e.g., Chapell et al., 2004, 2006; McCabe et al., 2003; Roth et al., 2002; Newman et al., 2005). However, there is an existing body of literature exploring ethnic/racial differences in the immediate effects of bullying. Examining these studies may provide information about potential racial/ethnic differences in long term effects. Studies examining racial/ethnic differences in prevalence rates of current bullying experiences among children and adolescents have found that White students reported being the target of bullying victimization more often than Black and Hispanic students (Nansel et al., 2001; Wang et al., 2009). Differences in prevalence rates of current bullying victimization between Black and Hispanic elementary and middle/school students have been mixed. Nansel and colleagues found that Hispanic middle school students were more likely than Black middle school student to report being the target of bullying. However, in at least two other studies examining the racial ethnic differences, Black students reported more bullying victimization than Hispanic students for students in grades seven and eight (Seals & Young, 2003) and grade six (Juvonen, Graham, & Schuster, 2003). Additional research is needed to examine racial/ethnic differences in the long-term effects of bullying.

One issue that has not been explored in the literature on gender and racial/ethnic differences in bullying is the perceived seriousness of bullying experiences. While reported frequency of bullying is one way to estimate how much influence bullying experiences may have on the individual, asking about perceptions of seriousness of bullying may add additional explanatory value to the effects of bullying as it is often the appraisal of threat that determines an individual's reaction (Folkman & Lazarus, 1988; Folkman, Lazarus, Dunkel-Schetter, De Longis, & Gruen, 1986). According to the transactional model of stress (Folkman & Lazarus; Folkman et al.), one's appraisal of the threat posed by an event is more predictive of a stressful reaction than the event itself. Inquiring about how serious bullying experiences were perceived may provide insight into whether bullying events are associated with long-term effects. Currently, no studies have examined the relationship between perceptions of seriousness of bullying and long-term effects and no studies have looked at gender or racial/ethnic differences in perceived seriousness of bullying. Therefore, research examining perceived seriousness of retrospective recall of bullying events is needed.

Factors Associated with Long-term Effects

There are a limited number of studies of college students that have focused on factors that account for increased rates of psychological distress and problems in relationships among former victims of bullying. Schafer and colleagues (2004) found that college students who recalled being bullied in middle/high school were significantly more likely to experience problems with depression, anxiety, and interpersonal functioning in comparison to those who only recalled experiencing bullying in elementary school. While age at the time of bullying was a significant predictor of later

distress, Schafer and colleagues found that duration of bullying was a stronger predictor of later distress than age at the time of bullying. Newman and colleagues (2005) also found that duration of bullying was a significant predictor of reported psychological distress in the college years.

Frequency of bullying experiences during childhood and adolescence has also been found to be a predictor of psychological distress (Jantzer et al., 2006; Tritt & Duncan, 1997). In a study of college students, Jantzer and colleagues found a negative correlation between frequency of bullying and trust in relationships and satisfaction with quality of friendships among (Jantzer et al). Similarly, Tritt and Duncan found that college students who reported greater frequency of bullying were also more likely to report lower levels of self-esteem.

Feelings of isolation at the time of bullying also may be a factor associated with later distress. Newman and colleagues (2005) found that adults who recalled feeling isolated when being bullied as adolescents were significantly more likely to report difficulty with intimacy and trust in romantic relationships than those who were bullied but did not perceive themselves as isolated. Additional research is needed to replicate these findings.

Appraisals of threat posed by bullying and feelings of control over bullying experiences have also been found to be associated with distress during the college years. In a retrospective study of college students who recalled experiencing bullying during childhood or adolescence, Hunter and colleagues (2004) found that students who recalled feeling a low degree of control over the bullying situations reported higher levels of distress than victims who recalled that they felt in control of bullying situations. In the

same study, former victims who recalled perceiving school aged bullying as threatening reported higher levels of distress in the college years compared to those who perceived the bullying as a challenge that could be overcome. Surprisingly, the researchers did not find a significant relationship between use of coping strategies and distress during the college student years. The authors examined a number of coping strategies including seeking help from friends, help from family member, help from teacher, ignoring the bullying, avoiding situations in which bullying occurred, making fun of the bullying, fighting back, and avoiding school. The participants reported that they perceived the following strategies as helpful: seeking help from friends, seeking help from family members, seeking help from teachers, ignoring the bully and talking to the bully, none of the strategies predicted level of distress experienced by participants. Although participants described these strategies as helpful, researchers found that implementation of these strategies did not account for variance in symptoms among former victims of bullying (Hunter et al.).

Coping Resources and Bullying

Frequency, duration, and timing of bullying represent external factors associated with bullying that appear to be related to distress during the college years (Jantzer et al., 2006; Newman et al., Schafer et al, 2004; Tritt & Duncan, 1997). Hunter and colleagues (2004) found that threat appraisal and perceptions of control of school aged bullying experiences predicted distress during college years. This may indicate that it would be helpful to examine the long-term effects of bullying from a stress-coping model. According to the transactional model of stress, stress results when there is an imbalance between demands posed by stressors and one’s perceptions of his or her ability to manage

these stressors (Folkman & Lazarus, 1988; Hobfoll, 1988, 1989, 2002). While coping strategies (such as those examined by Hunter et al.) explore behaviors enacted after a stressor has occurred, coping resources refer to perceptions of one's abilities and resources to manage stressors. One's perceptions of resources available for coping can influence appraisal of the degree of threat posed by an event (Hobfoll, 1988, 1989, 2002).

According to Hobfoll (1989, 2002), the best predictor of a stressful reaction is the individual's perceptions of their resources for managing the stressor. Wheaton's (1985) stress buffering hypothesis offers that possessing high levels of coping resources should attenuate the effects of stressful life events on psychosocial functioning. Conversely, when a person perceives themself as not possessing the necessary resources to deal with a stressor, then the psychological symptoms related to stress (e.g., anxiety, depression, social withdrawal, etc.) are likely to increase (Matheny, Aycock, Pugh, Curlette & Cannella, 1986; Hobfoll, 1989; Wheaton). Coping resources have been found to be significant moderators of psychological distress including depression, anxiety, and general psychological distress for a number of stressful life effects (Matheny et al., 1986; Wheaton, 1983, 1985).

Bullying can be considered a stressor when the experience is perceived by the victim as an on-going threat to personal resources, including physical safety, emotional well-being, and self-esteem (Roth et al., 2002; McCabe et al., 2003). Since the effect of a stressful life event is often dependent on one's appraisal of the event rather than the external event itself (Folkman & Lazarus, 1988), it is possible that those who viewed their experiences with bullying as more serious are also more likely to demonstrate problems with anxiety, depression, loneliness, and/or problems with interpersonal

relationships. Those who possess higher levels of coping resources may be less likely to view situations as threatening which might buffer them from the long-term effects of bullying.

Currently, there has not been a study to examine potential connections among retrospective memories of bullying, perceived coping resources, and current psychological distress. Additionally, many of the retrospective studies (with the exception of Hunter et al., 2004) examining the long-term effects of bullying have not taken into account perceived seriousness of bullying events. The purpose of this study was to determine whether perceptions of one's coping resources account for differences in symptoms among former victims of bullying while taking into account the perceived seriousness of these bullying experiences.

An additional focus of this study was to examine gender and racial/ethnic differences in perceived seriousness of bullying experiences and duration of bullying. As discussed previously in this paper, retrospective studies of bullying have focused on identifying gender and racial/ethnic differences in frequency of bullying victimization, but have not focused on how these events were perceived by the victims. The current study attempted to address this gap in the literature by analyzing mean differences in retrospective recall of the perceived seriousness of bullying events by gender and by racial/ethnic groups.

Prediction 1. Increased perceived seriousness of bullying was expected to predict higher rates of depression, except in the presence of higher rates of coping resources.

Prediction 2. Increased perceived seriousness of bullying and longer duration of bullying were expected to predict higher rates of anxiety, except in the presence of higher rates of the coping resources.

Prediction 3. Increased perceived seriousness of bullying and longer duration of bullying were expected to predict higher rates of loneliness, except in the presence of higher rates of the coping resources.

Method

Participants

Participants were undergraduate students recruited from two large, urban, public institutions, one of which was located in the southeastern United States and one in the intermountain-west United States. According to the 2009, enrollment statistics for the southeastern university, there were a total of 30,431 enrolled students (22,384 undergraduates and 8,047 graduate students). The university reported that 60.6% of the undergraduate population was female and 39.4% of the population was male. Regarding race/ethnicity the university reported the following undergraduate demographics: 0.04% of students identified as American Indian; 7.0% identified as Hispanic; 12.7% identified as Asian or Pacific Islander; 31.2% identified as Black; 0.30% identified as Native Hawaiian; 46.7% identified as White; and 2.9% identified as Multi-racial.

The intermountain-western university was a large, public institution in an urban area. According to 2009 enrollment data, the university reported a student population of 29,284 students (22,149 undergraduates and 7,135 graduate students), with 55.1% of the undergraduate population identifying as male and 44.9% identifying as female. Regarding race/ethnicity the university reported the following demographics for

undergraduate students: 0.60% identified as American Indian; 5.4% identified as Asian or Pacific Islander; 5.5% of students identified as Hispanic; 1.2% of students identified as Black; 76.6% identified as White; 0.60% identified as Multi-Racial; and 6.5% did not report a race/ethnic identify.

A total of 223 students participated in the current study. Twelve of the respondents' surveys were eliminated because of invalid response sets or incomplete surveys. Invalid response sets were defined as those in which participants answered questions in one direction on at least one of the measures (e.g., answering "true" for all the questions on one of the measures). Surveys were deemed incomplete and not usable if one of the measures in the survey packet was not completed of if the respondent skipped more than 10 items on any one of the measures. After eliminating such surveys, there was a total of 211 usable surveys (38% male and 62% female). Age of participants ranged from 18 years to 40 years, with a mean age of 21 years. Of the valid responses, 49.8% of participants reported their ethnicity as Black, 27.5% of participants were White, 5.7% were Asian or Pacific Islander, 3.8% were Hispanic/Latino, 9.5% were Multi-racial, and less than 1% reported they were American Indian/Alaskan. Regarding sexual orientation, 6.2% of participants were gay or lesbian, 5.2% were bi-sexual, 82.9% were heterosexual, 2.4% reported that they were uncertain of their sexual orientation, and 1.9% reported that they preferred not to label their sexual orientation.

Measures

Participants completed four independent measures, including a retrospective questionnaire that inquired about experiences with bullying (the Retrospective Bullying Questionnaire; Schafer et al., 2004), a measure of coping resources (the Coping Resource

Inventory for Stress-Short Form; Matheny, Aycock, Curlette, & Junker, 1993), a measure of loneliness (UCLA Loneliness Scale, Russell, 1996), and one measure of psychological distress to assess for anxiety and depression (Brief Symptom Inventory Scale; Derogatis, 1993). Participants completed the four measures in the same order to reduce problems associated with ordering effects.

The Retrospective Bullying Questionnaire was developed on the basis of extensive pilot work and guided by a questionnaire used by Rivers (2001). The final version contains 44 questions, mostly multiple-choice. The questionnaire begins with the following definition of bullying: "Bullying is an intentional hurtful behavior. It can be physical or psychological. It is often repeated and characterized by an inequality of power so that it is difficult for the victim to defend him/herself." The RBQ covers experiences of victimization in school (6 types of victimization: 2 physical, 2 verbal, 2 relational), and the frequency, perceived seriousness, and duration (all 5-point scales) of bullying, the gender of bullies, and the number of bullies encountered. The questions are asked first for elementary, then for middle/high school. This survey also includes a 5-item trauma subscale of intrusive and recurrent recollections of victimization (each 5-point scales), and a question on suicidal ideation for those who have been bullied (4-point scale). A final section asked participants if they had ever been bullied at college and if so, the frequency of being bullied over the last six months (6-point scale). A shortcoming of this measure is that it has been normed on participants in the UK, Spain, and Germany, but not in the United States (it was originally written in English and translated into German and Spanish). Currently, only one study has used the measure with a U.S. college population (Janzter et al., 2006). The RBQ has been found to have good test-retest

reliability with *r* = .88 for elementary school victimization and *r* = .87 for middle/high victimization (Schafer et al., 2004).

The following items from the RBQ were used for the purposes of the current study: “How serious did you consider these [physical] bullying attacks [during elementary school] to be?”; “How serious did you consider these [verbal] bullying attacks [during elementary school] attacks to be?”; “How serious did you consider these [relational] bullying [during elementary school] attacks to be?”; “How serious did you consider these [physical] bullying attacks [during middle/high school] to be?”; “How serious did you consider these [verbal] bullying attacks [during middle/high school] to be?”; “How serious did you consider these [relational] attacks bullying [during middle/high school] to be?” Response options for each of these questions were: “I wasn’t bullied”; “Not serious”; “Somewhat serious”; “Quite serious”; and “Extremely serious”. The current study also utilized one item regarding duration of bullying: “How long did the bullying last?” Response options for this question were: “I wasn’t bullied”; “Just a few days”; “Weeks”; “Months”; “Years”. (See Appendix C for the RBQ in its entirety).

The Coping Resources Inventory for Stress-Short Form (CRIS-SF; Matheny et al., 1993) is a brief version of the original form of the Coping Resources Inventory for Stress (CRIS- SF; Matheny et al.). The short version consists of 70 true-false items that fall into 6 primary scales (Social Support, Tension Control, Structuring, Physical Health, Self Directedness, and Confidence) as well as an overall measure of coping effectiveness (Coping Resource Effectiveness). The abbreviated scales on the CRIS-SF scales have been found to correlate with their full-scale counterparts on the long from of the CRIS (*r* = .92) and to have high internal consistency reliabilities (Matheny & Curlette, in press).

The internal alpha coefficients of the primary scales range from .84 to .93 (Matheny et al.). The current study utilized only the Coping Resource Effectiveness (CRE) scale as a measure of perceived coping resources. This scale has been found to have a reliability coefficient of .93 and an internal alpha coefficient of .97 (Matheny & Curlette).

The UCLA Loneliness Scale-Version 3 is a 10-item, self-report questionnaire (Russell, 1996) that yields one overall loneliness score. Respondents indicate on a scale of 1 to 4 (1 = “I never feel this way”; 2 = "I rarely feel this way”; 3 = “I sometimes feel this way”; and 4 = “I often feel this way”) how strongly a statement describes them. In college students, a score of 20 is average and scores above 30 indicate severe loneliness (Russell). The scale possesses good test-retest reliability (α = .87; Hojat, Glaser, Xu, Veloski, & Christian, 1999) and concurrent validity with reports of time spent alone (Russell & Cutrona, 1988). Internal alpha coefficients of the UCLA Loneliness scale range from .89 - .95. The current study utilized the overall loneliness summary score.

The Brief Symptom Inventory (BSI; Derogatis, 1993) is the abbreviated version of the Symptom Checklist-Revised (SCL-R-90; Derogatis, Rickles, & Rock, 1976). Items for each dimension of the BSI were selected based on a factor analysis of the SCL-R-90, with the highest loading items on each dimension selected for the BSI (Derogatis). According to the author, the purpose of this measure is to identify self-reported clinically relevant psychological symptoms in adolescents and adults. It consists of 53 items covering nine symptom dimensions: Somatization, Obsession-Compulsion, Interpersonal Sensitivity, Depression, Anxiety, Hostility, Phobic anxiety, Paranoid ideation and Psychoticism; and three global indices of distress: Global Severity Index, Positive Symptom Distress Index, and Positive Symptom Total. The global indices measure

current or past level of symptomology, intensity of symptoms, and number of reported symptoms, respectively (Derogatis). The current study utilized the Depression and Anxiety subscales of the BSI.

The author reported good test-retest reliability and internal consistency scores. (Derogatis, 1993). The Depression index has been found to have a test-retest reliability coefficient of .84 and an internal consistency coefficient alpha of .85 (Derogatis). The Anxiety index has been found to have a test-retest reliability coefficient of .81. and an internal consistency score of .81. Convergent validity for the scales of the BSI is provided by correlations between the Wiggins content scales and the Tyron cluster scores from the MMPI ranged from .30 to .72 (Derogatis et al., 1976). Each subscale yields a raw score which is converted to a T-score. T-scores range from 29 to 81. In college students, the average T-score for the Depression scale has been found to be 49 and the average T-score for the Anxiety scale has been found to be 46. Scores equal to or greater than 63 are considered to be in the clinical range (Derogatis).

Procedures

The study was approved by each of the Institutional Review Boards at the respective universities. At both institutions, participants were recruited from undergraduate classes that require participation in a research study as part of course requirements. Students were sent an email from a member of the research team informing them of the purpose of the survey, that the survey would be administered during class time, date of the survey administration, and the voluntary nature of the survey. A member of the research team visited each classroom to review the purpose of the survey, emphasize that participation was voluntary, and administer the surveys. Surveys were

administered during class time. Survey completion required less than 60 minutes per participant. Students who chose not to participate were allowed to leave early or work on a project of their own choosing during the class time. Course instructors were not informed of students' participation or lack of participation in the study.

Results

Gender and Racial/Ethnic Differences

Multivariate analysis of variance (MANOVA) was utilized to test for between-group differences in reported experiences with bullying (i.e., perceived seriousness of physical bullying during elementary school; perceived seriousness of physical bullying during middle/high school; perceived seriousness of verbal bullying during elementary school; perceived seriousness of verbal bullying during middle/high school; perceived seriousness of relational bullying during elementary school; and perceived seriousness of relational bullying during middle/high school) based on gender and ethnicity. A between-groups MANOVA was selected over running separate ANOVA due to the increased likelihood of Type I errors associated with running the multiple comparisons that would be required by the ANOVA (Tabachnik & Fidell, 2007). Minimum sample size for the MANOVA was determined to be 170 participants. This number was derived by consulting Guilford & Futcher's (1978) chart for adequate samples sizes for MANOVA with the following characteristics: three levels of comparison, an alpha of .01, and a small expected effect size (Guilford & Futcher).

For the purposes of this study, two separate MANOVA were run. The first MANOVA included two levels (male and female) and the following dependent variables: perceived seriousness of physical bullying during elementary school; perceived

seriousness of physical bullying during middle/high school; perceived seriousness of verbal bullying during elementary school; perceived seriousness of verbal bullying during middle/high school; perceived seriousness of relational bullying during elementary school; perceived seriousness of relational bullying during middle/high school; and duration of bullying.

A second MANOVA was conducted to test differences in perceived seriousness of bullying between White and Black participants. Because there was an insufficient number of Asian, Pacific Islander, Hispanic, and Native Indian individuals in the sample, the current study only examined differences between Black and White college students. Therefore, there were two levels of comparison in the MANOVA (Black and White). The dependent variables were the same for the gender comparisons (perceived seriousness of physical bullying during elementary school; perceived seriousness of physical bullying during middle/high school; perceived seriousness of verbal bullying during elementary school; perceived seriousness of verbal bullying during middle/high school; perceived seriousness of relational bullying during elementary school; perceived seriousness of relational bullying during middle/high school and duration of bullying).

Hierarchical linear regression was used to test for the moderating effect of CRE on perceived seriousness of experiences with bullying and duration of bullying on depression, anxiety, and loneliness (Predictions 3, 4, and 5). Minimum sample size for running the hierarchical linear regression for the current study was determined using Tabachnick and Fidell's (2007) recommendation for determining sample size for hierarchical linear regression when testing individual predictors and when small effect sizes are expected, the following formula was applied to determine the appropriate

sample size: [$n \geq 104$ + (number of independent variables)]. Applying this formula to the current study, [$n \geq 104 + 1$] (where 1 equals the CRE scale of the CRIS-SF), yielded a minimum sample size of 105 participants. In order to reduce the likelihood of Type I errors associated with the number of hierarchical linear regressions conducted, the significance level was set at $\alpha = .01$.

Prevalence of Bullying

Participants were asked to describe their experiences with bullying during elementary and middle/high school. The majority of participants did not recall experiencing physical bullying during elementary and middle/high school (55.0% and 62.7%, respectively). Although participants reported experiencing verbal or relational bullying during elementary and middle/high school, the majority of participants did not perceive these events to be serious (see Table 1 for reported seriousness of bullying).

Descriptives

Descriptive statistics for the measures (Means, Standard Deviations, and Coefficient Alphas) are displayed in Table 2. The measures demonstrated acceptable reliability as Cronbach's coefficient alphas ranged from .80 to .88 for the measures in this sample (Tabachnik & Fidell, 2007). The mean for the Depression and Anxiety subscales of the BSI were 60.01 and 56.04, respectively, which were within the non-clinical range. However, both of these scores were higher than means attained from the BSI norm groups in which the mean T- score for Depression was 49 and the mean T-score for Anxiety was 46 (Derogatis, 1993), which is also in the expected range based on college student norms (Matheny & Curlette, in press).

Table 1

Perceived Seriousness of Bullying in Elementary and Middle/High School

	Responses									
	Never Bullied		Not Serious		Somewhat Serious		Quite Serious		Extremely Serious	
Type	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%
Elementary School										
Physical	115	55.0	59	28.2	20	9.6	9	4.3	6	2.9
Verbal	67	32.1	75	35.9	44	22.1	44	21.1	9	4.3
Relational	89	42.6	63	30.1	33	15.8	19	9.1	4	1.9
Middle/High School										
Physical	131	62.7	36	17.2	20	9.6	18	8.6	3	1.4
Verbal	88	42.1	64	30.6	29	13.9	24	11.5	4	1.9
Relational	79	38.0	63	30.1	37	17.7	24	11.5	5	2.4
Recalled Duration of Bullying across Elementary and Middle/High School										
	Never		Few Days		Weeks		Months		Years	
	n	%	*n*	%	*n*	%	*n*	%	*n*	%
Duration	86	41.1	58	27.8	20	9.6	15	7.2	30	14.3

Table 2

Descriptive Statistics of Measures in the Study

Scale	M	SD	α
Depression Scale (Brief Symptom Inventory)	60.01	11.34	.82
Anxiety Scale (Brief Symptom Inventory)	56.04	12.10	.84
UCLA Loneliness Measure	21.64	7.56	.88
Coping Resource Effectiveness	27.65	4.49	.80

Anxiety, depression, and loneliness were all significantly correlated with items related to perceptions of seriousness of physical, verbal, and relational bullying during elementary and middle/high school and duration of bullying. CRE was significantly, negatively correlated with the different bullying experiences with the exceptions of relational bullying during elementary school, relational bullying during middle/high school, and duration of bullying. CRE was also significantly negatively correlated with anxiety, depression, and loneliness (See Table 3 for correlations).

Group Differences in Experiences with Bullying

Gender differences in perceived seriousness of bullying were also explored. In order to examine whether there was a significant difference between reported experiences with bullying (i.e., perceived seriousness of physical bullying during elementary school; perceived seriousness of verbal bullying during elementary school; perceived seriousness of relational bullying during elementary school; perceived seriousness of physical bullying during middle/high school; perceived seriousness of verbal bullying during middle/high school; and perceived seriousness of relational bullying during middle/high school) based on gender, I conducted a MANOVA. (For reported frequency of bullying experiences by gender, see Table 4). The significance level was set at $\alpha = .01$ based on the small sample size (Fielding, 2005). Because the male and female subsample sizes were not equal, it was necessary to establish that there was not a significant difference in the variance-covariance matrices for males and females. I used Box's Test to test the null hypothesis that there were no differences in the variance-covariance matrices (Fielding). A significant result at the $\alpha \leq .001$ level on the Box's Test would indicate that the assumption of equal variances for the MANOVA had been violated (Fielding). In this

Table 3

Correlations Between Variables

	DEP	ANX	LONE	PP	VP	RP	PS	VS	RS	DUR
ANX	.62**									
LONE	.57**	.40**								
PP	.32**	.30**	.29**							
VP	.31**	.28**	.33**	.69**						
RP	.20**	.24**	.28**	.47**	.62**					
PS	.22**	.25**	.12**	.44**	.46**	.36**				
VS	.21**	.22**	.24**	.34**	.46**	.37**	.53**			
RS	.26**	.19**	.27**	.30**	.42**	.49**	.35**	.37**		
DUR	.31**	.22**	.27**	.32**	.47**	.39**	.61**	.54**	.60**	
CRE	−.26**	−.26**	−.17**	−.25**	−.16*	−.06	−.19**	−.11*	−.05	−.04

Note. DEP = Brief Symptom Inventory Depression Scale. ANX = Brief Symptom Inventory Anxiety Scale. LONE = UCLA Loneliness Measure. PP = Physical Bullying, Elementary School. VP = Verbal Bullying, Elementary School. RP = Relational Bullying, Elementary School. PS = Physical Bullying, Middle/High School. VS = Verbal Bullying, Middle/High School. RS = Relational Bullying, Middle/High School. DUR = Duration of Bullying. CRE = Coping Resource Effectiveness.

* $p \leq .05$.

** $p \leq .01$.

Table 4

Perceived Seriousness of Bullying in Elementary and Middle/High School by Gender

	Responses									
	Never Bullied		Not Serious		Somewhat Serious		Quite Serious		Extremely Serious	
Type	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%
Elementary School										
Physical										
Male	41	52.6	24	30.8	8	10.3	4	5.1	1	1.3
Female	74	56.5	35	26.7	12	9.2	5	3.8	5	3.8
Verbal										
Male	25	32.1	32	41.0	15	19.2	2	2.6	4	5.1
Female	42	32.1	43	32.8	29	22.1	12	9.2	5	3.8
Relational										
Male	40	51.9	18	23.4	13	16.9	3	3.9	3	3.9
Female	49	37.4	45	34.4	20	5.3	16	12.2	1	0.8
Middle/High School										
Physical										
Male	46	59.0	14	17.9	9	11.5	7	9.0	2	2.6
Female	85	65.4	22	16.9	11	8.5	11	8.5	1	0.8
Verbal										
Male	36	46.2	24	30.8	9	11.5	7	9.0	2	2.6
Female	52	39.7	40	30.5	20	15.3	17	13.0	2	1.5
Relational										
Male	41	52.6	18	23.1	10	4.8	8	10.3	1	1.3
Female	35	26.7	45	34.4	32	24.4	12	9.2	7	5.3

Recalled Duration of Bullying across Elementary and Middle/High School

	Never		Few Days		Weeks		Months		Years	
	N	%	*n*	%	*n*	%	*n*	%	*n*	%
Duration										
Male	36	46.2	18	8.6	9	4.3	3	1.4	12	5.7
Female	50	38.2	40	30.5	11	8.4	12	9.2	18	13.8

case, the Box's Test result was not significant ($F(2, 209) = 1.70$, $p = .024$), so I conducted the MANOVA.

Results of the MANOVA indicated there was an overall significant difference between males and females in reported experiences with bullying F (2, 209) = 7.18, p = .005. Once it was determined that there was a significant difference for the overall MANOVA, post-hoc between subjects ANOVAs were conducted to determine which of the dependent variables differed by gender. There was a significant difference between males and females in reported seriousness of relational bullying during middle/high school, (2, 207) = 8.11, p = .005, with females (M = 2.26, SD = 1.10) reporting higher perceived seriousness of bullying than males (M = 1.82, SD = 1.0). According to Cohen's (1992) standards for interpreting effect sizes, the effect size for this items was small, R^2 = .05. There were no significant differences between males and females in reported experiences with verbal bullying during elementary school, $F(2, 207) = 1.11$, p = .29 or middle/high school, $F(2, 207) = 1.53$, p = .22. Regarding experiences with relational bullying, there was not a significant difference in reported seriousness of bullying between males and females in elementary school, $F(2, 207) = 1.74$, p = .19. There were also no significant differences between males and females and reported duration of bullying, $F(2, 207) = .618$, p =.44. (See Table 5 for means and standard deviations of perceived seriousness of bullying by gender).

MANOVA also was utilized to determine if perceived seriousness of bullying experiences differed based on race/ethnicity. The Box's test of homogeneity of variance-covariance matrices was non-significant, indicating that the homogeneity of variance for unequal sample sizes was met, F (1, 157) = 1.84, p = .04. The MANOVA was significant

Table 5

Means and Standard Deviations of Perceived Seriousness of Bullying in Elementary and Middle/High School by Gender

	Men		Women	
	M	SD	M	SD
Elementary School				
Physical	1.70	0.93	1.67	1.04
Verbal	2.04	0.99	2.20	1.14
Relational	1.84	1.09	2.05	1.05
Middle/High School				
Physical	1.74	1.06	1.62	1.01
Verbal	1.87	1.03	2.06	1.02
Relational	1.82	1.06	2.26	1.10
Overall Bullying Experience				
Duration	2.17	1.44	2.33	1.47

(F (1, 157) = 5.08, p = .01), suggesting that there was a significant difference in reported perceived seriousness between White and Black participants with White students reporting greater perceived seriousness. Once again, between- subjects ANOVAs were conducted to further determine which dependent variables differed significantly. There was a significant difference between racial/ethnic groups on perceived seriousness of verbal bullying during middle school, F(1, 157) = 14.47, p = .001, with White students (M = 2.40, SD = 1.07) reporting that they perceived their experiences with verbal bullying to be more serious than Black students (M = 1.95, SD = 1.02). However, the effect size for this item was small, R^2 = .07. There was also a significant difference in reported seriousness of relational bullying during middle/high school, as White students (M = 2.49, SD = 1.07) perceived their experiences with relational bullying in middle/high school to be more serious than Black students (M = 1.88, SD = 1.09). Once again, the

effect size was small, R^2 = .07. (See Table 6 for frequency of perceived seriousness of bullying by race/ethnicity.)

There were no significant differences between White and Black participants on the following items: Perceived seriousness of physical bullying during elementary school $F(1, 157) = .155$, $p = .892$; perceived seriousness of verbal bullying during elementary school $F(1, 157)$, = .802, $p = .450$; perceived seriousness of relational bullying during elementary, $F(1, 157) = 2.87$, $p = .060$; perceived seriousness of physical bullying during middle/high school, $F(1, 157) = 1.29$, $p = .278$, and duration of bullying, $F(1, 157) = .924$, $p = .399$ school (see Table 7 for means and standard deviations of perceived seriousness of bullying for racial/ethnic groups).

Tests of Moderation

Based on the recommendation of Baron and Kenny (1986), I selected hierarchical linear regression to examine whether Coping Resource Effectiveness moderated the relationship between experiences with bullying during childhood/adolescence and depression, anxiety, and loneliness in adulthood. According to Baron and Kenny, to test linear moderation between variables, the product of the moderator and the independent variables is added to the regression analysis. Moderator effects are present when there is a significant effect for this interaction variable after controlling for the effects of the interaction term above and beyond the effects of both the independent variable and the moderating variable (Baron & Kenny).

In order to prevent problems with collinearity, all the predictor and hypothesized moderator variables were centered by subtracting the overall mean of the variable from each data point (Frazier, Tix, & Barron, 2004). In each hierarchical regression analysis

Table 6

Frequency of Perceived Seriousness of Bullying in Elementary and Middle/High School by Race/Ethnicity

	Responses									
	Never Bullied		Not Serious		Somewhat Serious		Quite Serious		Extremely Serious	
Type	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%
Elementary School										
Physical										
Black	61	59.2	23	22.3	7	6.8	8	7.8	4	3.9
White	33	56.9	15	25.9	8	13.8	1	1.7	1	1.7
Verbal										
Black	41	39.8	30	29.1	18	17.5	7	6.8	7	6.8
White	14	24.1	21	36.2	17	29.3	5	8.6	1	1.7
Relational										
Black	41	39.8	35	34.0	14	13.6	10	9.7	3	2.9
White	21	36.2	16	27.6	14	24.1	6	10.3	1	1.7
Middle/High School										
Physical										
Black	72	70.6	13	12.7	9	8.7	7	6.9	1	1.0
White	32	55.2	13	22.4	6	10.3	7	12.1	0	0.0
Verbal										
Black	55	53.4	28	27.2	11	10.7	7	6.8	2	1.9
White	14	24.1	18	31.0	14	24.1	12	20.7	0	0.0
Relational										
Black	49	47.6	33	32.0	10	9.7	7	6.8	4	3.9
White	12	21.1	17	29.8	17	29.8	10	17.5	1	1.8

Recalled Duration of Bullying across Elementary and Middle/High School

	Never		Few Days		Weeks		Months		Years	
	N	%	*n*	%	*n*	%	*n*	%	*n*	%
Duration										
Black	46	44.7	32	31.1	5	4.9	5	4.9	5	4.9
White	22	37.9	14	24.1	5	8.6	7	12.1	10	17.2

Table 7

Means and Standard Deviations of Bullying Experiences by Race/Ethnicity

	Black Participants		White Participants	
	M	SD	M	SD
Elementary School				
Physical	1.75	1.13	1.67	0.91
Verbal	2.12	1.23	2.28	0.99
Relational	2.02	1.10	2.14	1.09
Middle/High School				
Physical	1.55	0.98	1.79	1.06
Verbal	1.79	1.02	2.40	1.08
Relational	1.88	1.09	2.49	1.07
Overall Bullying Experience				
Duration	2.17	1.49	2.49	1.52

the predictor variable (either physical bullying during elementary school; verbal bullying during elementary school; relational bullying during elementary school; physical bullying during middle/high school; verbal bullying during middle/high school; relational bullying during middle/high school; or duration of bullying experiences) was centered and entered in the first step to determine the main effect of the predictor on the outcome variable (either depression, anxiety, or loneliness). The hypothesized moderator variable (CRE) was centered and entered in the second step to determine whether the moderator variable predicted the outcome variable after bullying was entered. Finally, the interaction terms (e.g., perceived seriousness of physical bullying during elementary school x CRE, etc.) were entered into the third step of the model to determine whether the interaction predicted the outcome variable, indicating a moderation effect.

Depression. In order to test Prediction 1 (i.e., that CRE would moderate the effect of physical, verbal, and relational bullying during elementary and middle/high school on depression and duration of bullying on depression), seven separate hierarchical regression analyses were conducted (physical bullying elementary x CRE; physical bullying middle/high x CRE; verbal bullying elementary x CRE; verbal bullying during middle/high x CRE; relational bullying during elementary x CRE; relational bullying during middle/high school x CRE; and duration of bullying x CRE).

In the first set of regression equations, perceived seriousness of physical bullying during elementary school was found to predict depression (B = 3.56, R^2 =.10, t = 4.76, p < .001). In the second step of the model, CRE was also found to predict depression, (B = -.398, R^2 = .135, ΔR^2 = .034, t = -2.84, p = .005). When the interaction term (perceived seriousness of physical bullying during elementary school X CRE) was entered in the third step, CRE was not found to be a significant moderator of depression (B = .195, ΔR^2 = .034, t = 1.39, p =.152). Thus, the interaction between bullying and depression was not different depending upon the level of coping resources effectiveness.

In a separate set of hierarchical regression equations, perceived seriousness of physical bullying during middle/high school was entered in the first step, (B = 2.32, R^2 = .048, t = 3.18, p = .003) and CRE was entered in the second step (B = -.465, R^2 = .096, ΔR^2 = .049, t = -3.30, p = .001). Both physical bullying during elementary school and CRE were found to be significant predictors of depression. However, CRE was not found to be a significant moderator (B = -.133, ΔR^2 =.005, t = 1.04, p = .305), again indicating that level of coping resources did not impact the relationship between bullying and depression.

Perceived seriousness of verbal bullying during elementary school was found to predict depression (B = 3.15, R^2 = .093, t = 4.57, p = .001). In the second step, CRE was also found to predict depression, (B = -.449, R^2 = .139, ΔR^2 = .004, t = -3.28, p = .001). When the interaction terms (perceptions of seriousness of verbal bullying during elementary school X CRE) were entered in the third model, CRE was not found to be a significant moderator of depression (B = .195, ΔR^2 = .004, t = 1.02, p = .305).

Perceived seriousness of verbal bullying during middle/high school was found to be a significant predictor of depression, (B = 2.13, R^2 = .044, t = 3.06, p = .002). CRE was also found to be a significant predictor of depression, (B = -.495, R^2 = .100, ΔR^2 =.056, t = -3.56, p = .007). However, CRE was not found to be a significant moderator of the relationship between perceived experiences with verbal bullying during middle/high school and depression, (B = .195, ΔR^2 =.009, t = 1.43, p = .550).

Perceived seriousness of relational bullying during elementary school was found to predict depression, (B = 2.04, R^2 = .038, t = 2.83, p = .005). CRE was also found to predict depression, (B = -.513, R^2 = .099, ΔR^2 = .061, t = -3.70, p = .000), but CRE was not found to be a significant moderator of depression and perceived seriousness of experiences with relational bullying during elementary school (B = .186, ΔR^2 = .009, t = 1.40, p =.161).

A similar pattern was found for perceived seriousness of relational bullying during middle/high school, depression, and CRE. In the first model, perceived seriousness of relational bullying during middle/high school was a significant predictor of depression, (B = 2.56, R^2 =.066, t = 3.80, p = .005). CRE was also a significant predictor of depression, (B = -.519, R^2 = .129, ΔR^2 = .063, t = -3.82, p = .000), but CRE was not

found to be a significant moderator in the relationship between perceived seriousness of relational bullying and depression, (B = .239, ΔR^2 =.016, t = 1.95, p =.061).

The relationship among recalled duration of bullying, CRE, and perceived seriousness of bullying also was explored. Recalled duration of bullying was found to be a significant predictor of depression, (B = 2.33, R^2 = .094, t = 4.61, p = .001). Similarly, CRE was found to be a significant predictor of depression, (B = -.514, R^2 = .156, ΔR^2 =.061, t = -3.84, p <.001). CRE was not found to significantly moderate the effect of recalled duration of bullying on depression (B= .035, ΔR^2 =.001, t = .396, p = .693).

Anxiety. The same hierarchical linear regression approach was utilized to test Prediction 2 (i.e., that CRE would moderate the relationship between perceived experiences with physical, verbal, and relational bullying and anxiety; and recalled duration of bullying and anxiety). Perceived seriousness of physical bullying during elementary school was found to predict anxiety, (B = 3.64, R^2 =.088, t = 4.42, p = .001). In the second model, CRE was also found to predict anxiety, (B = -.453, R^2 = .125, $\Delta R2$ = .037, t = -2.94, p = .004). When the interaction terms (experiences with physical bullying during elementary school x CRE) were entered in the third model, CRE was not found to be a significant moderator of anxiety (B = .035, ΔR^2 = .014, t = .396, p =.693). Thus, the relationship between perceived seriousness of physical bullying during elementary school and anxiety was not different depending upon the level of coping resources effectiveness.

Perceived seriousness of physical bullying during middle/high school was also found to predict anxiety, (B = 3.19, R^2 =.074, t = 4.03, p = .001). In the second model, CRE was also found to predict anxiety, (B = -.490, R^2 = .119, $\Delta R2$ = .045, t = -3.22, p = .001). When the interaction terms (experiences with physical bullying during middle/high

school X CRE) were entered in the third model, CRE was not found to be a significant moderator of anxiety (B = .222 , ΔR^2 = .011, t = 1.61, p =.108). Thus, the interaction between bullying and anxiety was not different depending upon the level of coping resources effectiveness.

Hierarchical regression also was applied to test CRE as a moderator in the relationships between perceived seriousness of verbal and relational bullying during elementary and middle/high school and anxiety; and CRE as a moderator between duration of bullying and anxiety. In each case, the hypothesized predictors of loneliness (i.e., perceived seriousness of verbal and relational bullying during elementary and middle/high school and duration of bullying) were significant predictors of anxiety. Likewise, CRE was significant predictor of anxiety in all of these cases, but CRE was not a significant moderator in any of the models (see Table 8 for results).

Loneliness. Linear hierarchical regression was applied to test the hypothesis that CRE would moderate the relationship between loneliness and perceived seriousness of bullying and loneliness and duration of bullying (Prediction 3). A total of seven separate hierarchical regressions were computed to examine the relationships between perceived seriousness of bullying experiences (physical, verbal, and relational during elementary and middle/high school and duration of bullying) and CRE.

Perceptions of seriousness of physical bullying during elementary school were found to significantly predict loneliness, (B = 2.11, R^2 =.075, t = 4.06, p < .001). In the second model, CRE was not found to be a significant predictor of loneliness, (B = -.145, R^2 = .085, ΔR^2 = .010, t = -1.47, p = .143). When the interaction terms (experiences with physical bullying during elementary school x CRE) were entered in the third model, CRE

was not found to be a significant moderator of loneliness (B = .038, ΔR^2 = .001, t = .396, p =.692). Thus, the interaction between perceived seriousness of physical bullying during elementary school and loneliness was not different depending upon the level of coping resource effectiveness.

Perceived seriousness of physical bullying during middle/high school was not found to be a significant predictor of loneliness, (B = .742, R^2 = .010, t = 1.45, p = .148). In the second model, CRE was found to be a significant predictor of loneliness, (B = -.212, R^2 = .032, ΔR^2 = .022, t = -2.12, p = .035). When the interaction terms (perceived seriousness of physical bullying during middle/high school x CRE) were entered in the third model, CRE was not found to be a significant moderator of loneliness (B = .059, ΔR^2 = .002, t = .649, p = .517). Thus, the relationship between perceived seriousness of physical bullying and loneliness was not different depending upon the level of coping resources effectiveness.

Separate hierarchical regressions were also computed to test whether CRE served as a moderator for perceived seriousness of verbal and relational bullying during elementary and middle/high school, duration of bullying, and loneliness. In each of these regression models, the hypothesized predictor variables (i.e., perceived seriousness of verbal and relational bullying during elementary and middle/high school) and duration of bullying were found to be significant predictors of loneliness. Likewise, CRE was also inversely related to loneliness in each of these equations, but was not a moderator of perceived seriousness of bullying and loneliness (see Table 8 for results).

Table 8

Results of Linear Regression Testing CRE as a Moderator in the Relationship between Bullying and Anxiety and Loneliness

	Main Effect: Bullying			Main Effect: CRE				Bullying × CRE		
	B	R^2	t	B	ΔR^2	R^2	t	B	R^2	t
Verbal Elementary										
Anxiety	3.13*	.077	4.11*	−.507*	.049	.125	−3.36*	.071	.001	.503
Loneliness	3.09*	.100	4.57*	−.667*	.217	.113	−5.61*	.049	.001	.401
Verbal Middle/High										
Anxiety	2.49*	.051	3.26*	−.531*	.056	.118	−3.58*	.553	.001	.457
Loneliness	1.57*	.052	3.34*	−.201*	.020	.071	−2.07*	−.074	.002	−.841
Relational Elementary										
Anxiety	2.73*	.057	3.51*	−.559*	.110	.118	−3.73*	.114	.121	.794
Loneliness	1.95*	.073	2.71*	−.706*	.020	.093	−5.76*	.102	.001	.776
Relational Middle/High										
Anxiety	2.16*	.039	2.88*	−.583*	.066	.105	3.85*	.019	.000	.135
Loneliness	2.53*	.067	3.78*	−.667*	.025	.092	−5.47*	−.006	.002	.148
Duration										
Anxiety	1.74*	.044	3.05*	.576*	.064	.108	−3.83*	.018	.000	.001
Loneliness	2.82*	.072	4.53*	−.646*	.094	.022	−5.29*	−.029	.004	−.341

* $p \leq .01$.

Discussion

The purpose of this study was threefold. The first purpose was to investigate gender and racial/ethnic differences in perceived seriousness of bullying. The second purpose was to replicate past findings demonstrating a relationship between retrospective recall of bullying experiences and current symptoms of depression (Roth et al., 2002; Storch et al., 2004), loneliness (Schafer et al., 2004), anxiety disorders, (McCabe et al., 2003; McCabe, et al., 2010; Roth et al.), relationship problems (Newman et al., 2005; Roth et al.; Schafer et al.). The third purpose was to determine if coping resources moderated the relationship between perceived seriousness of experiences with bullying and anxiety, depression, and loneliness in college students. Regarding the first purpose of the study, females in this study reported that they perceived their experiences with relational bullying during middle/high school to be more serious than males. However, the effect size was small, suggesting that only 6% of the variance in perceived seriousness of relational bullying during middle/high school was explained by gender. An effect size of this magnitude may suggest that while there is a statistically significant meaningful relationship. There were no significant differences between males and females in perceived seriousness of physical bullying during elementary or middle/high school, verbal bullying during elementary or middle/high school or relational bullying during elementary school. Males and females did not differ significantly in the duration of bullying experiences. The results from the gender analysis may suggest that females tend to view their experiences with relational bullying during middle/high school as more serious than males, but that males and females do not differ in how serious they perceived

their experiences with verbal or physical bullying. Additional studies are needed to replicate in other university populations before these assertions can be generalized.

Regarding race/ethnicity, there was a significant difference between White and Black students on perceived seriousness of relational and verbal bullying during middle/high school, with White students reporting that they perceived their experiences with these types of bullying in middle/high school to be more serious. Once again, the effect size was small, with only 7% of the variance in both verbal and relational bullying during middle/high school accounted for by racial/ethnic group membership. There were no significant differences between the racial/ethnic groups in perceived seriousness of physical, verbal or relational bullying during elementary school. There also were no significant differences among the racial/ethnic groups in reported duration of bullying across elementary and middle/high school. These findings were consistent with past research (Nansel et al., 2001; Wang et al., 2009) in which it was found that White students were more likely to report greater rates of bullying (measured as a general construct) than Black and Hispanic students (Nansel et al.; Wang et al.). These findings need to be replicated with larger sample sizes.

The second purpose of the study was to replicate past findings that former experiences of bullying would predict higher rates of depression, anxiety, and loneliness. The results of the current study were consistent with past findings that increased perceived seriousness of bullying and longer duration of bullying were related to increased rates of depression (Prediction 1), anxiety (Prediction 2), and loneliness (Prediction 3). In general, perceived seriousness of experiences with each bullying type of bullying (physical, verbal, and relational) at each level (elementary and middle/high

school) predicted higher reported symptoms of depression, anxiety, and loneliness. In other words, as perceptions of seriousness of bullying increased and as the duration of bullying increased, participants were more likely to report more symptoms of anxiety, depression, and loneliness. The only exception to this was that recalled experiences with physical bullying during middle/high school did not predict loneliness in adulthood. It is not clear why physical bullying during middle/high school was not a significant predictor of loneliness. One reason could be that physical bullying during middle and high school has less effect on the development of social efficacy than verbal and relational bullying (Dempsey & Storch, 2008). Further research is needed to replicate this result to determine if it is generalizable to other college populations.

The third purpose of the study was to explore whether current levels of coping resources effectiveness would buffer the effects of bullying on depression, anxiety, and loneliness. The results of the current study did not support the expectation that coping resources would moderate the relationship between experiences with bullying and reported symptoms of depression, anxiety, and loneliness among college students. there were multiple limitations of the study that may explain why current levels of coping resources did not moderate the relationship of past experiences with bullying and measures of psychopathology. that the study retrospectively measures experiences of bullying while asking about current coping resources. Although Hobfoll (1988, 1989) has suggested that coping resources are stable over the life-time, it is possible current perceived coping resources are not related strongly to perceived resources at the time of bullying. The lack of significant findings in the current study may provide evidence that coping resources are not always stable across the lifespan.

Another potential explanation for the lack of moderating effects among coping resources is that the current study did not control for other traumatic events. In past studies, victims of bullying have been found to be at greater risk for other forms of interpersonal trauma such as domestic violence, sexual trauma, conventional crimes, and dating violence (Baldry, 2003; Holt & Espelage, 2005; Shields & Cicchetti, 2001). These traumatic experiences also have been found to be associated with negative effects on psychosocial functioning (Jantzer & Hazler, 2004; Novick & Novick, 2001). Since participants were not asked about other forms of trauma, it was not possible to determine how much past experiences with bullying contributed to increased symptoms in the sample (Holt, Finkelhor, & Kauffman-Kantor, 2007). Additional research is needed to understand the unique contributions of bullying to later problems in psychosocial functioning while controlling for other forms of trauma. There also is a need for additional research examining how experiences with bullying combined with other forms of trauma may differentially influence later psychosocial functioning.

Another limitation associated with the retrospective design was that causation cannot be confirmed from these results It is possible that those who were bullied may possess other characteristics that made them vulnerable to bullying (e.g., poor social skills, shyness, etc.) and that these characteristics have persisted into adulthood making them more prone to depression, anxiety, and loneliness (Ledley et al., 2006). Theoretically, these types of questions might call for tests of mediation which can answer questions about how or why a certain effect takes place (Baron & Kenney, 1986; Frazier, et al., 2004). Future research should focus on testing mediation effects.

The demographics of the sample also should be taken into consideration when examining the results. There were significantly more females than males (62% vs. 38%). This sample closely approximates that gender distribution of the Southeastern university which reported a gender distribution of 60.6% female and 39.4% male. However, it is not representative of the university in the Intermountain West, which reported a gender distribution of 55% male and 44.9% female. The findings may not be generalizable to other universities and colleges with different gender distributions.

Sampling of racial/ethnic groups also was disproportionate with 49% of the sample consisting of Black students which represents a higher percentage of Black students than either university (the Southeastern university reported 31.2% of students identify as Black and the Intermountain West university reported that only 1.2% of students identified as Black). Therefore, the findings of this study may not be generalizable to other universities and colleges. However, the proportion of Black students represented in the study also represents a unique contribution to the literature as as the majority of retrospective studies have had largely White samples (e.g., Chapell et al., 2004, 2006; McCabe et al., 2003; Roth et al., 2002; Newman et al., 2005).

Another factor to consider when interpreting results is that this sample of students reported higher rates of depression and anxiety on the BSI compared to norm groups (Derogatis, 1993). According to results from the BSI norming studies, college students tend to average a T-score of 49 on the Depression 46 on the Anxiety scale (Derogatis). In the current study, the average Depression score was 60 and the average Anxiety score was 56.04, both of which are higher than the norming population. This indicates that the current sample was reporting higher rates of distress than other college students and it is

not clear if these higher rates of depression and anxiety are connected to bullying experiences. Therefore, the results associating perceived seriousness of bullying with depression and anxiety must be interpreted with caution.

Future Research

The current study provided support for past findings that adults who were bullied during childhood and/or adolescence may be at greater risk for depression (Roth et al. 2002; Storch et al., 2004), loneliness (Schafer et al., 2004), anxiety disorders, (McCabe, et al., 2003; McCabe et al., 2010; Roth et al.), relationship problems (Roth et al.; Newman et al., 2005; Schafer et al.). Future researchers interested in examining the relationship between coping resources and adult psychosocial functioning might consider controlling for other traumatic events and controlling for differences between bully/victims and victims. Since the current sample did not perceive their experiences with bullying to be serious, future researchers also may want to utilize a sample of participants who perceived their experiences with bullying to have been more serious. This may provide greater variability among victimization scores which would allow more opportunity to detect moderating effects.

As discussed previously, a limitation of this study was that the study focused on current coping resources and past experiences with bullying. For future research, it might be more meaningful to retrospectively measure coping resources at the time of the bullying. It seems more reasonable that perceived resources at the time of the bullying events might have influenced how bullying was experienced and the outcome of the bullying on the individual. The current study utilized only a general measure of coping resources (i.e., coping resource effectiveness) which may have masked the effects of

specific coping resources. In the future, it may be helpful to focus on retrospective recall of specific types of coping resources at the time of the bullying.

The current study attempted to answer the question “who” develops problems in functioning by investigating if those who possess higher rates of coping resources were less likely to demonstrate long-term effects. Another consideration for future research would be to examine the processes that might lead some former victims of school-aged bullying to develop problems with psychosocial functioning. For example, it is possible that experiences with bullying influence the development (or lack of development) of coping resources. This type of hypothesis would call for statistical tests of mediation (Baron & Kenny, 1986).

In order to prevent problems associated with retrospective recall of bullying events, longitudinal studies are needed to gain a more accurate picture of the potential long-term effects and to determine if a causal relationship exists between bullying in childhood and adolescence and adult psychosocial functioning (Dempsey & Storch, 2008). Likewise, it would be useful to conduct longitudinal studies of current victims of bullying receiving interventions. This could provide information about how to prevent distress in former victims of bullying.

College counseling center populations are sparsely represented in literature examining the long-term effects of bullying. The current study and other studies (e.g., Chapell et al., 2004, 2006; McCabe et al., 2003; Roth et al., 2002; Newman et al., 2005; Schafer et al., 2004) have drawn samples from general college student populations. More research is needed to establish prevalence rates of former bullying experiences among

college counseling center populations and to determine how former bullying experiences affect individuals who seek services at college counseling centers.

Since many victims of bullying may not receive interventions at the time of bullying, research is also needed to determine how colleges and universities can promote psychological well-being among students who were victims of bullying. It has been suggested that different social experiences in adulthood may counteract the effects of bullying experiences (Schafer et al., 2004). For example, colleges that have a low social hierarchical structure and low rates of bullying victimization may provide a climate where former victims can develop new relationships and improve self-esteem (Shafer et al.). Additional research is needed to explore how college environments might facilitate (or hinder) psychosocial adjustment among former victims of bullying.

Group therapy also has been recommended as an intervention for former victims of bullying to receive social support, learn and practice new social skills, and improve self-esteem (Roth et al., 2000; Duncan, 1999). However, group counseling is a multifaceted intervention (Glading, 2007) and it is not clear what types of groups would be most helpful (e.g., interpersonal process groups, social skills groups, support groups, psychoeducation groups). As of this date, there have been no published studies examining interventions provided during post-bullying experiences. Future research should focus on identifying efficacious interventions for college students who were the targets of bullying during elementary and/or middle/high school.

Implications for College Counselors

Despite the limitations of the current study, some implications can be drawn from the findings. This study provides additional support that adults who were bullied as

children and/or adolescents may be at greater risk for symptoms of depression, anxiety, and loneliness, which are among the most common presenting problems that college counselors treat (Kitzrow, 2003). Therefore, it is likely that college counselors will encounter clients with a history of bullying. During the initial assessment process, it may be helpful for college mental health professionals to inquire about experiences with peers during adolescence/childhood. Just as asking specifically about past trauma experiences is more likely to yield helpful information for the therapeutic process (Briere & Scott, 2006), it may also be important to ask specifically about negative peer experiences and how the client may view the effect of these experiences on their current functioning.

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APPENDIXES

APPENDIX A

Georgia State University
Informed Consent

Title: Understanding the Long-term Effects of Bullying

Principal Investigators: Joel Meyers, Ph.D.
Student Principal Investigator: Courtney Chambless, MS

I. Purpose:

You are invited to take part in a research study. You are invited to take part because you are currently a college student. The purpose of the study is to understand the long-term effects of bullying on college students' mental health. A total of 245 participants will be recruited for this study. Participation will take about 1 hour of your time total.

II. Procedures:

If you decide to participate, you will complete 4 surveys. The surveys will take 1 hour. The surveys will ask you questions about experiences with bullying during elementary, middle, and high school. There will also be questions about the way you cope with stress, your current feelings and mood. You will also be asked questions about your age and ethnicity.

Surveys will be completed during class time. You will take the surveys in your classroom at Georgia State University. You will only complete the surveys once. We expect that your total participation time will be 1 hour over the course of 1 class session.

All information you provide will be anonymous. This means you will not be asked to give information linking your answers to you. You will not be contacted by the researchers after you have completed the surveys.

Your decision to participate or not participate will not affect your grade in this course. You will not be compensated for your participation.

III. Risks:

It is possible that you may experience some emotional discomfort as a result of answering survey questions. If as a result of completing these surveys you experience emotional discomfort, distressing memories, or feel the need to talk to a mental health professional, you may contact Courtney Chambless, the student primary investigator at (404) 542-7792 to receive a referral. You may be interested to know that as a student at Georgia State University, you may be eligible for free

individual and group counseling at the GSU Counseling Center. The counseling center is located in the Citizens Trust Building (next to the University Commons) at 75 Piedmont Avenue, N.E., Suite 200A. To arrange for an initial appointment, please call (404) 413-1653.

IV. Benefits:

Participation in this study may not benefit you personally. Overall, we hope to gain information about the long-term effects of bullying.

V. Voluntary Participation and Withdrawal:

Participation in research is voluntary. You do not have to be in this study. If you decide to be in the study and change your mind, you may stop at any time. You may skip questions. Whatever you decide, you will not lose any benefits to which you are otherwise entitled. Your instructor will not have access to your survey results. Your grade in this course will not be affected no matter your decision about participation

VI. Confidentiality:

We will keep your records private to the extent allowed by law. Only the primary researcher and student researcher will have access to the information you provide. Information may also be shared with those who make sure the study is done correctly (GSU Institutional Review Board, the Office for Human Research Protection (OHRP) and/or the Food and Drug Administration (FDA).

We will use a code number rather than your name on study records. Only the primary researcher and student researchers will have access to the information you provide. It will be stored in a locked cabinet. The key will be stored separately from the data to protect privacy. Tapes will be stored until data analysis is complete. Your name and other facts that might point to you will not appear when we present this study or publish its results. The data that will be stored on computers are firewall protected. The findings will be summarized and reported in group form. You will not be identified personally.

VII. Contact Persons:

Contact Joel Meyers at (404) 413-8192, jpmeyers@gsu.edu or Courtney Chambless at (404) 542-7792, cchambless2@student.gsu.edu if you have questions about this study. If you have questions or concerns about your rights as a participant in this research study, you may contact Susan Vogtner in the Office of Research Integrity at 404-413-3513 or svogtner1@gsu.edu.

VIII. Copy of Consent Form to Subject:

We will give you a copy of this consent form to keep.

If you are willing to volunteer for this research, please sign below.

_____ _____

Participant Date

_____ _____

Principal Investigator or Researcher Obtaining Consent Date

APPENDIX B

University of Utah
Informed Consent

BACKGROUND

You are being asked to take part in a research study. Before you decide if you want to participate, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether you want to volunteer to take part in this study.

You are invited to take part in this research because you are currently a college student. The purpose of the study is to understand the long-term effects of bullying on college students' mental health. Currently, there is very little research directed towards understanding the long-term effects of bullying in college students. This study will help us understand why some former victims of bullying may experience long-term effects while others do not. A total of 245 participants will be recruited for this study. Participation will take about 1 hour of your time total.

The study is being conducted by Courtney Chambless, MA, MS;(doctoral student and pre-doctoral intern); Lois Huebner, Ph.D., (faculty member in the University of Utah's Educational Psychology Department) and Joel Meyers, Ph.D. (faculty member, Department of Counseling and Psychological Services, Georgia State University).

STUDY PROCEDURE

If you decide to participate, you will complete 4 surveys. The surveys will take 1 hour total. The surveys will ask you questions about experiences with bullying during elementary, middle, and high school. There will also be questions about the way you cope with stress, your current feelings and mood. You will also be asked questions about your age and ethnicity.

You will only complete the surveys once. We expect that your total participation time will be 1 hour over. You will complete the surveys in the Educational Psychology research lab.

All information you provide will be anonymous. This means you will not be asked to give information linking your answers to you. You will not be contacted by the researchers after you have completed the surveys.

RISKS

The risks of this study are minimal. You may feel upset thinking about or talking about personal information related to bullying. These risks are similar to those you experience when discussing personal information with others. If you feel upset from this experience, you can tell the researcher, Courtney Chambless and she will tell you about resources available to help. You can reach her at (801) 581-6826 Monday through Friday from 8:00am-:5:00pm. After business hours and on weekends, she can be reached at (404) 542-7792.

BENEFITS
There are no direct benefits for taking part in this study. However, we hope the information we get from this study may help develop a greater understanding of the long-term effects of bullying.

ALTERNATIVE PROCEDURES
If you do not want to take part in the study, you may earn research participation credit by participating in a different study or consulting with your course instructor to determine an acceptable substitute assignment.

CONFIDENTIALITY
Your data will be kept confidential. Data and records will be stored in a locked filing cabinet or on a password protected computer located in the researcher's work space. Your name will not be attached to the surveys. Only the primary researcher and student researchers will have access to the information you provide. Your name and other facts that might point to you will not appear when we present this study or publish its results. The data that will be stored on computers that are firewall protected.

PERSON TO CONTACT
If you have questions, complaints or concerns about this study, you can contact Courtney Chambless (801) 581-6826 or cchambless@sa.utah.edu or Lois Huebner, (801) 581-6926 or lhuebner@sa.utah.edu.

If you feel you have been harmed as a result of participation, please call Courtney Chambless. You can reach her at (801) 581-6826 Monday through Friday from 8:00am-:5:00pm. After business hours and on weekends, she can b e reached at (404) 542-7792.

Institutional Review Board: Contact the Institutional Review Board (IRB) if you have questions regarding your rights as a research participant. Also, contact the IRB if you have questions, complaints or concerns which you do not feel you can discuss with the investigator. The University of Utah IRB may be reached by phone at (801) 581-3655 or by e-mail at irb@hsc.utah.edu.

Research Participant Advocate: You may also contact the Research Participant Advocate (RPA) by phone at (801) 581-3803 or by email at participant.advocate@hsc.utah.edu.

VOLUNTARY PARTICIPATION
Participation in research is voluntary. You do not have to be in this study. If you decide to be in the study and change your mind, you may stop at any time. You may skip any questions. Whatever you decide, you will not lose any benefits to which you are otherwise entitled. Your instructor will not have access to your survey results. Refusal to participate or the decision to withdraw from this research will involve no penalty or loss of benefits to which you are otherwise entitled. This will not affect your relationship with the investigator.

COSTS AND COMPENSATION TO PARTICIPANTS
There are not costs for participating in this study. You will not be compensated for your participation.

CONSENT
By signing this consent form, I confirm I have read the information in this consent form and have had the opportunity to ask questions. I will be given a signed copy of this consent form. I voluntarily agree to take part in this study.

_____
Printed Name of Participant

_____ _____
Signature of Participant Date

_____
Printed Name of Researcher or Staff

_____ _____
Signature of Researcher or Staff Date

APPENDIX C

Retrospective Bullying Questionnaire

The following questions are about bullying. Bullying is intentional hurtful behavior. It can be physical or psychological. It is often repeated and characterized by an inequality of power so that it is difficult for the victim to defend him/her self.

All answers will be anonymous.

1. Are you Male ☐ Female ☐

2. How old are you? _____(years, months)

3. How would you describe your ethnic and/or racial background?

   a. _____ American Indian or Alaskan Native
   b. _____ Black
   c. _____ White
   d. _____ Asian or Pacific Islander
   e. _____ Hispanic
   f. _____ Multiracial, Specify _____
   g. _____ Other, Specify _____

4. Which of the following comes closest to describing your sexual attraction?
   a. ____ I am primarily romantically or sexually attracted to people of my own sex.
   b. ____ I am romantically or sexually attracted to people of both sexes.
   c. ____ I am primarily romantically or sexually attracted to people of the opposite sex.
   d. ____ I am not romantically or sexually attracted to other people.
   e. ____ I am uncertain to whom I am romantically or sexually attracted.

Please think back to your school days. You may have seen some bullying at school, and you may have been involved in some way. Please mark the *1* choice that best describes your own experiences at school.

5. I was not involved at all and I never saw it happen ☐
   I was not involved at all, but I saw it happen sometimes ☐
   I would sometimes join in bullying others ☐
   I would sometimes get bullied by others ☐
   At various times, I was both a bully and a victim ☐

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Please briefly describe an incident in which you observed someone else being bullied or an incident in which you felt you were bullied?

_____

_____

_____

_____

THIS SECTION DEALS WITH YOUR EXPERIENCES IN *ELEMENTARY* SCHOOL (GRADES KINDEGARTEN -5TH GRADE)

1. Did you have a happy time in elementary school?
☐ Detested ☐ Disliked ☐ Neutral ☐ Liked a bit ☐ Liked a lot

2. Did you have a happy time at home with your family while in elementary school?
☐ Detested ☐ Disliked ☐ Neutral ☐ Liked a bit ☐ Liked a lot

THE NEXT QUESTIONS ARE ABOUT PHYSICAL FORMS OF BULLYING-HITTING, KICKING, AND/OR HAVING THINGS STOLEN FROM YOU.

3. Were you physically bullied at elementary school?
Hit/punched Yes ☐ No ☐
Stolen from Yes ☐ No ☐

4. Did this happen
Never ☐ Rarely ☐ Sometimes ☐ Frequently ☐ Constantly ☐

5. How serious did you consider these bullying attacks to be?
I wasn't bullied☐ Not serious ☐Somewhat serious☐ Quite serious☐ Extremely serious ☐

THE NEXT SET OF QUESTIONS ARE ABOUT VERBAL FORMS OF BULLYING-BEING CALLED NASTY NAMES AND BEING THREATNED.

6. Were you verbally bullied at elementary school.
Called names Yes ☐ No ☐
Threatened Yes ☐ No ☐

7. Did this happen
Never ☐ Rarely ☐ Sometimes ☐ Frequently ☐ Constantly ☐

8. How serious did you consider these bullying-attacks to be?
I wasn't bullied☐ Not serious ☐Somewhat serious☐ Quite serious☐ Extremely serious ☐

THE NEXT QUESTIONS ARE ABOUT IDIRECT FORMS OF BULLYING- HAVING LIES OR NASTY RUMORS TOLD ABOUT YOU BEHIND YOUR BACK, OR BEING DELIBERATELY EXCLUDED FROM SOCIAL GROUPS.

9. Were you relationally bullied at elementary school?

Had lies told about you	Yes ☐	No ☐
Excluded	Yes ☐	No ☐

10. Did this happen

Never ☐ Rarely ☐ Sometimes ☐ Frequently ☐ Constantly ☐

11. How serious did you consider these bullying attacks to be?

I wasn't bullied☐ Not serious ☐Somewhat serious☐ Quite serious☐ Extremely serious ☐

12. How long did the bullying attacks last?

I wasn't bullied ☐ Just a few days ☐ Weeks ☐ Months ☐ Years ☐

13. How many pupils bullied you in elementary school?

I wasn't bullied ☐
Mainly by one boy ☐
By several boys ☐
Mainly by one girl ☐
By several girls ☐
By both boys and girls ☐

14. If you were bullied, why do you think this happened?

_____

_____

_____

_____

THIS PART DEALS WITH YOUR EXPEREINCES IN MIDDLE SCHOOL AND HIGH SCHOOL (6TH-12TH GRADES).

15. Did you have a happy time at school during middle and high school?

☐ Detested ☐ Disliked ☐ Neutral ☐ Liked a bit ☐ Liked a lot

16. Did you have a happy time at home with your family while in middle and high school?

☐ Detested ☐ Disliked ☐ Neutral ☐ Liked a bit ☐ Liked a lot

THE NEXT QUESTIOS ARE ABOUT PHYSICAL FORMS OF BULLYING- BEING

HIT, PUNCHED AND/OR STOLEN FROM.

17. Were you physically bullied during middle or high school?
Hit/punched Yes ☐ No ☐
Stolen from Yes ☐ No ☐

18. Did this happen
Never ☐ Rarely ☐ Sometimes ☐ Frequently ☐ Constantly ☐

19 How serious did you consider these bullying attacks to be?
I wasn't bullied☐ Not serious ☐Somewhat serious☐ Quite serious☐ Extremely serious ☐

THE NEXT SET OF QUESTIONS ARE ABOUT VERBAL FORMS OF BULLYING-BEING CALLED NAMES AND/OR THREATNED

20. Were you verbally bullied during middle or high school.
Called names Yes ☐ No ☐
Threatened Yes ☐ No ☐

21. Did this happen
Never ☐ Rarely ☐ Sometimes ☐ Frequently ☐ Constantly ☐

22. How serious did you consider these bullying-attacks to be?
I wasn't bullied☐ Not serious ☐Somewhat serious☐ Quite serious☐ Extremely serious ☐

THE NEXT QUESTIONS ARE ABOUT RELATIONAL FORMS OF BULLYING-HAVING LIES OR NASTY RUMORS TOLD ABOUT YOU BEHIND YOUR BACK, OR BEING DELIBERATELY EXCLUDED FROM SOCIAL GROUPS.

23. Were you relationally bullied during middle or high school?
Had lies told about you Yes ☐ No ☐
Excluded Yes ☐ No ☐

24. Did this happen
Never ☐ Rarely ☐ Sometimes ☐ Frequently ☐ Constantly ☐

25. How serious did you consider these bullying attacks to be?
I wasn't bullied☐ Not serious ☐Somewhat serious☐ Quite serious☐ Extremely serious ☐

THE NEXT QUESTIONS ARE ABOUT BULLYING IN GENERAL.

26. How long did the bullying attacks last?
I wasn't bullied ☐ Just a few days ☐ Weeks ☐ Months ☐ Years ☐

27. How many pupils bullied you in middle or high school?
I wasn't bullied ☐
Mainly by one boy ☐
By several boys ☐
Mainly by one girl ☐

By several girls ☐
By both boys and girls ☐

28. If you were bullied, why do you think this happened?

_____

_____

_____

_____

PART III: GENERAL EXPERIENCES AT SCHOOL

29. Which were the main ways you used to cope with the bullying?
(Please mark one or more options)

I wasn't bullied at school ☐
I tried to make fun of it ☐
I tried to avoid the situation ☐
I tried to ignore it ☐
I fought back ☐
I got help from my friends ☐
I got help from a teacher ☐
I got help from family/parents ☐
I tried to handle it by myself ☐
I did not really cope with it ☐
Other (Please describe)

_____

_____

30. Did you ever take part in bullying anyone while you were at school?
(Please mark one or more options)

hit/punched ☐
stolen from ☐
called names ☐
threatened ☐
told lies about ☐
excluded ☐

31. Did this happen…
Never ☐ Rarely ☐ Sometimes ☐ Frequently ☐ Constantly ☐

32. How often did you try to avoid school by pretending to be sick or by playing truant because you were bullied?

I wasn't bullied at school ☐

Never ☐
Only once or twice ☐
Sometimes ☐
Maybe once a week ☐
Several times a week ☐

33. Have you been bullied since leaving school?
I haven't been bullied since leaving school ☐
I have been bullied by my family ☐
I have been bullied by others (please specify) ☐

RECOLLECTIONS OF BEING BULLIED
(Only answer these questions if you were bullied)

35. Do you have vivid memories of the bullying event(s) which keep coming back causing you distress?
No, never ☐ Not Often ☐ Sometimes ☐ Often ☐ Always ☐

36. Do you have dreams or nightmares about the bullying event(s)?
No, never ☐ Not Often ☐ Sometimes ☐ Often ☐ Always ☐

37. Do you ever feel like you are re-living the bullying event(s)?
No, never ☐ Not Often ☐ Sometimes ☐ Often ☐ Always ☐

38. Do you ever have sudden vivid recollections or 'flashbacks' to the bullying events?
No, never ☐ Not Often ☐ Sometimes ☐ Often ☐ Always ☐

39. Do you ever feel distressed in situations which remind you of the bullying event(s)
No, never ☐ Not Often ☐ Sometimes ☐ Often ☐ Always ☐

40. If you were bullied do you feel it had any long-term effects? If so, please describe below:

APPENDIX E

UCLA Loneliness Scale

Indicate how often each of the statements below is descriptive of you. Circle one letter for each statement:

0 indicates "I often feel this way"
S indicates "I sometimes feel this way"
R indicates "I rarely feel this way"
N indicates "I never feel this way"

1. How often do you feel unhappy doing so many things alone? O S R N

2. How often do you feel you have nobody to talk to? O S R N

3. How often do you feel you cannot tolerate being so alone? O S R N

4. How often do you feel as if nobody really understands you? O S R N

5. How often do you find yourself waiting for people to call or write? O S R N

6. How often do you feel completely alone? O S R N

7. How often do you feel you are unable to reach out and communicate with those around you? O S R N

8. How often do you feel starved for company? O S R N

9. How often do you feel it is difficult for you to make friends? O S R N

10. How often do you feel shut out and excluded by others? O S R N

(with permission of Daniel Russell)

Russell, D. (1996). The UCLA Loneliness Scale (Version 3): Reliability, validity, and factor structure. *Journal of Personality Assessment*, 66, 20-40.

APPENDIX F

Coping Resources Inventory for Stress (CRIS)
Short Form

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Instructions: This inventory is designed to better understand your stress coping resources. Its value to you will depend on your honesty and accuracy in completing it. Using the 4-point scale below, indicate the extent to which you agree or disagree with each item.

1 = strongly agree 2 = agree 3 = disagree 4 = strongly disagree

1. When compared with others, my coping ability is excellent.
2. My family is not as supportive of what I do as I would like them to be.
3. I slow down my breathing to become less emotional.
4. I'm satisfied with my time management skills.
5. I think of myself as being in good health.
6. I'm very good at defending my rights.
7. I cope with difficult situations better than most people do.
8. Members of my family do not encourage one another.
9. When I feel the pressure mounting, I usually practice a relaxation technique.
10. I manage my time better than most people.
11. My physical health is a problem to me.
12. I'm good at asserting myself.
13. I'm very good at putting my problems in proper perspective.
14. Members of my family are seldom willing to compromise.
15. Sometimes when highly stressed, I have calmed myself down by sitting quietly and breathing slowly.
16. I assign priorities to daily matters and stay with them.
17. I have a health problem that limits my physical movements.
18. If I don't like what someone is doing, I usually say so.
19. I can manage most stressful situations very well.
20. Members of my family are not willing to listen to my problems.
21. When facing stressful situations, I know how to become calm by sitting quietly and turning my mind inward.
22. I am a well organized person.
23. I have a health problem that causes me pain.
24. I do not let others get away with criticizing me unfairly.
25. In stressful situations, I put things in perspective better than most persons do.
26. Members of my family do not respect my rights as much as they should.
27. When I'm afraid, I often regulate my breathing to get control.
28. I plan my tasks to insure a steady pace.
29. I suffer some from ill-health.

30. I have a hard time giving criticism, even when it's needed.
31. When dealing with scary situations, I often have racing thoughts and runaway emotions.
32. I do not get enough affection from my closest friends.
33. Often I lower my stress by controlling my thoughts
34. I have difficulty staying with my goals.
35. I usually feel full of energy.
36. I try too hard to get people's approval.
37. Often my feelings get the best of me.
38. When things go wrong, there aren't many friends I can ask for help.
39. I do not know what to say to myself to calm down
40. I usually do not complete the tasks I start.
41. I do not tire easily.
42. I try too hard to please other people.
43. I tend to view things as being much worse than they are.
44. I receive a great amount of emotional support from friends.
45. When under tension, I'm good at turning my thoughts to less stressful things.
46. I am good at carrying out my plans.
47. I'm often so lacking in energy that I can't finish things I start.
48. If anyone disapproves of me, I try very hard to change my behavior.
49. Other people adjust to stressful situations better than I do
50. I have friends that I enjoy greatly.
51. When I'm under stress, I seldom examine my thinking.
52. I have a hard time carrying out a plan of action.
53. I have to restrict my activities because my energy is limited.
54. I need everyone to like me.
55. I can handle my emotions very well.
56. If I'm in conflict with others, my friends tend to back me up.
57. When upset, I usually tell myself good things in order to calm down.
58. Often I do not get the important things done.
59. I have much less energy that I would like to have.
60. When someone is angry with me, I usually feel that it's my fault.
61. I have a health problem that causes me to worry.
62. If I'm anxious, I make an effort to think of positive things.
63. If someone has taken advantage of me, I seldom say any thing to them about it.
64. When in need, my friends give me a lot of help.
65. When I become afraid, I cannot think straight.
66. I sometimes walk or jog to reduce tension.
67. When I'm distressed, I usually think that things will turn out okay.
68. If my friends notice that I'm feeling down, they try to cheer me up.
69. When I feel worried, I try not to think negatively.
70. When I'm under stress, I think too much about the worst possible outcomes.

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