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THE ROLE OF SELF-BLAME AND RESILIENCE IN PSYCHOSOCIAL OUTCOMES IN COLLEGE STUDENTS WHO ENGAGE IN CYBERBULLYING

A Dissertation Defense Presented in partial fulfillment of requirements For the degree of Doctorate of Philosophy in the Department of Psychology The University of Mississippi

by

JENNIFER R. BAILEY

August 2016

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ABSTRACT

Bullying behaviors (traditional and cyber) are often associated with adverse long-term consequences. As a result of an increase in technology use, traditional bullying has gradually expanded to include cyberbullying. While research in the area of cyberbullying is relatively new, current evidence suggests that cyberbullying is a pervasive problem from childhood into adulthood, and is associated with long-term detrimental effects for bullies, victims, and bully-victims. Research also suggests that self-blame, the tendency to view life events as being within an individual's control may exacerbate the development and intensity of psychological symptoms (e.g., anxiety, depression) that may result from experiencing stressful events. (Feinauer & Stuart, 1996). Resiliency has been suggested as a buffer against the development of symptoms of anxiety and depression. Resiliency has been defined as a measure of stress coping ability that encompasses personal competence, trust in one's instincts, positive acceptance of change, control, and spiritual influences (Conner & Davidson, 2003; Masten, 2001; Rutter, 2006). The purpose of the present study was to examine the relationships among cyberbullying, self-blame, resilience, and psychological well-being in college students.

Participants were 543 undergraduates from a public university in the southeastern United States. Participants included 155 males and 388 females ranging in age from 18 to 30 plus years. It was hypothesized that the experience of cyberbullying (X) would negatively predict psychosocial outcomes (Y) as mediated through level of self-blame (M). Additionally, given the rationale that resilience could potentially act as a protective factor against engaging in self-blame, it was hypothesized that (W) would serve as a moderator of the relationship between cyberbullying (X) and self-blame (M). Using "Model 7" by Hayes (2013), a moderated-mediation analysis was conducted. Contrary to predictions, the overall indirect of self-blame (M) in the analysis of psychosocial outcomes (Y) regressed on Cyberbullying (X)- by-Resilience (W) interaction was not significant. However, as expected, self-blame mediated the relationship between cyberbullying and psychosocial outcomes. Results and implications of findings are discussed.

DEDICATION

I would like to dedicate this dissertation to my family whose love and support helped me attain my advanced degree. Your constant guidance and support have shaped not only my dissertation but also my future.

LIST OF ABBREVIATIONS AND SYMBOLS

CBS	Cyberbullying Scale
DAS-21	The Depression Anxiety Stress Scales-21
BRS	The Brief Resilience Scale
SB	Self-Blame
PANAS	The Positive and Negative Affect Scales
MCAR	Missing Completely At Random
CI	Confidence Interval
А	Cronbach's alpha
r	Pearson's correlation coefficient
Ν	Number of Participants
SD	Standard Deviation
М	Mean

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1. Moderated Mediation Model

I. INTRODUCTION

Bullying is defined as repeated aggressive behavior towards a peer that is intended to cause harm or fear. Often times, victims perceive bullies to be more powerful than themselves. Estimates of bullying among children and adolescents suggest that it is a pervasive problem with potential long-term consequences. A study by Olweus and Alasker (1991) suggested that present day bullying occurs more frequently and with greater lethality than it did in the past two decades. During the past school year, according to a 2011 nationally representative sample of youth: 16 % of males and 7.8% of female students reported being in a physical fight on school property, 5.9% missed school because of bullying, 5.4 % reported carrying a weapon (gun, knife, or club) onto school property, and 7.4 % of American youth were threatened or injured with a weapon on school grounds (Center for Disease Control, 2012).

There is considerable evidence that bullying has adverse consequences for both bullies and victims. In particular, bullying behavior appears to be predictive of poor psychological adjustment (Davidson & Demaray, 2007). Youth who aggress against or have been the victims of bullying often develop conduct disorder later in adolescence. Moreover, bullying has been correlated with poor achievement in school, poor peer relationships, and increased risk of drug or alcohol use (Veenstra et al., 2005). Research also suggests being a bully or bully victim is associated with internalizing disorders such as anxiety and depression (Veenstra et al., 2005; Ybarra & Mitchell, 2004; & Ybarra & Mitchell, 2007), and is not limited to children.

Traditional forms of bullying lend to images of spreading rumors, gossiping, and playground fights. It is believed that as children age forms of bullying aggression change with physical (overt) manifestations decreasing and bullying via rumors and gossip (relational) increasing (MacDonald &

Roberts-Pitman, 2010; Privitera & Campbell, 2009). Research associated with bullying in college-aged students is sparse. However, approximately 18% of college undergraduates report being bullied once or twice during their college experience (MacDonald & Roberts-Pitman, 2010).

Popularization of electronic forms of communication have provided the basis for a new type of "indirect bullying" (Boulton, Lloyd, Down, & Marx, 2012). Perpetrators of electronic bullying use various media including text or picture messaging, e-mail, chat-rooms, instant messaging, websites, and social media to transmit rumors, insults, and threats of physical violence toward victims (Raskauskas & Stolz, 2007). The terms "cyberbullying" and "traditional bullying" are now used to differentiate between the two bullying formats. While there is no agreement as to how cyberbullying is best operationalized, most studies define cyberbullying as "aggressive and deliberate behavior that is frequently repeated over time, carried out by a group or an individual using electronics, and aimed at a victim who cannot defend him or herself" (Calvete, Orue, Estevez., Villardon, and Padilla, 2010, p. 1128). Cyberbullying is seen as a conceptually distinct construct within the larger umbrella of bullying. Unlike traditional forms of bullying, cyberbullying allows perpetrators to remain anonymous, as well as potentially being pervasive as the mobility of online aggression can follow the victim.

Although research on cyberbullying behavior and victimization is limited, studies suggest that like traditional forms of bullying and victimization, victims and perpetrators of cyberbullying often experience emotional distress. Similar to traditional forms of bullying, cyberbullying and cyberbullying victimization may lead to poor psychosocial outcomes. For example, Finkelhor, Mitchell, and Wolak (2000) found a relationship between victims, perpetrators of online bullying and increased levels of depression and anxiety.

Research also suggests that self-blame, the tendency to view life events as being within an individual's control may exacerbate the development and intensity of psychological symptoms (e.g., anxiety, depression) that may result from experiencing stressful events. (Feinaeuer & Stuart, 1996).

Attribution theory suggests that individuals who interpret traumatic events as being outside of their control, such as blaming the perpetrator, tend to have better long-term psychological outcomes (e.g., lower levels of depression and anxiety). In contrast, individuals who feel responsible for experienced traumatic events (self-blame) tend to suffer from increased levels of anxiety, depression, and display feelings of hopelessness (Feinaeuer Stuart, 1996). A study examining the relationship between women survivors of sexual abuse, long-term psychological outcomes and attributions of responsibility concerning the assault found that women who blamed themselves had significantly more symptoms compared to those who blamed the perpetrator (Feinaeuer & Stuart, 1996).

Resiliency has been suggested as a buffer against the development of symptoms of anxiety and depression. Resiliency has been defined as a measure of stress coping ability that encompasses personal competence, trust in one's instincts, positive acceptance of change, control, and spiritual influences (Conner, & Davidson, 2003; Masten, 2001; Rutter, 2006). Several recent studies have reported an association between resiliency, anxiety, and depression among people experiencing a range of stressors (Bitsika, Sharpley, & Peters, 2010; Hoger, Austin, & Pollack, 2007; Southwick, Vythilingam, & Charney, 2005). For example, Bitsika, Sharpley, and Peters (2010) explored the relationship between resiliency, anxiety, and depression in a large sample of college undergraduates. Results indicated that higher levels of resiliency were associated with lower levels of depression and anxiety.

The purpose of this study was to examine the relationships among cyberbullying, self-blame, resiliency, and psychological well-being in college students. Following a discussion of traditional forms of bullying and victimization, cyberbullying will be discussed. The epidemiology of this problem behavior and its impact on victim and perpetrator will be examined. The impact of self-blame and resiliency on psychosocial health will also be discussed.

Traditional Bullying

Bullying among school-aged children is not a new phenomenon; however, systematic studies of bullying did not begin until the 1970's at which time research mainly took place in Scandinavia. In the 1980's and early 1990's, bullying among school-aged children began to attract attention in other countries: England, the United States, Canada, Australia, Japan, and Netherlands (Olweus, 1995). Olweus (1977) was one of the first to operationalize and systematically examine bullying. Olweus characterized the typical victim of bullying as being anxious, insecure, physically weak, with low selfesteem, and exhibiting a negative self-view. In contrast, Olweus characterized the typical bully as being aggressive towards peers, teachers, and adults. Similarly, bullies were thought to act impulsively with a strong need to dominate other people.

Varied definitions of bullying are used in bullying research. Rivers and Smith (1994), based on the work of Bjorkqvist, Lagerspetz, and Kaukiainen (1992), identified bullying behaviors as a subset of aggression that relies on an imbalance of power between the bully and victim, and are repetitive in nature. Their work suggested that there are significant differences in the types of bullying behaviors including direct physical aggression which includes behaviors such as punching, hitting, or kicking to hurt another person, direct verbal aggression which includes using words to hurt another person, and indirect aggression which includes ignoring, spreading rumors, and exclusion (Zachchilli & Valerio, 2011). Indirect aggression is also referred to as relational aggression. Research has indicated that students, teachers, and parents are more likely to report direct forms of bullying; whereas, relational forms of aggression tend to go unnoticed and under reported (Jacobsen & Bauman, 2007). Greene (2000), in an attempt to provide a common definition of bullying, created a list of common features across definitions of bullying. Common features included: a) intent of the bully is to inflict harm or fear in the victim, b) aggressive behavior is repeated, c) victim does not engage or entice the bully, d) often occurs within peer groups, and e) there is an imbalance of power (either real or perceived).

Varying methods and operational definitions of traditional types of bullying have made it difficult to determine an overall prevalence rate of bullying. According to Solberg and Olweus (2003), variability

in prevalence rates observed is related to a number of factors. First, most studies do not define prevalence in a manner consistent with epidemiological definitions of prevalence. Second, studies reporting prevalence rates of bully/victim problems obtain their data from multiple sources (e.g., teacher nomination, peer ratings, or self-report). Third, participants are not always provided with a definition of bullying leading to subjective participant interpretations of bullying. Fourth, studies vary in length of time under investigation (e.g., last two weeks, last two months, or last 6 months). Fifth, studies vary regarding number and specificity of response and rating categories. Finally, prevalence estimates vary based on the method used to determine frequency. For example, some studies base estimates on a single item/variable, whereas others use a composite score or scale index such as mean or the sum of several variables/ratings.

Using data obtained from a larger project, in 1997, Solberg and Olweus (2003) sought to obtain prevalence estimates of school-aged bullying. A total of 7,171 Norwegian students in grades 5 through 9 (2,544 girls and 2,627 boys) ranging in age from 11 to 15 years were administered a revised version of the Olweus Bully/ Victim Questionnaire, as well as measures of social disintegration (the extent to which the students felt accepted or like they belonged), global negative self-evaluations (the degree to which students had a generally negative opinion of themselves), depressive tendencies (how often did the students feel sad or miserable), general aggression (the degree to which the students used mainly physically and verbally aggressive behavior in their relations with peers and teachers at school), and antisocial behavior (the degree to which the students were involved in 10 relatively non-serious high prevalence activities such as skipping school and 7 more serious low prevalence activities such as breaking things on purpose or stealing). Analyses revealed 10% of the students were victims of bullying, 6.5% bullied others, and 1.6% were bully-victims (students who were both bullying victims and bullying perpetrators). Prevalence estimation of students classified as bully or bully victims were obtained using the frequency cut off point of "2 or 3 times a month." The authors estimated prevalence cut off was based on their previous findings that victims (based on this cut off) endorse higher rates of social disintegration, negative self-evaluation, and depression when compared to non-victims.

Prevalence rates have also been estimated according to participant age, gender, and various classifications of bullying. Utilizing a sample of 7,000 primary (ages 8 to 11) and secondary (ages 11 to 16) school children in Great Britain, Rivers and Smith (1994) examined three types of bullying (direct physical, direct verbal, and indirect). Questionnaires were completed regarding bullying behavior experienced during the previous school year. Results indicated direct-physical behaviors such as hitting, kicking, and stealing were more common among boys than girls in both primary and secondary students. No significant gender or age differences (primary vs. secondary) were found with direct- verbal behaviors such as name calling and threatening. In both primary and secondary school children more girls than boys reported incidents of indirect/relational bullying. Rivers and Smith speculated that due to limited physical size and close social interactions within their peer groups, girls are more likely to find indirect forms of bullying most effective. Additionally, in late adolescence and adulthood, the primary intent of indirect/relational aggression (e.g., spreading malicious rumors) appears to be social manipulation. High school students and adult bullies often disguise their intentions to harm others, leaving victims uncertain as to whether or not harm was intentional. This uncertainty tends to lead to self-doubt and increased levels of anxiety and depression in victims.

Research suggests that aggressive behavior extends beyond childhood. Aggression appears to be common across the lifespan. In high school, college students, and adults there is a transition from physical forms of aggression to relational or indirect types of aggression (Baron & Neuman, 1996; and Geddes & Baron, 1997). Adult aggression is often seen in the work place in the form of harassment, gossip, and other behaviors that inflict emotional harm on victims. Geddes & Baron (1997) reported that adult females were found to backstab and gossip about their enemies more than males.

Recently, Privitera and Campbell (2009) reported that 10.7% of male Australian Manufacturing Workers (n = 103) had experienced some form of work place bullying. Male victims of workplace harassment reported that the bullying had a significant impact on their social and family relationships. In particular, the male employees reported poor physical health, increased feelings of isolation, insecurity in

the workplace, problems with social and family relationships, a decrease in moral, lack of trust, and a lack of commitment to their jobs. Similar results have been reported by Kaukianen et al. (2001). A sample of 169 Finish participants (67 males and 102 females) ranging in age from 20 to 60 years completed selfreport questionnaires tapping workplace aggression. Results indicated: (1) that aggression in the work place is common, (2) bullying aggression is not limited to children, and (3) work place aggression causes an increase in depression and anxiety.

Consequences of Traditional Bullying

Research suggests that bullying behavior is often associated with significant long-term consequences, extending into adulthood (Bosworth, Espelage, & Simon, 1999; Davidson & Demaray, 2007; Griffin & Gross, 2004; Juvonen, Nishina, & Graham, 2001; Olweus, 1995; Pellegrini, Bartini, & Brooks, 1999; Rigby, 2000; Slee, 1994). In particular, bullies, bully-victims, and victims often report psychosocial symptoms including: depression, anxiety, loneliness, suicidal ideation, suicide attempts, and threats of suicide (Kaltial – Heino et al., 1999; Kumpulainen, et al., 1998). Additionally, bullies, bullyvictims, and victims often exhibit somatic symptoms such as digestive problems, headaches, and fatigue (Rigby, 2000).

In a 5-year longitudinal study, Swearer, Song, Cary, Eagle, and Mickleson, (2001) investigated psychosocial outcomes of victims, bullies, bully-victims, and controls. Participants included 133 (66 male and 67 female) 6th grade students ranging in age from 11 to 13 years. Analyses revealed significantly higher levels of anxiety and depression for students reporting bullying behavior. Similarly, Biggam and Power (1999) explored the association between anxiety, depression, and bullying in a sample of young Scottish adults ranging in age from 16 to 21 years. Scottish youth were administered a series of questionnaires about bullying tendencies, anxiety, and depression. Analyses revealed that victims of bullying reported significantly higher levels of anxiety and depression when compared to bully – victims and controls (peers who had experienced no form of bullying).

Newman, Holden, and Delville (2005) explored long-term consequences associated with bullying in adolescents. Participants completed self-report questionnaires about bullying experiences before and during high school. Data indicated that long-term psychological impact (e.g., depression, anxiety, loneliness, and somatic symptom) of bullying was associated with bullying frequency, duration, and in some cases gender. Similarly, Holt, Finkelhor, and Kaufman-Kantor (2007) investigated the impact of bullying on psychological functioning and academic performance in a large sample of 5th grade students. Participants completed questionnaires assessing peer relations and childhood bullying. Students in the peer victim category were at risk of serious psychological and academic problems. Similarly, students classified as "multiple victims" were at higher risk for psychological, academic, and social problems relative to non- bully victims and students in the peer victim category.

Cyberbullying

As a result of an increase in technology use such as the Internet and text messaging, traditional bullying has gradually expanded to include cyberbullying. The term cyberbullying was first coined by Bill Belsey, and was defined as using electronic means to "taunt, insult threaten, harass, and or intimidate a peer" (Raskaukas & Stoltz, 2007, p.565). Research indicates that children and adolescents use text messages (e.g., sexual harassment such as sending nude pictures), threatening email (e.g., name calling), instant messages (e.g., spreading rumors or lies and threats ranging from fist fights to killing the victim), defaming websites (e.g., posting nude or other harmful pictures), impersonation (e.g., pretending to be someone else), trickery (e.g., getting someone to reveal personal information, then sharing the information with others), outing (e.g., using the internet, text messages, or email, to disclose sensitive information including sexual orientation), exclusion (e.g., blocking someone from a website, Facebook account, email, or other forms of technology, and online "slam books" (e.g., rating people based on looks or some other detrimental insult) to aggress against their peers (Raskaukas & Stoltz, 2007).

Compared to traditional bullying, prevalence rates of cyberbullying have been difficult to assess for two primary reasons: (1) cyberbullying is a relatively new area of study, and (2) inconsistent operational definitions of cyberbullying has led to a wide range of bullying statistics. Currently, reported prevalence rates of cyberbullying across age groups range from 4.8% to 55.3 % (Dilmac, 2009; Sourander, Helstela, Helenius, & Piha, 2000). Although, prevalence rates of cyberbullying vary, a majority of studies have concluded that while traditional forms of bullying tend to decrease with age, electronic forms of bullying increase.

Ybarra and Mitchell (2004) used the Youth Internet Survey to investigate the prevalence rates of cyberbullying in youth between the ages of 10 and 17. Data indicated that approximately 9% of the surveyed youth reported participating in some form of cyberbullying. This rate reflected a 50% increase in prevalence compared to a similar survey study conducted by the authors in 2000. In 2007, Ybarra and Mitchell conducted a study similar to their 2004 survey design. Participants included a large sample of children and adolescents between the ages of 10 - 17. The purpose of their study was to examine the prevalence and frequency associated with online harassment. Online harassment was operationally defined as using the Internet to embarrass, harass, or tease peers. Specific examples of online harassment included making "rude or nasty comments." Participants were surveyed about their perceptions associated with online harassment, victimization, Internet use, and problem behaviors. Data indicated that 6% of the participants indicated that they had limited experience with Internet harassment. In the same study, Ybarra and Mitchell found that 84% of the surveyed youngsters knew their aggressors, 69% indicated that the identity of their bully was unknown. The authors suggested that the unique power structure created by the Internet might explain why cyberbullying continues beyond typical forms of traditional bullying.

Using a small sample of British students, between the ages of 11 -16, Smith and colleagues (2008) conducted two studies that examined the frequency and type of cyberbullying experiences of students. In the first study, data indicated that approximately 6.6% of the participants had frequent

experiences with cyberbullying, and 15.6% had been bullied fewer than two times within the past two months. In the second study, the same students were asked to identify specific types of cyberbullying experienced. Analyses revealed that the majority of the participants experienced cyberbullying in the form of instant messages (such as AOL or Facebook messenger) and smart phone calls (e.g., nasty phone calls or text messages).

Kowalski and Limber (2005) examined the prevalence rates of cyberbullying in a large sample of middle school students from several communities in the Southeastern and Southwestern United States. Survey data revealed that 18% of the students (25% of the girls and 11% of the boys) reported having been victims of cyberbullying at least once within the last two months. Of students who endorsed cyberbullying victimization, 53.2% stated that they had been bullied by a school peer, 37% had been bullied by a friend, 13% reported being cyber bullied by a sibling, and 48% were bullied by unknown perpetrators. In addition to being victims of cyberbullying during the last two months 11% of students reported cyberbullying another person. Of those students who bullied others, 41.3% reported bullying another student at school, 32.7% reported bullying a friend, and 12.6% reported bullying a sibling.

Raskauskas and Stolz (2007) examined electronic bullying and its relationship with traditional forms of bullying in a small sample of adolescents between the ages of 13-18. Participants were asked to complete self-report measures on their experiences with electronic and online forms of bullying. They found that 48.8% of the surveyed adolescents endorsed being victims of online bullying, and 21.4% of the youth indicated that they had been victims of electronic bullying. Raskauskas and Stolz also asked the participants about their experiences with traditional bullying. Results indicated that being a victim of bullying at school was correlated with an increased risk of being a victim of cyberbullying. The authors suggested that anonymity associated with cyberbullying increases the ease through which victims of traditional bullying can retaliate thereby becoming a bully victim.

Using a large sample of college undergraduates, MacDonald and Roberts-Pittman (2010) examined the frequency of cyberbullying and specific cyberbullying experiences. The authors defined cyberbullying as "sending or posting harmful or cruel text or images using the Internet or Digital communication devices" (p. 2004). Based on this operational definition, participants were asked a series of questions which included have you ever: (1) "witnessed another student being bullied", (2) "personally experienced bullying," and (3) "personally bullied another student." All questions were rated on a 4-point Likert type scale ranging from 1 "Never" to 4 "Very Frequently." Additionally, participants were asked about specific forms of media associated with their cyberbullying experiences. Analyses indicated that 38% of participants knew someone who had been cyberbullied, 21.9% reported being cyberbullied, and 8.6% reported cyberbullying another student. Additionally, 25% of the students reported being harassed or threatened through a social networking site, 21.2% reported being harassed through threatening text messages, 16.1% reported receiving harassing or threatening email messages 13.2% had received harassing or threatening Instant Messages (IMs), 9.9% had experienced another negative or embarrassing chat room posts, and 6.8% had experienced negative comments or images posted on websites.

Zacchilli and Valerio (2011) examined awareness and prevalence of cyberbullying in a large sample of undergraduates between the ages of 18 to 23. Participants were asked to respond to a series of questions concerning past and present experiences with bullying (traditional and cyber). Analyses indicted that in grade and middle school, 15% of the students, reported that they had bullied someone else, 19% endorsed being bullied, and 3% reported that they had used cyberbullying to bully other students. In high school, 21% reported bullying other students, and 6% indicated using cyberbullying to harass other students. With regards to being the victim of bullying in grade school and middle school, 36% reported experiencing traditional bullying in grade school, 33% reported traditional bullying during middle school, and 3% of participants indicated that they had cyber bullied another student in middle school. In high school, 21% indicated that they had been the victims of traditional bullying, and 4% reported being cyber bullied. In college, approximately 1% of students reported traditional victimization,

and 1.5% reported being cyber bullied in high school. In addition to prevalence rates of bullying experiences, participants were asked to report about specific types of cyberbullying used. Percentages of specific cyberbullying methods included 5% MSN/AOL, 4% hacking, 3% Email, 14% name-calling, 20% gossip, 16% ignoring, and 12% Facebook.

Previous research on traditional bullying argued that bullying behavior decreased with age. However, current data suggests that aggressive behavior appears to be common across the life span. As a result of an increase in technology use, such as the Internet and text messaging, traditional bullying has gradually expanded to include cyberbullying. While research in the area of cyberbullying is relatively new, current evidence suggests that cyberbullying is a problem for children, adolescents, college students, and adults. Similarly, current prevalence data indicate that cyberbullying is a pervasive problem that has long-term detrimental effects on bullies, victims, and bully-victims.

Consequences

Victims, bullies, and bully-victims of cyberbullying commonly experience emotional distress. Typical emotions associated with cyberbullying include: frustration, anger, and sadness (Hinduja & Patchin, 2007). Beran and Li (2007) suggested that anger and crying were the most frequent responses to cyberbullying, with depression, hurt, anxiety, embarrassment, and fear being other generalized emotional responses to bullying experiences. Research also suggests that while cyberbullying contains only threats, they appear to have more negative long-term effects than traditional bullying (Campbell, 2005). Campbell (2005) outlined several possible reasons as to why cyberbullying may lead to worse psychological outcomes. First, technology allows for a larger audience for the aggression. For example, threatening emails can be forwarded, and websites can be viewed by an unlimited number of people. Second, unlike traditional bullying, cyberbullying relies on the power of written words. When traditional bullies insult a victim, either physically or verbally, the victim is not constantly re-exposed to the incident. However, the same is not true for cyberbullying in which emails, message boards, or other Internet based forums create

a sense of permanency because images or written messages can remain posted indefinitely. Finally, most victims of traditional bullying are able to escape interacting with a bully. However, escape from cyberbullying is difficult as threatening behavior can occur at any time since it does not require victims to be present.

Ybarra and Mitchell (2007) examined overall impact of bullying in adolescent victims and perpetrators of cyberbullying. A large sample of adolescents between the ages of 10 and 17 participated in the study. Specific areas of impact included: harassment, perpetration psychosocial problems, behavior, and Internet use. Data indicated that various behavioral problems, including aggression, rule breaking, depression, and withdrawal were associated with psychosocial problems and perceived harassment. More importantly, adolescents who were originally victims of cyberbullying were likely to become cyber bullies, and traditional bully victims also endorsed higher rates of becoming cyber bullies.

Using a large sample of 7th grade Swiss students, Machmutow, Perran, Sticca, and Alsaker (2012), examined the relationship between cyberbully victimization and depression. The authors sought to determine if cyber victimization led to higher levels of depression compared to victims of traditional bullying. Participants filled out a series of self-report measures assessing the frequency with which they were bullied (traditional and cyberbullying) and depressive symptoms over a 6-month period. Analyses indicated that being the victim of cyberbullying was predictive of depressive symptoms. Additionally, compared to participants who reported being victims of traditional bullying, cyber bullied victims scored higher on measures of depression.

In addition to emotional distress, youth involved with cyberbullying tend to display noticeable changes in behavior. Using a sample of Canadian cyber bully victims in grades $7^{th} - 9^{th}$, Beran and Li (2007) examined behavioral changes associated with cyberbullying. Analyses indicated that cyber victimization led to: (1) low academic achievement, (2) increased alcohol or drug abuse, (3) lower grades, (4) lower self-esteem, (5) higher absentee rate, (6) internet avoidance, (7) ruminating about harassment,

(8) increased irritability, (9) increased suspicion towards others, and (10) decreased engagement in previously enjoyed activities such as text messaging, instant messaging, and email use.

Schenk and Fremouw (2012) examined the psychological impact of cyberbullying in a large sample of college undergraduates. Participants completed a series of questionnaires including the Internet Experiences Questionnaire (IEQ), Symptom Checklist -90-R (SCL-90-R), and the Suicidal Behavior Questionnaire-Revised (SBQ-R). Based on responses to the IEQ participants were classified as victims and controls. Relative to controls, victims of cyberbullying endorsed significantly higher levels of psychological distress on the following subscales of the SCL-90-R: (1) depression, (2) anxiety, (3) phobic anxiety, and (4) paranoia. On the IEQ, victims indicated that cyberbullying had affected them in the following ways: 46.2% felt frustrated, 40.9% felt stressed, 37.9% felt sad or hurt, 33.8% felt angry, and 23.4 % had problems concentrating. On the SBQ-R, cyberbullying victims admitted to more suicide attempts (5.7%) than the control group (0.0%). Victims also reported higher levels of suicidal ideation (10.1%) compared to the control group (0.0%), and finally, cyberbullying victims scored significantly higher on the SBQ-R total score then the control group. The authors concluded that cyberbullying victimization in college undergraduates may lead to poor psychological outcomes.

The above review reveals that bullying behaviors (traditional and cyber) are often associated with adverse long-term consequences. Bullies, bully-victims, and victims often report psychosocial symptoms including depression, anxiety, loneliness, suicidal ideation, suicide attempts, and threats of suicide. Research also suggests that aggressive behavior appears to be common across the life span with bully transitioning from physical forms of aggression to relational or indirect types of aggression (Baron & Neuman, 1996; Geddes & Baron, 1997). As a result of an increase in technology use, traditional bullying has gradually expanded to include cyberbullying. While research in the area of cyberbullying is relatively new, current evidence suggests that cyberbullying is a pervasive problem from childhood into adulthood, and is associated with long-term detrimental effects for bullies, victims, and bully-victims.

Self-Blame

Research suggests that self-blame, the tendency to view life events as being within an individual's control may exacerbate the development and intensity of psychological symptoms such as anxiety and depression (Feinaeuer & Stuart, 1996). In particular, attributions of self-blame have been identified as important moderators of adjustment to stress and trauma. Attribution theory states that individuals who interpret traumatic events as being precipitated by external factors such as blaming the perpetrator or other environmental circumstances, have better long-term outcomes including lower levels of psychosocial symptoms such as anxiety, depression, and hopelessness (Feinaeuer & Stuart, 1996). Unfortunately, many trauma victims assume personal responsibility for their traumatic experience.

Feinaeuer and Stuart (1996) sought to examine the relationship between long-term psychological outcomes and four categories of blame in sexual abuse victims. The four categories of blame included: (1) self, (2) perpetrator, (3) fate, and (4) fate and self. Participants included women between the ages of 18 – 65 from the 1984 Salt Lake County, Utah Voter Registration records. Participants were administered measures of psychological distress, and a self-report measure created by the authors assessing self-blame. Analyses revealed that victims who blamed the perpetrator endorsed fewer internalizing symptoms than victims who interpreted the abuse as being their fault. Similarly, in a sample of middle school children, Graham and Juvonen (1998) found that self-blame mediated the relationship between self-perceived victimization and adjustment problems such as loneliness, depression, anxiety, and lower levels of self-worth.

O'Neill and Kerig (2000) explored the relationship between attributions of self- blame and longterm psychological adjustment among women who had experienced physical and sexual violence in intimate relationships. 160 women were recruited from battered women's shelters, community support groups for battered women, and a college campus. Demographics of the sample included: 75% Caucasian, 13% Native American, 4 % African American, and 4% Hispanic. Participants completed

measures of physical and sexual abuse, psychological symptoms, and a measure of self-blame created by the researchers for this study. Analyses revealed a positive correlation between self-blame and psychological symptoms of depression and anxiety. Hierarchical multiple regressions revealed self-blame moderated the relationship between physical violence and psychological symptoms (depression and anxiety). The authors suggested that maintaining a belief that they could have controlled and/or prevented the abuse attributions of self-blame intensified their experiences. Similarly, by blaming themselves victims may believe that similar future events (abuse) are within their control thereby increasing psychological distress.

Hassija and Gray (2012) explored the relationships among self-blame, traumatic events, and PTSD symptom severity in a large sample of undergraduate students. Traumatic experiences included: sexual assault, physical assault, unwanted or uncomfortable sexual experiences, and sexual and physical abuse. Participants completed a demographic questionnaire, as well as measures of interpersonal assault exposure, PTSD symptom severity, and attributions of interpersonal assault. Meditational analyses suggested that self-blame was associated with poorer psychological adjustment. In particular, participants who reported blaming themselves for the traumatic events reported a greater number of symptoms on the measure of PTSD symptom severity than participants who blamed the perpetrator.

Arata (1999) examined self-blame in a large sample of female undergraduate students who endorsed having experienced rape or sexual abuse. Participants completed a series of self-report measures assessing: (1) child sexual abuse history, (2) adult history of sexual abuse, and (3) attributions of blame (self or perpetrator). Analyses indicated that participants who blamed themselves reported higher levels of trauma symptoms including, anxiety, depression, loneliness, and panic. The authors concluded that among child and adult victims of sexual abuse higher levels of self-blame increased the likelihood of poor psychological outcomes (e. g, higher levels of depression, anxiety, and feelings of loneliness).

Frazier and Schauben (1994) examined the relationship between self-blame and long-term psychosocial outcomes in a large sample of undergraduate women who reported a history of being raped. Participants between the ages of 17 and 56 years completed a measure of psychological symptoms (Brief Symptom Inventory), and a 5-point Likert-type scale assessing attributions of responsibility for the rape (i.e. self-blame vs. blaming other). Data indicated that victims of rape who blamed themselves for the assault reported greater psychological symptoms then victims who blamed the perpetrator. In particular, relative to rape victims who blamed the perpetrator, women who blamed themselves reported higher levels of anxiety, depression, loneliness, and panic symptoms.

As part of a larger longitudinal project, Perren, Ettekal, and Ladd (2013) investigated the impact of self-blame versus external blame (blame perpetrator or events outside of their control) on peer victimization. Data was collected from a large sample of 5th grade children between the ages of 5 and 7. Assessment of peer victimization occurred at three time points. At time one (spring of 5th grade), peer victimization was assessed through peer nominations. Each student was asked to nominate at least three classmates who were often teased, kicked, punched, or picked on. At time two (fall and spring of 6th grade), attributions of self-blame were assessed through hypothetical scenarios in which each child was asked to image themselves being picked on by another student. After reading each description, the students were asked to report why the child was picking on them. Students could pick between, "I must have done something to make this happen" to "accidental reasons." Each response was rated on a 5-point Likert type scale with 1 "not the reason" to 5 "really the reason." Finally, at Time three maladjustment was assessed (spring of 7th grade). To evaluate each student's psychological adjustment, parents and teachers were asked to complete the Child Behavior Check List (Teacher or Parent Form). In particular, the authors were interested in anxious and depressive symptoms (i.e. internalizing behaviors). Results indicated that students who blamed themselves for being bullied scored higher total scores on the Child Behavior Check List, as well as higher scores on the Anxious/Depressive Subscale. Additionally, from time one (5th grade) to time three (7th grade) there was considerable consistency regarding internalizing

problems. When students blamed themselves for being bullied, internalizing symptoms appeared to remain stable over time. The authors suggested that there is a strong link between peer victimization, self-blame, and long-term psychological problems (e.g., anxiety and depression).

Resilience

Everyone who experiences major stressors or traumatic events does not develop clinical levels of anxiety or depression. Some individuals appear to quickly return to previously normal functioning following a traumatic or stressful event. According to Smith and Colleagues (2008), resilience in the face of stress includes "the ability to adapt to stressful circumstances, to not become ill despite significant adversity, and to function above the norm in spite of stress or adversity" (p. 194).

Bitsika, Sharpley, and Peters (2010), investigated the relationship between resiliency and development of anxiety and depression. Male and female undergraduates ranging in age from 17- 54 years completed several self-report measures of anxiety, depression, and resiliency. Analyses indicated that participants with clinically elevated scores on the depression and anxiety scale had lower total scores on the resilience measure.

Newman-John, Mason, and Hunter (2014) examined the relationship between resilience and longterm outcomes associated with chronic pain. The authors hypothesized that resilience would be a predictor of long-term adjustment to pain and pain related outcomes. A large sample from a pain clinic in Australia participated in the study. To be included in the study, participants had to be older than 18 years of age and have a reported history of pain lasting longer than 12 months. Participants completed selfreport measures of pain coping, resilience, depression, and pain outcomes. Results indicated that resilience was positively associated with adjustment to chronic pain. In particular, individuals high on the resilience measure reported fewer work related absences due to pain. Contrary to expectations resilience did not predict outcomes associated with depression. The authors concluded that resilience is an important factor associated with health related outcomes. In two studies Smith and colleagues (2010) investigated resilience as a predictor of health related outcomes. In both studies participants included a large sample of college undergraduates from a university in the Southeastern United States. Participants completed questionnaires assessing resilience and health related outcomes. The authors predicted that resilience would predict health related outcomes over and above: (1) optimism, (2) social support, (3) mood clarity, (4) spirituality, and (5) purpose in life. In the first study the relationship of positive and negative affect with health was examined. Analyses indicated that resilience (which included positive and negative affect) accounted for a significant amount of variance in the prediction of health related outcomes when controlling for other variables (optimism, social support, mood clarity, spirituality, and purpose in life).

In the second study, the physical symptoms associated with health and health related outcomes (e.g., positive adaptation to chronic pain and the ability to continue working) and their relationship to resiliency were examined. Data indicated that resilience was able to predict health related outcomes even when controlling for optimism, social support, mood clarity, purpose in life, spirituality, and physical symptoms. Based on the results of studies, the authors concluded that resilience is an important factor associated with long-term health adjustment and outcomes in chronic pain patients.

Self-blame and resilience appear to be associated with long-term psychological outcomes. Research on self-blame indicates that individuals' attributions concerning adverse life events have impact on the development and intensity of psychological outcomes such as depression and anxiety (Feinaeuer & Stuart, 1996). Individuals who attribute aversive life events to circumstances within their control have worse long-term psychological outcomes compared to individuals who blame external variables (e.g., blame perpetrator or environment). Similarly, resilience is thought to buffer psychological reactions to stressful life events (Smith, Dalen, Wiggins, Tooley, Christopher, & Bernard, 2008). Individuals fare best in terms of long-term psychosocial outcomes if they are readily able to behaviorally adjust and return to adaptive functioning. While research in the area of cyberbullying is relatively new, current evidence suggests that cyberbullying behavior often leads to detrimental effects. Moreover, adverse outcomes are reported for bullies, victims, and bully/victims. The purpose of the present study was to examine the relationships among cyberbullying, self-blame, resilience, and psychological well-being in college students. It was predicted that the experience of cyberbullying would negatively predict psychosocial outcomes as mediated through level of self-blame, and that resilience would serve as a moderator of the relationship between cyber bulling and self-blame.

II. METHODS

Participants

Participants were 543 undergraduates from a public university in the southeastern United States. Participants included 155 males and 388 females ranging in age from 18 to 30 plus years. Demographic information for all participants is listed in Table 1.

Measures

Demographics

Participants completed a short questionnaire that provided demographic data such as gender, age, years in college, ethnicity, and sexual orientation.

Cyberbullying Scale (CBS; Steward, Drescher, Maack, Ebesutani, & Young, 2014) is a 16- item self-report measure designed to assess cyberbullying in children and adolescents. Students are asked to respond based on cyberbullying experiences that have occurred in the "PAST FEW MONTHS." Items one and two are administered to determine specific types of cyberbullying behavior experienced. Items 3 -16 are scored on a 5 point scale ranging from 1 "Never" to 5 " All the time." A total score is derived by adding items 3 -16. Higher total scores are indicative of higher frequency of cyberbullying. The CBS has been found to have good internal consistency with Chronbach's alpha for the Total Score being .94 (Stewart, Drescher, Maack, Ebestutani, & Young, 2014). Initial evaluation of the CBS's psychometric properties indicates that the measure demonstrates good concurrent validity (Stewart, Drescher, Maack, Ebestutani, & Young, 2014). The CBS correlated high with constructs such as anxiety, depression, and

loneliness (Stewart, Drescher, Maack, Ebestutani, & Young, 2014). For the present study, questions were adapted for college students with the word "kids" replaced by the word "people."

The Depression Anxiety Stress Scales-21 (DASS-21; Lovibond & Lovibond, 1995) is a 21-item short form of Lovibond and Lovibond's (1995) 42-item self-report measure of depression, anxiety, and stress (DASS). The authors maintain that doubling the total score on the DASS-21 is equivalent to derived scores from the full-scale version of the DASS. The DASS-21 contains the full range of symptoms measured by the original DASS. Its three subscales (stress, depression, and anxiety) are added together to create a total score.

The DASS-21 and each of its subscales have been found to have good internal consistency with Cronbach's alphas for the Depression, Anxiety, and Stress subscales ranging from .92 to .97 (Antony, Bieling, Cox, Enns, & Swinson, 1998; Henry & Crawford, 2005). Extent literature indicates that the DASS-21 has good concurrent validity correlating highly with other measures of depression, anxiety, and stress (Antony, Bieling, Cox, Enns, & Swinson, 1998; Henry & Crawford, 2005).

The Brief Resilience Scale (BRS; Smith, Dalen, Wiggins, Tooley, Christopher, & Bernard, 2008) is a 6-item self-report measure designed to assess an individual's ability to bounce back and return to normal levels of adaptive functioning following a stressful life event. Three of the items (1, 3, and 5) are worded in a positive manner, and three of the items (2, 4, and 6) are negatively worded. For each item, participants are given the following instructions "Please indicate the extent to which you agree with the following statements." The items on the instrument are scored on a 4-point scale ranging from 1 "Strongly Agree" to 5 "Strongly Disagree". The BRS is scored by reverse coding items 2, 4, and 6 and finding the mean of the six items. The BRS has demonstrated good internal consistency with Cronbach's Alpha ranging from .80 to .91 (Smith, Dalen, Wiggins, Tooley, Christopher, & Bernard, 2008). The BRS has good concurrent and discriminate validity (Smith, Dalen, Wiggins, Tooley, Christopher, & Bernard, 2008).

2008). Similarly, the BRS has also demonstrated good internal consistency and test- re-test reliability (Smith, Dalen, Wiggins, Tooley, Christopher, & Bernard, 2008).

Measure of Self-Blame: A literature review revealed that the vast majority of research involving self-blame has focused on children resulting in most measures of the construct being created for children. Moreover, investigations involving adults routinely used measures of self- blame that have been modified to meet specific study needs. In the present study, a measure of self-blame was created based on the work of Feinauer and Stuart (1996). Feinhaur and Stuart used four items to determine the extent to which participants blame themselves or others for their abuse. Items used to determine extent of self-blame included: (a) "I blame and criticize myself for my part in the experience," (b) " I decided I brought it all on myself and therefore I am to blame," (c) " I am to blame for my abuse as a child and as an adult," and (d) " It is part of my Karma." For the present study, the word "abuse" on item (c) was replaced with "cyberbullying", and the word "karma" on item (d) was be replaced with "external factors". Items on the instrument were scored on a 4-point scale ranging from 1 "Strongly disagree" to 4 "Strongly agree." A total score was derived by reverse coding item 4 and calculating a total score for the 4 items.

The Positive and Negative Affect Scales (PANAS; Watson, Clark, & Tellegen; 1988) is a 20-item self-report measure that is comprised of two subscales. Each subscale (Positive Affect and Negative Affect) contains 10 items asking participants to "indicate to what extent you feel this way right now, that is, at the present moment OR indicate the extent you have felt this way over the past year." For each of the 20 items, participants are asked to respond based on a 5 –point scale ranging from 1 " Very Slightly or not at all" to 5 " Extremely." Scores are obtained by finding individual means for each subscale (Positive and Negative). Total scores can range from -10 to 50 with lower scores representing lower levels of positive or negative affect. Both PANAS scales have demonstrated high internal consistency. Chronbach alpha coefficients ranged from 0.86 to 0.90 for the Positive Affect Scale, and 0.84 to 0.87 for the Negative Affect Scale (Watson, Clark, & Tellegen, 1988). The PANAS correlates highly with other measures that assess general dysfunction, anxiety, and depression (Watson, Clark, & Tellegen; 1988).

Procedure

Participants were recruited via the University of Mississippi online participant system (Sona Systems). Students received 1 research credit for participating. Informed consent and measures were administered anonymously using Qualtrics (Enterprise Service Tools; Provo UT). Participants were first administered informed consent describing the nature of the study, confidentiality, and right to terminate participation at any time. Participants were given an unlimited amount of time to complete questionnaires which included a demographic questionnaire, Cyberbullying Scale, Depression Anxiety and Stress Scale-21, Brief Resilience Scale, Measure of Self-Blame, and Positive and Negative Affect Scale. Counter-balanced presentation of questionnaires was used. The PANAS was administered as an additional measure of overall mood and interpretation of the world for use in the event that the Self-Blame measure did not demonstrate adequate internal consistency reliability. As the Self-Blame measure correlated with both PANAS subscales, and demonstrated good internal consistency reliability (Table 2), it was determined that both measures would provide equivalent outcome data. Therefore, following removal of univariate and multivariate outliers, only the Self-Blame measure was entered into final analyses, tables, and data descriptions.

III. RESULTS

Preliminary Analysis

Prior to conducting analyses participants' response time effort was evaluated. Use of response time to identify outliers relies on the assumption that a minimum amount of time is required to read accurately and answer each item. Based on the distribution of data and use of Outlier Labeling rule, 250 participants with completion times below 450 seconds were removed as outliers, as were 3 participants who only completed the demographic questionnaire, and 6 participants whose age (30 years+) fell 2 Standard Deviations above the mean. One univariate outlier more than 3 standard deviations from the mean on the PANAS-Negative Affect Subscale was removed. Mahalanobis distance identified four multivariate outliers that were removed from the final analyses. The final sample consisted of 279 participants.

Examination of skewness and kurtosis revealed a normal distribution for the BRS. However, distributions for the CBS, SB, DASS subscales, and DASS Total Score were negatively skewed. Kurtosis for the CBS scale indicated a relatively flat distribution. However, because the final analyses (moderated mediation), and 95% bootstrapped confidence intervals produced by the Hayes 2013 Process Macros utilize an inferential statistic that does not assume a normal distribution, the data were left untransformed. Data were collected using Qualtrics ensuring that no data entry errors were present. Missing value analyses indicated no variables with 5% or more missing values. Little's MCAR test for significance revealed that data were missing at random (p < 0.05). Missing data were imputed using the maximization likelihood estimation.

Reliability and descriptive statistics were obtained for all measures and are shown in Table 2. A correlation matrix was computed in order to examine relationships among variables of interest (Table 3). Significant negative relationships were observed between the BRS and CBS, BRS and SB, BRS and DASS subscales, and BRS and DASS Total Score. Additionally, there were significant positive relationships observed between the CBS and SB, CBS and DASS subscales, and CBS and DASS Total Score.

Cyberbullying Prevalence and Frequencies

Prevalence rates for participant responses on the CBS are presented in Tables 4 through 6. The most experienced form of cyberbullying for victims and perpetrators was text messages/twitter. Approximately 39.4% of participants indicated that they had been victims of cyberbullying via text messages/twitter, and 20.1% indicated that they had cyberbullied others using text messages/twitter. Based on responses to CBS Item 1 "*Do other college students use any of the following to bully you*," and CBS Item 2 "*Do you use any of the following to bully other college students*," 26.9% of participants indicated that they had been victims), 96.1% indicated that they had been victims of cyberbullying, and 44.1% indicated that they had cyberbullied others. It is interesting to note that several bully/victims indicated that they had been bullied and bullied others using the same technology. Table 7 provides frequency and percentages of bully/victims who endorsed matching responses on CBS Items 1 and 2. The two most common forms of media identified by bully/victims were Text Messages/Twitter (68%) and social networking sites (34.6%).

Moderated Mediation (Conditional Process Analysis)

It was hypothesized that the experience of cyberbullying (X) would negatively predict psychosocial outcomes (Y) as mediated through level of self-blame (M). Additionally, given the rationale that resilience could potentially act as a protective factor against engaging in self-blame, it was hypothesized that resilience (W) would serve as a moderator of the relationship between cyberbullying
(X) and self-blame (M). The moderated mediation hypothesis was examined by estimating the cyberbullying by resilience interaction predicting self-blame (indirect effect of a₃ x b). This model (shown in Figure 1) provided a test of whether the relationship between cyberbullying experiences and self-blame among participants with resilience predicted psychosocial outcomes. Although, many variants of moderated-mediation can be used, "Model 7" by Hayes (2013), in which the a-path of the indirect effect is moderated by some other variable was selected for this study. In this instance of moderated mediation, the relationship between self-blame and cyberbullying was thought to depend on the level of a moderating variable (resilience).

The overall indirect effect of self-blame (M) in the analysis of psychosocial outcomes (Y) regressed on Cyberbullying (X)-by-Resilience (W) interaction was not significant (Overall Indirect effect = 0.005 (95% C.I.: -.0742 -.0854). The overall indirect effect indicates that the overall pathway between Cyberbullying (X) and Psychosocial Outcomes (Y) was not significant. Because the overall indirect effect was not significant, a separate analysis was performed with just the mediator present. The mediation only analysis revealed a significant indirect effect = .1616 (95% C.I.: 0.0877 - .2620). Magnitude of the indirect effect of cyberbullying on psychosocial outcomes was mediated by self-blame. However, in this model, resilience did not significantly impact the overall pathway of cyberbullying (X) to psychosocial outcomes (Y). To the degree that significant difference were not evident, no follow-up analysis on the moderated-mediation were necessary.

IV. DISCUSSION

Consistent with previous research, present findings indicate that cyberbullying is a common experience among college students (Bauman & Newman, 2013; Raskauskas & Stolz, 2007; Juvonen & Gross, 2008; MacDonald & Roberts-Pittman, 2010; Zacchilli & Valerio, 2011). Almost all participants reported that in the past few months they had been victims of cyberbullying (96%). Additionally, 44% reported bullying others, and 26.9% reported being bully/victims. Similar to previous reports, text messages and social networking sites were noted as primary modalities for cyberbullying behavior (MacDonald & Roberts-Pittman, 2010; Zacchilli & Valerio, 2010). It has been reported that traditional forms of bullying may decrease with age, and may be replaced by electronic forms of bullying (Dilmac, 2009; MacDonald & Roberts-Pittmn, 2010; Zacchilli & Valerio, 2011).

As noted in the introduction, studies suggest that like traditional forms of bullying, individuals who participate in cyberbullying behavior often experience emotional distress

(Bosworth et al., 1999; Davidson & Demaray, 2007; Rigby, 2000). In particular, bullies, bully-victims, and victims often report psychosocial symptoms including depression, anxiety, loneliness, suicidal ideation, and an increased use of alcohol (Kaltiala-Heino et al., 1999; Kumpulainen, et al., 1998; Selkie, Kota, Chan & Moreno, 2015). Results of the present study are consistent with previous research examining psychological functioning and bullying involvement (Ybarra, 2004; Ybarra & Mitchelle, 2007; Veenstra et al., 2005). Specifically, examination of the correlation matrix revealed that depression, anxiety, and stress were positively correlated with cyberbullying behavior. Our data are also consistent with prior reports of the relationship between cyberbullying and psychosocial outcomes in college-aged participants (Crosslin & Golman, 2014; Na, Dancy, & Park, 2015; Schenk & Fremow, 2012).

As expected, self-blame mediated the relationship between cyberbullying and psychosocial outcomes. Participants who reported responsibility/blame for cyberbullying experienced elevated levels of poor psychosocial outcomes (e.g., higher levels of stress, depression, and anxiety as measured by the DASS-21). This finding is consistent with previous research demonstrating self-blame for undesirable or stressful events exacerbates the development and intensity of psychological symptoms (Feinaeuer & Stuart, 1996; Graham & Juvonen, 1998; Hassija & Gray, 2012; O'Neill & Kerig, 2000).

Resilience has been found to serve as a protective factor against negative or adverse events. (Bitsika, Sharpley, & Peters, 2010; Hoger, Austin, & Pollack, 2007; Southwick, Vythilingam, & Charney, 2005). Research suggests that individuals scoring high on measures of resilience endorse fewer long-term and short-term psychosocial symptoms following exposure to stressful events (Bitsika, Sharpley, & Peters, 2010; Hoger, Austin, & Pollack, 2007; Southwick, Vythilingam, & Charney, 2005). As such, it was predicted that resilience would serve as a moderator of the relationship between cyberbullying and self-blame. Surprisingly, this hypothesis was not confirmed.

One possible explanation concerning the failure of resilience to moderate the relationship between bullying and self blame concerns the nature of cyber aggression. In contrast to traditional bullying, cyberbullying does not necessitate direct contact with the target. Negative images and pictures, text messages, and emails can be posted anonymously. Moreover, material posted to the cyberenvironment is exceedingly difficult to eliminate limiting degrees of freedom for victims concerning confronting bullies and controlling toxic message content. Protective factors associated with resilience have been operationalized as a person's ability to problem solve and adapt based on environmental feedback; as well as the ability to seek out assistance and exert personal control over a given situation (Conner, & Davidson, 2003; Masten, 2001; Rutter, 2006). It may be that the defining features of cyberbullying (e.g., anonymity, relatively permanent availability of toxic content) limit the impact of typical displays of effective resilience behaviors. That is, the inability to affect electronic content and confront the cyberbully may limit opportunities for personal competence building and establishing a sense of personal control.

Limitations

Several limitations of the current work deserve mention. The present study used a southeastern university sample composed largely of Caucasian females. Replicating this work with a more diverse sample would contribute to determining generalizability of these findings. Additionally, a large portion of the sample was removed from analyses as a result of their unusually quick questionnaire completion. Future work should include safeguards to address this issue ensuring integrity of participant responses. For example, Meade and Craig (2011) suggest placing bogus items into measures as a means of flagging participant's careless responding. Other investigators suggest placing self-report indices at the end of the survey to assess attention, effort, or thoughtfulness (Desimone, Harms, & Desimone, 2015). The selfreport indices typically ask the participant to reflect on and evaluate perceived effort throughout a given study. LIST OF REFERENCES

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APPENDIX

	Frequency	Percentage
Gender		
Male	77	27.6
Female	202	72.4
Age		
18	72	25.8
19	129	46.2
20	41	14.7
21	22	7.9
22	5	1.8
23-29	10	3.6
Race/Ethnicity		
European/Caucasian	198	71.0
African American	52	18.6
Asian	14	5.0
Hispanic	7	2.5
Other	8	2.9
Years in College		
1	181	64.9
1-2	55	19.7
2-3	21	7.5
3-4	17	6.1
4+	5	1.8

Table 1. Descriptive Statistics of Participants (n= 279)

Sexual Orientation		
Heterosexual	266	95.3
Bisexual	4	1.4
Homosexual	7	2.5
Asexual	2	0.8

Table 2. Descriptive Statistics for Key Variables

	Mean	SD	А
BRS Mean	3 401	0 728	853
CBS Total	20.52	6 998	018
	20.32	0.226	.916
Self-Blame	6.843	2.899	.825
DASS-21 Stress	12.53	4.267	.857
DASS-21 Anx	10.20	3.488	.818
DASS-21 Dep	10.67	3.881	.889
DASS-21 Total	33.41	10.49	.935

	1	2	3	4	5	6	7
1.BRS	-	201**	204**	478**	387**	466**	495**
2.CBS		-	.318**	.247**	.282**	.256**	.289**
3. SB			-	.347**	.410**	.322**	.396**
4.DASS_Stress				-	.729**	.750**	.926**
5.DASS_Anx					-	.673**	.877**
6.DASS_Dep						-	.898**
7.DASS_Total							-

Table 3. Bivariate Relationships Among Measures

	Frequency	Percentage
E-mail	9	3.2
Online video clips of you	10	3.6
Text messages/Twitter	110	39.4
Social networking site (like Facebook)	74	26.6
Picture Messages	28	10
Chatroom	10	3.6
Instant messaging	13	4.7
Virtual World (like Second Life or the Sims)	10	3.6
Developed a mean website or message board about you	4	1.4

 Table 4. Prevalence of Cyberbullying Scale- Victimization (Frequency and Percentages)

	Frequency	Percentage
E-mail	1	0.4
Online video clips of you	5	1.8
Text messages/Twitter	56	20.1
Social networking site (like Facebook)	32	11.5
Picture Messages	14	5.0
Chatroom	6	2.2
Instant messaging	5	1.8
Virtual World (like Second Life or the Sims)	2	0.7
Developed a mean website or message board about you	2	0.7

Table 5. Prevalence of Cyberbullying Scale- Perpetration (Frequency and Percentages)

Item	Never	Almost Never	Sometimes	Almost All the Time	All of the Time
3. You get online or text messages from another person threatening to beat you up	77.4	17.5	4.3	0.4	0.4
4. Other people leave you out of online groups on purpose	49.5	29.6	0.4	19.4	1.1
5. Another person say something mean to you (like calling you names or making fun of you) in a text message or online	38.4	31.5	25.4	4.3	0.4
6. A person who is mad at you try to get back at you by not letting you be in their online group anymore	60.6	23.7	15.1	0.6	0.0
7. You get text or online messages that make you afraid for your safety	80.6	14.0	4.3	1.1	0.0
8. A person tell lies about you in texts or online to make other people not like you anymore	50.5	27.3	20.8	1.4	0.0
9. Another person say online that they won't like you unless you do what they want you to do	77.8	15.7	4.7	1.4	0.4
10. People try to keep others from liking you by texting or posting mean things about you	64.9	21.1	11.8	1.8	0.4
11. Another person send you a message saying they will beat you up if you don't do what they want you to do	87.4	9.0	2.5	0.7	0.4
12. You get in online fights	67.4	23.3	0.4	7.5	1.4
13. Another person put you down online by sending or posting cruel gossip, rumors, or something else hurtful	65.2	22.6	10.8	1.4	0.0
14. Has another person pretended to be you and sent or post something that	77.4	17.2	4.7	0.7	0.0

Table 6. Cyberbullying Scale Prevalence Items 3 -16 "How often Do/How often Does/How often Has/ How often Have" (percentages)

damages your reputation or friendships					
15. Another person share your personal secrets or images online without your permission	69.9	19.7	9.3	1.1	0.0
16. Have you had to ask for help to fix something bad that happened to you online (like a mean picture of you was posted, people called you names, someone threatened you)?	72.4	21.2	5.0	0.7	0.7

Table 7. Frequency and Percentage of Participants who endorsed matching response options on CBS Items 1 and 2 (Bully/Victims)

Response Option	Frequency	Percentage
Fmail	1	1 33
	1	1.22
Online video Clips of You	1	1.33
Text Messages/Twitter	51	68.0
Social Networking (like Facebook)	26	34.6
Picture Messages	8	10.6
Chatroom	3	4.00
Instant Messaging	1	1.33
Virtual World (like second life or sims)	2	2.67
Developed a mean website or message board	1	1.33

*Percentages based on the 75 participants who fell into the bully/victim group



Figure 1. Moderated Mediation Model

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Education	
Anticipated 2016	 Predoctoral Internship in Clinical Psychology (APA-accredited) Medical College of Georgia-Charlie Norwood VA Medical Center Psychology Residency Area of Focus: Community Psychology Track (Susan Sato, Ph.D. Overall Supervisor) Anticipated Completion Date: June 2016
Anticipated 2016	 University of Mississippi: Oxford, Mississippi Clinical Psychology graduate student Ph.D. expected 2016 Dissertation: The Role of Self-Blame in Psychosocial Outcomes in College Students who Engage in Cyberbullying Behavior. Advisor: Alan M. Gross, Ph. D.
2007	 University of Northern Iowa: Cedar Falls, Iowa MA Clinical Psychology (05/2007) Thesis: Life Threatening Communication: Assessing Suicide Threat and Its Relation to Psychological Factors in an Adolescent Inpatient Sample Advisor: Augustine Osman, Ph. D. Student Paper Award: (2006, May). Psychometric evaluation of the Suicide Probability Scale in adolescent inpatient samples. Paper presented at the 78th annual convention of the Midwestern Psychological Association, Chicago, IL.
2005	Northern Illinois University: DeKalb, Illinois

- B.S. Psychology
- Deans List, four consecutive years
- Graduated Summa Cum Laude
- Won Northern Illinois University Cooperative Education/ Internship Programs Co-Op Student of the Month, September 2004
 - o Honors thesis: Suicide Threat in Adolescence
 - o Advisor: Peter Gutierrez, Ph. D.

Predoctoral Internship Medical College of Georgia (MCG) & Charlie Norwood Veterans Affairs Medical Center (CNVAMC):

07/2015-06/2016 CNVAMC

Supervisors: Scott Peebeles, Ph. D., Stephanie Boyd, Psy.D., Jill Hann, Ph.D.

- Credentialed in the FIM System for Medical Rehabilitation Outcomes Measurement
- Spinal Cord Unit:
 - o Conducted Intake Assessments
 - o Conducted Neuropsychological Assessments
 - o Conducted Mental Status Exams
 - o Conducted Psychoeducational Groups
 - Consult Work on a Medical Unit
 - Co-Planned a Party for Veterans who have Survived 50 years with a Spinal Cord Injury.
- Suicide Prevention Unit
- General Mental Health
 - Conducted Intake Assessments
 - Held Individual Therapy Sessions
 - Taught Trauma Orientation Classes
 - Completed Comprehensive Personality and Posttraumatic Stress Disorder Assessments with Veterans

08/2007-06/2015 Clinical Practicum

University of Mississippi Psychological Services Center

Supervisors: Laura Johnson, Ph. D., Alan Gross, Ph. D., Scott Gustafson, Ph. D., Tom Lombardo, Ph. D., John Young, Ph. D., & Todd Smitherman, Ph. D.

- Conducted intakes to determine service needs
- Conducted individual therapy psychotherapy with adults, children, and adolescents presenting with Autism, Panic Disorder, Posttraumatic Stress Disorder, Trichotillomania, Insomnia, mood disorders, Bipolar Disorder, and adjustment disorder
- Provided Psychological Evaluations for Pre-Bariatric Surgery Patients
- Empirically Supported Treatment Training and Clinical Supervision:

- Behavior Therapy/ Behavioral Activation for Depression (Clinical)
- Cognitive Behavior for Anxiety (Clinical)
- Cognitive and Behavioral Therapies for Generalized Anxiety (Clinical)
- Cognitive Behavioral Therapy for Panic Disorder (Clinical)
- Cognitive Therapy for Depression
- Prolonged Exposure for Post-Traumatic Stress Disorder (Clinical)
- Psycho-Education for Bipolar (Clinical)
- Sleep Restriction Therapy (Clinical)

08/2012 – 06/2014 Practicum Experience: Assistant to the Director of Clinical Training University of Mississippi, Oxford Mississippi

Supervisor: Alan Gross, Ph. D.

- Assisted Director with daily management of clinical program
- Assisted with Revision of Psychology Departments Online Application Process
- Organized, Assisted, and Monitored Incoming and First Year Students
- Organized Application Materials and the Department's Interview Weekend Activities

07/2010 – 06/2011 Practicum Experience: Assistant to the Psychological Services Center University of Mississippi, Oxford Mississippi Supervisor: Scott Custafson, Ph. D.

Supervisor: Scott Gustafson, Ph. D.

- Assisted the Director with Daily Operations and Management of Clinic
- Provided Quality assurance Reviews of Clinic Records
- Marketed and Advertised Clinic Services
- Increased Community Relations
- Participated and Organized the Clinic's Participation in the University's Health Fair
- Participated and Organized the Clinic's Participation in the Psychology Department's Community wide Out of the Darkness Walk (American Foundation for Suicide Prevention and Awareness)
- Organized and Monitored Emergency Cell Phone Duties
- Organized and Tracked Supervision Teams' Client Flow
- Oriented and Trained Incoming Graduate Student Therapists on Clinic's Policies and Procedures
- Revised Clinic Manual and Streamlined Procedures
- Helped Develop and Manage Data with an Attrition Study
- Surveyed Experts in the Field for Therapist Guides and Treatment Manuals to be Selected for the Enhanced Library

07/2009 - 06/2010	Practicum Experience: Psychology Intern: North Mississippi Regional Center
	Oxford Mississippi (Main Campus)
	Community Homes: Senatobia, MS; Batesville, & MS, Hernando, MS Supervisor: Scott Bethay, Ph. D., & Kim Sallis, Ph. D.; LPC; LCMRT
	• Individual Counseling with Adults with Intellectual Disabilities
	• Development, Implementation, and Evaluation of Behavior Programs for clients with Intellectual Disabilities
	• Intellectual and Adaptive Behavior Assessments of Adults with Intellectual Disabilities
	• Worked with a multidisciplinary treatment team to develop treatment plans and enhance client's quality of life
	• Staff in-services and Training
08/2007-06/2009	Practicum Experience: Behavioral and Therapy Consultant: Baptist Children's Village
	Water Valley, Mississippi
	Supervisors: Alan Gross, Ph. D., & Randy Cotton, Ph. D.
	Created and Implemented Token Economy System
	 Conducted Staff Trainings on Token Economies, Basic
	Principles of Behavioral Modification
	 Collected Program Outcomes
	 Created Weekly Behavior Plans for Each of the
	Residents (Target Behaviors) for the Token Program
	Behavioral Consultant to Residential Staff
	• Provided Individual Therapy to Residents
	• Participated in Weekly Staff Meetings (House mangers, Social
	Worker, Campus Supervisor)
06/2006 - 06/2007	Practicum Experience: Psychology Intern: Mental Health Institute
	Supervisor: Augustine Osman Ph D
	 Provided Individual Therapy to Children, Adolescents, Adults (men and women)
	 Group Leader: Women's Group, Men's Group, and Adolescent Group Conducted Full Battery Assessments
	• Participated in Bi-Weekly Treatment Team Meetings (Psychiatrist,
	Primary Physician, Social Worker, Nurse, and Ward Staff)
	• Participated in Weekly Rounds- Children's Ward
	• Collected Research Data on Psychometric Instruments pertaining to suicide, depression, and other self-harm behaviors
01/2006 - 12/2006	Practicum Experience: Graduate Assistant: Center for Social and Robaviarel Posserab
	University of Northern Lowe: Ceder Falls, Lowe
	Supervisor: Gene Lutz Ph D
	Supervision Sene Lucz, in D.

- Created and Coordinated the Internal Evaluation of the University of Northern Iowa's Community College Program
 - Developed Syntax for Data Analysis
 - o Created Measure for Community Program Evaluation
 - Worked with Director of the Community College Program
 - Monitored all Incoming Surveys
- Assisted with the Iowa Gambling Treatment Outcomes Study for the Iowa Department of Health Division of Behavioral Health and Professional Licensure
- Assisted with the Evaluation of the Impact Science Skills and Technology Use Program for the Iowa Educational Technology Training Institute.

06/2006- 06/2007 Practicum Experience: Clinic Coordinator for the Psychological Assessment University of Northern Iowa, Cedar Falls, Iowa Supervisor: John Williams, Ph. D.

- Coordinated Psychological Assessments
- Managed Financial Aspects of the Assessment Clinic
- Supervised Students with Reviews of Reports
- Managed Daily Operations of the Assessment Clinic

Teaching Experience

08/2014 – 05/2015 Instructor of Record for Introduction to Psychology University of Mississippi, Oxford, Mississippi

O6/2006 – 12/2006 Graduate Teaching Assistant: Advanced Graduate Statistics Course University of Northern Iowa, Cedar Falls, Iowa Supervisor: Otto MacLin, Ph. D.

- Assist with Lecture Materials and Lectures
- Grading Assignments and Exams
- Held Office Horus
- Conducted Review Sessions Prior to Exams

Supervised Assessment Experience

01/2014 – 08/2014 Verification Specialist: Office of Student Disability Services University of Mississippi, Oxford Mississippi Supervisors: Scott Gustafson, Ph. D., ABPP, & Stacey Reycraft

- Reviewed Documentation of Psychological Disabilities to Determine Eligibility for Accommodations.
- Provided Interviews with Students, Parents, and Referring Health Care Specialists to Tailor Accommodations for Their Needs

07/2013 - 05/2014	Assessment Practicum Experience: Psychological Assessment Clinic (Assessment Team)			
	University of Mississippi, Oxford, MS			
	Supervisor: Scott Gustaison, Pn. D, ABPP			
	• Full-Battery Assessments (including an array of cognitive, personality,			
	and symptom measures)			
	• Test Administration and Scoring			
	• Case Presentations			
	• Feedback Sessions			
	• Integrated Report Writing			
	Both Adult and Child Assessments			
	• Peer Reviewed Full Battery Integrated Assessment Reports			
	• Participated in Weekly Team Supervision Meetings			
03/2013 – Present	Neuro-Health Rehabilitative Psychology and Assessment Consultant			
	Private Practice, Tupelo, Mississippi			
	Supervisor: Brian Thomas, Ph. D.; ABPP (CN)			
	• Drug and Alcohol Overdose, Competency, and Neuropsychological			
	Assessments with Adults			
	Test Administration and Scoring			
	• Intellectual Assessments (Cognitive, Achievement, and Malingering)			
	to clients seeking Disability Services			
	 Adults, Children, and Adolescents 			
08/2010 – Present	Psychological Examiner, Psychological Assessment Clinic			
	University of Mississippi, Oxford, MS			
	Supervisor: Scott Gustafson, Ph. D., ABPP			
	• Full-Battery Assessments (including an array of cognitive, personality,			
	and symptom measures)			
	Test Administration and Scoring			
	Integrated Report Writing			
	Case Presentations			
	Feedback Sessions			
	Both Adult and Child Assessments			
	Peer Review Assessment Scoring and Reports			
	• Assessments Conducted on-campus and within the Oxford, MS School			
	District			
07/2009 - 06/2014	Assessment Experience: Psychology Intern Diagnostic Services			
	Center: North Mississippi Regional Center			
	Supervisor: Scott Bethay, Ph. D.			
	Conducted Full-battery assessments for clients seeking community			
	services as well as admission to the Regional Center			
	 Assessments were used to determine placement eligibility 			
	 On Campus Resident 			

- Community Home Resident
- Apartment Living
- Home Care Opportunities
- Participated in Placement Meetings with the Diagnostic Team following my evaluations

Behavioral and Assessment Consultation

06/2014 – 07/2014 Emotional Disabilities Evaluation (EMD): Greenwood Mississippi School District Greenwood, Mississippi Supervisor: Alan Gross, Ph. D,
 Administered a Full- Battery assessment for the Greenwood

- Administered a Full- Battery assessment for the Oreenwood Mississippi School District (Including Structured Interview with Child, Clinical Interview with Teachers, Parents, Principle, and Child Advocate; Cognitive, Achievement, Personality, and Symptom Measures
- Integrated Report
- Test Administration and Scoring
- Feedback Session
- Child Assessment

08/2008 – 02/2009 Behavioral Consultant: ICS Head Start Centers New Albany Coffeeville, Water Valley, Houston, and Okolona, Mississippi Supervisor: Alan Gross, Ph. D

- Development, implementation and behavioral services for children
- Staff-in-services and Training
- Consultation with Parents
- Conducted Classroom Observations
- Wrote Behavioral Plans and Monthly Formal Reports Regarding Classroom and Individual Student Functioning

Research Experience

10/10 - 10/15	Dissertation Research
	• Designed and will Recruit Participants for Study Investigating the
	Role of Self-blame and Resilience on Psychosocial Outcomes in
	Students who Engage in Cyberbullying using a Mediated/Moderation
	Model
08/05 - 05/07	Research Assistant, Psychometric Laboratory
	University of Northern Iowa, Cedar Falls Iowa
	Supervisor: Augustine, Osman, Ph. D.
	• Data screening

	 Help prepare manuscripts for publication Collect and analyze clinical and nonclinical data Prepare research questionnaire packets Screen and select undergraduate research assistants Assist with editing manuscripts that are submitted for blind editorial review Supervise undergraduate research assistants with data entry and collection Assist undergraduate students with paper presentations for conferences
	• Assist with the development and validation of self-report instruments
08/05 - 05/06	Research Assistant: Clinical-Personality Assessment Laboratory University of Northern Iowa, Cedar Falls, Iowa Supervisor: John Williams, Ph. D
	 Participated in Data Analysis Associated with Comparing MMPI RC scales (O-SORT's) with PAL
	 Assisted with Data Collection for a Thesis Project looking at Body
	 Prepared Institutional Review Board for E-Mode vs. Wechsler Abbreviated Scale for Intelligence
	Participated in Conference Presentations
University and De	partmental Service/ Psychological Experiences
08/14 – Present	 Cultural Connections Ambassador: International Ladies Club University of Mississippi, Oxford Mississippi Supervisor: Laura Johnson, Ph. D. Primary Facilitator International Student Group
08/10 - 05/11	Member, Psychological Service Center Executive Team University of Mississippi, Oxford, Mississippi Supervisor: Scott Gustafson, Ph. D., ABPP
08/2008 - 12/08	Member, Clinical Faculty Search Committee University of Mississippi, Oxford Mississippi Primary Search Coordinator: Scott Hargrove, Ph. D., ABPP

Publications

- Bailey, J. R., Gross, A. M., & Cotton, C. R. (2011). Challenges associated with establishing a token economy in a residential care facility. *Clinical Case Studies*.
- Bailey, J. & Gross, A. M. (2010). Cognitive Assessment with Children. In J. C. Thomas & M. Hersen (eds.). *Handbook of Clinical Psychology Competencies*, New York: Springer.

- Osman, A., Barrios, F. X., Kopper, B. A., Gutierrez, P. M., Williams, J. E., & Bailey, J. (2005). The Body Influence Assessment Inventory (BIAI): Development and validation. *Journal of Clinical Psychology*, *62*, 923-942.
- Osman, A., Bailey, J., & Kopper, B. A. (2007). Assessing reasons adolescents give for living: The Reasons for Living Inventory for Adolescents (RFL-A). In F. Columbus (ed.). *Psychological Tests and Testing*, New York: Nova Sciences Publishers.
- Osman, A., Barrios, F. X., Kopper, B. A., Williams, J. E., & Bailey, J. (2008). Psychometric properties of the Beck Depression Inventory-II in nonclinical adolescent samples. *Journal of Clinical Psychology*, 64, 83-102.
- Osman, A., Williams, J. E., Espenschade, K., Gutierrez, P. M., Bailey, J. R., & Osman, C. (2009). Further evidence of reliability and validity of the Multidimentional Scale for Children (MASC) in psychiatric inpatient sample. *Journal of Psychopathology and Behavioral Assessment*, 31, 202-214.
- Smitherman, T. A., Kolivas, E. D., & Bailey, J. R. (2012). Panic Disorder and Migraine: Comorbidity, Mechanisms, and Clinical Implications. *Headache*, *53*, 24-45.

Presentations and Convention Posters

- Bailey, J., Choma, K., Chowdry, O., Collingwood, M., Salvatore, A., Ryan, J., & Williams, J. E. (2007, May). *Factor Structure and Validity of the Pain Distress Inventory (PDI)*. Poster Session presented at the 19th Annual Convention for the Association for Psychological Science.
- Bailey, J., Mack, T. C., Salvatore, A. A., Fang, Q., Choma, K. & Osman, A., (2006, November). *The Social Phobia and Depression Inventory-24 (SPADI-24): Development and Validation*. Poster Session presented at the 40th Annual Convention for the Association for Behavioral and Cognitive Therapies (ABCT), Chicago, IL.
- Bailey, J., Salvatore, A., Fang, Q., Choma, K., Mack, T., & Williams, J. E. (2006, October). *Psychometric properties of the Body Investment Scale in an adolescent inpatient sample*. Poster session presented at the Kansas Conference for Child and Adolescent Psychopathology, Lawrence, KS.
- Bailey, J., Salvatore, A., Fang, Q., Choma, K., & Williams, J. E., (2006, May). Validity of the Student Worry Questionnaire-30 in the Assessment of worry among college students. Poster session presented at the 78th annual convention of the Midwestern Psychological Association, Chicago, IL.
- Barrios, F., Osman, A., Williams, J. E., & Bailey, J. (2007). *Validation of the Body Influence Assessment Inventory (BIAI) in Adolescent Samples*. Poster Session presented at the 2007 Society for Behavioral Medicine.

- Collingwood, M., Choma, K., Bailey, J., Fang, Q., & Kopper, B. A. (2007). *Protective Constructs in Adolescent Psychiatric Inpatients with Eating Problems*. Poster session presented at the 2007 American Psychological Association.
- Fang, Q., Choma, K., Mack, T., Bailey, J., Salvatore, A., & Osman, A. (2006, November). *The Multi-Attitude Suicide Tendency (MAST) Scale: Validation in Adolescent Psychiatric Inpatients*. Poster Session presented at the 40th Annual Convention for the Association for Behavioral and Cognitive Therapies (ABCT), Chicago, IL.
- Fang, Q., Choma, K., Salvatore, A., Mack, T., Bailey, J., & Gutierrez, P. M. (2006, October). *Validation of the Pain Distress Inventory using an adolescent inpatient sample*. Poster session presented at Kansas Conference for Child and Adolescent Psychopathology, Lawrence, KS.
- Fang, Q., Choma, K., Salvatore, A., Bailey, J. (2006, May). *Psychometric characteristics* of the Suicide Resilience Inventory - 25 in adolescent inpatient samples. Poster session presented at the 78th annual convention of the Midwestern Psychological Association, Chicago, IL.
- Kolivas, E., Young, C., Walter, R., T., Bailey, J. R., & Allen, M (2010). Impact of online course resource utilization on course performance across traditional and nontraditional college students. Symposium Presented at the 36th Annual Association of Behavioral Analysis International (ABAI).
- Mack, T., Bailey, J., Salvatore, A., Fang, Q., Choma, K., & Kopper, B. A. (2006, October). *Psychometric properties of the STAXI-2 using and adolescent inpatient sample*. Poster session presented at the Kansas Conference for Child and Adolescent Psychopathology, Lawrence, KS.
- Ryan, J., Salvatore, A., Bailey, J., McCabe, K., Nixdorf, E., P. M. (2007, May). *Validation of the Body Influence Assessment Inventory-28 (BIAI) in Clinical and Nonclinical Adolescent Samples*. Poster presented at the 19th Annual Convention for the Association for Psychological Science.
- Salvatore, A., Choma, K., Mack, T. C., Fang, Q. Bailey, J. R., & Osman, A. (2006, November). *Psychometric Validation of the Social Thoughts and Beliefs Scale* (*STABS*). Poster session presented at the 40th Annual Convention for the Association for Behavioral and Cognitive Therapies (ABCT), Chicago, IL.
- Salvatore, A., Bailey, J., Fang, Q., Choma, K., & Osman, A. (2006, May). *Psychometric evaluation of the Suicide Probability Scale in adolescent inpatient samples*. Paper presented at the 78th annual convention of the Midwestern Psychological Association, Chicago, IL.
• Salvatore, A., Kopper, B., Choma, K., Mack, T., Bailey, J., Osman, A., & Schmitt, L. (2006, October). *Validation of the Reasons for Living Inventory for Adolescents in youths with internalizing disorders*. Poster session presented at the Kansas Conference for Child and Adolescent Psychopathology, Lawrence, KS.

Technical Reports

- Lutz, G. M., & Bailey, J. R. (2006). Internal Evaluation of the University of Northern Iowa Community College Program. Center for Social and Behavioral Research.
- Lutz, G. M., Gonnerman, M. E., Walsh, B., Park, K. H., Muilenburg, R., & Bailey, J. 2006). Iowa Gambling Treatment Outcomes System: Year 1. Iowa Department of Public Health Division of Behavioral Health and Professional Licensure.
- Gonnerman, M. E., Lutz, G. M., Park, K. H., & Bailey, J. R. (2006). Evaluation of the Impact Science Skills & Technology Use Program. Iowa Educational Technology and Training Institute (IETTI). ITS-Educational Technology University of Northern Iowa.

Statistical Skills

- SPSS for Windows
- SPSS for Excel
- Titanium
- Excel
- BMDP-Dynamic
- ZumaStat
- MPLUS

Community Service

- 2012 Co-Chaired the Out of the Darkness Overnight Community walk on the University of Mississippi Campus sponsored by the American Foundation for Suicide Prevention and Awareness.
- Raised \$1,000and participated in the Out of the Darkness Overnight sponsored by the American Foundation for Suicide Prevention and Awareness
- Participated and was a member of Alpha Phi Omega (Service Fraternity) 40 hours of service required per semester
- Participated in an after school program through the Newman Center for Big Brothers/Big Sisters Program
- Participated in an Equine Therapy program for Physically Handicapped Children

Membership and Other Professional Affiliations

- Association for Behavioral and Cognitive Therapies (ABCT)
- American Psychological Association (APA)
- Society for a Science of Clinical Psychology (APA Division 12; Section 3)
- Midwestern Psychological Association (MPA)
- American Foundation for Suicide Prevention and Awareness (AFSP)

Professional References

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