The Effects of Bullying and the Mediating Role of Attachment and Humanity-Esteem on Self-Esteem and Behavioral Outcomes

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THE EFFECT OF BULLYING AND THE MEDIATING ROLE OF ATTACHMENT AND HUMANITY-ESTEEM ON SELF-ESTEEM AND BEHAVIORAL OUTCOMES

by

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A thesis submitted in partial fulfillment of the requirements for the Honors in the Major Program in Psychology in the College of Sciences and in the Burnett Honors College at the University of Central Florida Orlando, Florida

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ABSTRACT

Any type of bullying can become a traumatic event for a child, leading to lasting negative effects. Specifically, victimization may lead to numerous behavioral problems and lowered self-esteem. Also, the quality of attachment may have a predictive relationship with the victimization and the negative outcomes it may cause. Other research implied that a similar relationship may be found between retrospective bullying and humanity-esteem. Despite the collective research done on these variables, no study, until now, has looked at retrospective bullying, humanity-esteem, attachment, behavior problems, and self-esteem all together. This study not only looked at the relationships among these variables but also the role that humanity-esteem and attachment served between victimization, later behavior problems, and later self-esteem. One hundred thirty-six participants completed five questionnaires assessing experiences of retrospective bullying, humanity-esteem, current attachment relationships, behavior problems, and self-esteem. The results of this study indicated that participants who reported having been bullied previously also endorsed internalizing and externalizing problems as well as low self-esteem. Further, humanity-esteem and attachment both served as significant predictors of victimized individuals’ behavioral problems and self-esteem. Such findings suggested that a higher view of humanity and secure attachment may serve as a protective factor against the negative outcomes that may be related to having been bullied. The importance of studying the relationships among these variables is discussed further.
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INTRODUCTION

Bullying has become a pervasive problem in our society for children and adolescents of all ages. According to research that was conducted by the Centers for Disease Control and Prevention (2010) in collaboration with the U.S. Department of Education and U.S. Department of Justice, about 32% of students nationwide reported being bullied in the year 2007 alone. From 2003 to 2010, 116 students were killed on 109 separate occasions of bullying. Given the prevalence and the devastating outcomes that can result from bullying experiences, understanding the correlates of these experiences, particularly those correlates that can serve as protective factors, is important to improving the outcomes of our children and adolescents.

Although individuals may know bullying when they see it, definitions of bullying may not be used consistently. In fact, there are many different definitions of bullying, but the most commonly utilized definition was provided by Olweus (1993) and is used by the American Psychological Association (2012). This definition stated that, in order to be considered a bully victim, an individual must be repeatedly exposed to negative, aggressive acts on the part of one or more peers over time, with these acts involving an imbalance of power and the intent to impose some type of injury or discomfort onto the victim. An imbalance of power is included in this definition because the victim typically has trouble defending him- or herself and/or has done nothing to cause the bullying, leaving it to be unprovoked. This description is consistent with other researchers’ definitions of bullying (Boulton et al., 1999; Limber, 2002; Nansel et al., 2001).
According to Olweus (1993), there are four different forms of bullying. Relational bullying, also known as social bullying, is one of two types of indirect bullying (Baldry, 2004; Fitzpatrick & Bussey, 2011; Galen & Underwood, 1997; Sbarbaro & Enyeart Smith, 2011; Williams & Kennedy, 2012). Relational bullying involves the manipulation of peer relationships meant to cause harm to the victim (Crick & Grotpeter, 1995, 1996). This form of bullying may include actions such as rumor spreading, taunting, and withdrawing or threatening to end friendships (e.g., social exclusion), along with nonverbal acts such as malicious stares (Galen & Underwood, 1997; Paquette & Underwood, 1999; Underwood, 2003).

The second type of indirect bullying is cyberbullying. With the emerging use of technology, cyberbullying has turned into the newest form of bullying and recently has become the focus of many current studies. As explained by Beran and Li (2005), cyberbullying is defined as the repeated, intentional causing of harm with the use of technology, such as a computer or telephone. Sending harassing and/or incriminating messages through emails, instant messages, and text messages or posting similar information on social networking sites, blogs, or other comparable websites are just some of the ways that cyberbullying can take place (Sbarbaro & Enyeart Smith, 2011). A survey performed by the Pew Research Center indicated that 9% of 799 individuals had been bullied by text message, 8% had been bullied online, and 7% had been bullied on the phone within the past twelve months. Indirect bully victims are typically girls (Nansel et al., 2001; Pellegrini & Long, 2002; Waasdorp & Bradshaw, 2011) who are being victimized via relation bullying by other girls (Harris & Petrie, 2002; Olweus, 2003; Vaillancourt & Hymel, 2006; Varjas et al., 2009; Wang et al., 2009) or who are being cyberbullied by boys (Bhat, 2008; Li, 2005; Wang et al., 2009).
Just as there are two forms of indirect bullying, Olweus (1993) also identified two forms of direct bullying. The first type is verbal bullying, which consists of strictly verbal attacks from one individual to another. This type of bullying may occur via name calling and/or the use of abusive language (Sbarbaro & Enyeart Smith, 2011). Unlike relational and cyber bullying, verbal bullying is done directly to an individual instead of behind their backs. Physical bullying is the second form of direct bullying and includes behaviors such as hitting, kicking, and pushing (Houndoumadi & Patraski, 2001; Sbarbaro & Enyeart Smith, 2011). This type of bullying is considered one of the most harmful types of bullying, as it causes immediate physical harm (whereas the other types of bullying cause psychological harm over time that may result in future physical self-harm.)

Clearly, each of these types of bullying can be related to negative outcomes for children and adolescents. Given the potential for such negative outcomes, it is important for researchers to identify correlates that may put individuals at risk or protect them from future negative outcomes. As a result, this study will examine potential correlates that may protect children and adolescents from experiencing future negative outcomes.

The Relationship Between Victimization and Later Functioning

Clearly, the effects of bullying have become more apparent in schools and via news reports publicizing incidents of bullying. Concurrently, research on how victimization in primary and secondary schools affect individuals later in life has increased exponentially. Recent studies have begun to examine the intrapersonal and interpersonal thoughts and behaviors of individuals who have been victimized as well as the academic success that these individuals may experience.
Although no study can state concretely that being victimized ‘caused’ problems for individuals, it is can be stated safely that there is a correlation between being victimized and experiencing certain outcomes.

In a bulk of studies done on victimization, subsequent school difficulties were highlighted (Thijs & Verkuyten, 2008). According to Thijs and Verkuyten (2008), individuals who were victimized experience a lower sense of self-efficacy (i.e., they do not expect to or believe that they can perform any new challenge or situation successfully; Phares, 2008). In turn, this lower self-efficacy may result in lower academic achievement. Although some studies found that being bullied was related to lower grade point averages (GPA; Neary & Joseph, 1994; Yang et al., 2003), Ma, Phelps, Lerner, and Lerner (2009) concluded that such findings were not entirely conclusive because they were done retrospectively. A study by Juvonen, Nishina, and Graham (2000) obtained longitudinal data suggesting that, with increasing perceived levels of victimization, individuals’ GPAs decreased over a one-year period of time. They also suggested that absenteeism increased over that one-year time period as well. These findings were consistent with those of other researchers (e.g., Gastic, 2008; Rigby, 1997). Given findings such as these, it is likely that victimization is associated significantly with lower academic success.

In addition to the academic difficulties experienced by individuals who have been victimized, Fitzpatrick and Bussey (2011) found that relational (or social) victimization is related to an increase in externalizing behaviors. Hodges and colleagues (1999) noted similar results for children who did not have a mutual best friend. Further, significant relationships between being victimized previously and internalizing symptoms also were noted (McLaughlin, Hatzenbuehler,
& Hilt, 2009). Specifically, victimization was related to emotional dysregulation (McLaughlin et al., 2009), anxiety (Bellmore, Witkow, Graham, & Juvonen, 2004; Hodges & Perry, 1996; Olweus, 1993; Rigby, 2001; Rigby & Slee, 1993), and depression (Craig, 1998; Hawker & Boulton, 2000; Hodges & Perry, 1996; Olweus, 1993; Rigby, 2001; Salmon, 2000; Slee, 1995). In fact, Hawker and Boulton (2000) even suggested that the depressive symptoms experienced by individuals who have been victimized may persist for as long as a decade after the harassment has ended. Loneliness (Bellmore, Witkow, Graham, & Juvonen, 2004; Juvonen, Nishina, & Graham, 2000; Kochenderfer & Ladd, 1996; Nansel et al., 2001; Schäfer, Korn, Smith, Hunter, Mora-Merchán, Singer, & van der Meulen, 2004; Tritt & Duncan, 1997), shyness (Jantzer, Hoover, & Narloch, 2006), and low self-esteem (Hawker & Boulton, 2000; Hodges & Perry, 1996; Juvonen, Nishina, & Graham, 2000; Olweus, 1993; Rigby & Slee, 1993; Schäfer et al., 2004; Tritt & Duncan, 1997) also were noted in a considerable number of individuals who have been victimized.

Further, it was asserted that former victims experience a lower sense of trust in others (Schäfer et al., 2004; Smith, 1991) and find it challenging to make friends (Adams & Lawrence, 2011). Due to the trauma they experienced, victims tend to see their peers as unpredictable and unreliable, creating difficulties when they try to create friendships (Olweus & Endresen, 1998; Rigby, 1997; Sutton, Smith, & Swettenham, 1999). Nonetheless, victims report yearning for emotionally close relationships but find it hard to get themselves to trust others for fear that their peers will hurt them in ways that they were hurt previously (Schäfer et al., 2004). Given these relationships, understanding individuals’ relationships with others may prove to be important in predicting the outcomes of those who were victimized previously.
Humanity-Esteem

In fact, understanding individuals’ perceptions of other people in general may be an important mechanism in the relationship between having been bullied and subsequent outcomes. In particular, humanity-esteem, or the general evaluation (i.e., the positive versus negative attitudes, feelings, and beliefs) of humanity (Luke & Maio, 2009), may be a useful variable for furthering our understanding of individuals’ perceptions of other people. Although not many studies examined humanity-esteem, the creation of the Humanity-Esteem Scale enabled researchers to study this variable, particularly in the context of self-categorization theory (Luke, Maio, & Carnelley, 2004). This theory suggested that individuals define themselves on three different but interrelated levels (Turner, 1985; Turner, Oakes, Haslam, & McGarty, 1994; Turner, Hogg, Oakes, Reicher, & Wetherill, 1987). At the most basic level, personal identity is defined as unique and individualistic. The second level involves individuals evaluating themselves as a member of a distinct social group, allowing them to define and categorize their own social identity by the individuals with whom they associate. The last and most conclusive level involves individuals associating themselves with humanity as a whole, as well as each of the other individual levels, is also known as humanity identity.

Further, researchers conceptualized individuals’ views of humanity as being composed of individuals’ beliefs about human nature and as being influenced by past events and emotions (Luke, Maio, & Carnelley, 2004). Applying this concept to victimization, individuals who were bullied previously would be expected to have lower perception of themselves and others due to their past experiences. In other words, being repeatedly victimized eventually may be related to
individuals’ thoughts and feelings about others. In turn, these thoughts and feelings may be related to how they view humanity as a whole. Given such hypotheses, humanity esteem should be examined further as an explanatory variable in the relationship between former bullying experiences and later functioning.

**Attachment Theory**

Attachment to other important individuals also may prove to be an important variable in explaining the relationship between bullying experiences and later functioning. According to John Bowlby’s theory of attachment, it is thought that early childhood attachment experiences aid in the development of each individual’s internal working models (Bowlby, 1969, 1973). These internal working models affect individuals’ perceptions of not only themselves but of the world around them, forever causing implications later in life (Luke, Maio, & Carnelley, 2004). Ainsworth, Blehar, Waters, and Wall (1978) added onto Bowlby’s theory by asserting that depending on the quality of the attachment, children will form one of three different attachment types: Secure Attachment, Anxious Avoidant Attachment, and Ambivalent Attachment. The attachment type is distinguishable by multiple behavioral characteristics demonstrated by children when they are separated from their caregiver, as seen in the Strange Situation experiment (Ainsworth et al., 1978).

*Secure attachment* is formed when caregivers are sensitive and responsive to the needs of their infants early on, creating a sense of trust that allows infants to know that their caregivers are reliable (Ainsworth et al., 1978). Once this trust has been formed, infants then will use their caregivers as a base for exploring, coming back to them whenever they feel uneasy. The key
behavior in securely attached children is the response that they give when their caregivers leave. In particular, when separated, children will appear distressed but then will welcome their caregivers back with ease.

The next two attachment types fall under the realm of Anxious Insecure attachment and are related to negative responses and outcomes (Ainsworth et al., 1978). Parents of infants who exhibit anxious insecure attachment more often fail to respond consistently and sensitively to the infants needs. Anxious avoidant attachment behaviors are seen when caregivers depart and their children seem uncaring, not appearing to be bothered by their caregivers’ departure. With the return of their caregivers, children then ignore or avoid them, rather than responding to their absence. Ambivalent attachment in children is characterized by children showing extreme distress in the absence of their caregivers but anger or rejection when their caregivers return.

Although these attachment styles generally were studied in infants and young children, Bowlby’s (1969, 1973) internal working models suggested that these styles can have a long-standing, pervasive influence throughout individuals’ lives. As a result, it is likely that these internal working models will shape older children’s perceptions of themselves in the context of relationships as well as the connections that occur between themselves and others throughout development. As a result, secure attachment with others may be a protective correlate for children and adolescents in the face of bullying. Therefore, attachment deserves to be examined further in this context.

The Relationship Between Victimization and Attachment
As previously stated, people who were victims of bullying may have expressed their desire for emotionally close relationships but find it difficult to get past their perceptions that their peers may be untrustworthy and unreliable (Schäfer et al., 2004). Research actually showed that friendship is typically thought of as a protective factor for bully victims. Boulton and colleagues (1999) found that having a reciprocated best friend, or even just peer acceptance, decreases an individual’s chances of becoming a victim. Similarly, Hodges and colleagues (1999) also found that having a reciprocated best friend decreases internalizing behaviors and the length of victimization. Other negative impacts of victimization, such as anxiety and depression, also decreased with the presence of a high quality friend (Schmidt & Bagwell, 2007). Hodges and colleagues (1999) also found that not having a reciprocated best friend could actually increase internalizing and externalizing problems in victimized children.

Despite all the research that was done on attachment during victimization, there have not been many studies that have looked directly at relationships between attachment and victimization after the bullying already took place. Given the lack of research on this topic, the current study examined further the relationship between attachment and retrospective bullying. In relating this concept to past research, it is thought that attachment may play a mediating role in victimization and later behavior problems and self-esteem. Based on this research, it was hypothesized that attachment would mediate the impact of victimization on individuals’ perceptions of themselves (i.e., behavior problems and self-esteem).

The Current Study
The current study examined previous bullying experiences and subsequent behavior problems and self-esteem as well as the mediating role of humanity-esteem and attachment. It was hypothesized that those who were victimized previously would be more likely to score lower on humanity-esteem scales and attachment and would exhibit unfavorable psychological outcomes (e.g., higher internalizing and externalizing problems, lower self-esteem). Further, if humanity-esteem and attachment made a difference to individuals’ previous experience of bullying, it could be suggested that humanity-esteem and attachment may serve as protective factors against the effects of victimization.
A power analysis with an alpha level of .05 and a medium effect size suggested that approximately 84 participants were needed to identify an effect with four predictors in a regression analysis (Cohen, 1992). Since this study focused on college students with previous bullying experiences, 150 participants were recruited to insure that there would be sufficient variability in the measurement of previous bullying experiences. Of the 150 participants, 11 had to be removed for declining to answer their age (as this study was interested in the experiences of individuals who were 18- to 24-years of age), and another three had to be removed for being over 24-years old since all the participants were required to be from 18- to 24-years of age. All participants in this study were undergraduate students at the University of Central Florida and were recruited through the online extra credit system, Sona Systems, where extra credit was awarded for compensation.

Of the remaining 136 participants, 51 were male, and 85 were female. The mean age of these participants was 19.80 years ($SD = 1.74$ years). The majority of participants were Caucasian (64.7%). In contrast, the remainder of the sample was Hispanic (11.8%), African American (11%), Asian American (7.4%), and Indian (.7%); 4.4% were from some other type of ethnicity. Although the majority of the participants were Freshmen (46.3%) at the time of the survey, there were also a good distribution of Sophomores (14.7%), Juniors (16.9%), and Seniors (22.1%). Nearly all of the participants were single (90.4%), whereas a small number were living with their partner (5.9%) or were married (2.2%); two people did not provide this information.
With regard to participants’ contact with their parents, frequencies varied across responses for mothers versus fathers. When participants were asked how frequently they spoke with their mother: 56.6% said that they did so at least once a day, 30.1% said that they did so less than once a day but at least once a week, 5.1% said that they did so less often than once a week but at least once every two weeks, 4.4% said that they did so less often than every two weeks but at least once a month, .7% said that they did so less often than once a month, and 2.9% were recorded as saying that they had no contact. When participants were asked how frequently they had contact with their fathers, 33.8% said that they spoke to their father at least once a day, 28.7% said that they did so less often than once a day but at least once a week, 10.3% said that they did so less often than once a week but at least once every two weeks, 8.8% said that they did so less often than every two weeks but at least once a month, 6.6% said that they did so less often than once a month, 10.3% were recorded as having no contact; and two people declined to answer about their contact with their father. See Table 1 for complete demographic data.

**Measures**

*Demographics.* A demographic questionnaire was given to obtain necessary, basic information. Participants answered questions regarding their personal information, such as their gender, age, and ethnicity; their parents’ information, such as their mother and father’s occupation, their academic backgrounds, and their average yearly income; and their own current information, such as their GPA, their living arrangement, and how frequently they speak to their parents.
**Bullying.** To assess participants’ previous and current experiences of having been bullied, the *Retrospective Bullying Questionnaire* (Shäfer et al., 2004) was used. This measure consists of 44 items that measure the frequency, seriousness, type, and duration of victimization occurring in primary school, secondary school, and college (Hamburger, Basile, & Vivolo, 2011). This measure assesses the type of bullying that was experienced, including physical, verbal, or indirect bullying. The questions about bullying were divided into primary school events, secondary school events, college events, and general experiences at school. Such questions included “Were you physically bullied in primary school?” “Were you verbally bullied in secondary school?” and “Were you bullied in college?” The questions also asked about victimization related to psychological behavioral outcomes, suicidal ideation, and trauma associated with bullying. Participants also were asked to complete questions such as “If you were bullied, why do you think this happened?” and “If you were bullied, do you feel it had any long-term effects? If so please describe below.” The reliability statistic for this measure was divided by primary school (r = 0.88), secondary school (r = 0.87), and trauma (r = 0.77).

**Behavior Problems.** The *Achenbach Adult Self-Report for Ages 18-59 (ASR; Achenbach, 2009)* was used to measure the behavior problems being experienced by participants. The first portion of this measure asked questions about friendships, relationships with spouses or partners, relationships with family members, and work and educational satisfaction. Examples of these questions included: “About how many close friends do you have? (Do not include family members),” “I get along well with my spouse or partner,” and “Compared with others, how well do you: Get along with your father?” The second part of this measure consisted of 126 questions that examine adaptive functioning, empirically based syndromes, DSM-oriented scales, and
substance use. Participants were asked to rate their behavior in the past six months using a three-point Likert scale (0 = Not True, 1 = Somewhat or Sometimes True, and 2 = Very True or Often True). Example items included “I am too forgetful,” “I lie or cheat,” and “I drink too much alcohol or get drunk.”

**Self-Esteem.** Self-esteem was measured using the *Rosenberg Self-Esteem Scale* (Rosenberg, 1989). Participants were asked to evaluate themselves using a four-point Likert scale (1 = Strongly Agree to 4 = Strongly Disagree) on this 10-item questionnaire. Examples of questions included “On the whole, I am satisfied with myself” and “I feel that I am a person of worth.” Some question were reversed-scored, such as “At times I think I am no good at all” and “All in all, I am inclined to think that I am a failure.” The Cronbach’s alpha for this scale is .87.

**Humanity-Esteem.** In order to evaluate humanity-esteem, the *Humanity-Esteem Scale* (Luke & Maio, 2004). This measure was developed from the *Rosenberg Self-Esteem Scale* and measured participant’s evaluation of humanity and how humans are evolving. It consists of ten questions that were endorsed using a seven-point Likert scale (-3 = Strongly disagree to 3 = Strongly agree). Examples of questions included “Human beings are able to prosper as well as any other species in the universe” and “I take a positive attitude toward humanity.” Examples of items that needed to be reversed-scored were “I wish I could have more respect for humanity in general” and “Human beings are useless at times.” The alpha level for the reliability of this scale is 0.77.

**Attachment.** The *Measure of Attachment Qualities* (MAQ; Carver, 1997) was used to measure participants’ general attachment to others. The MAQ is designed to measure secure
attachment, avoidant tendencies, ambivalence-worry, and ambivalence-merger in general adult attachment. It included 14 questions that were endorsed using a four-point Likert scale ($1 = I \text{ D}I\text{S}agree \ with \ the \ statement \ a \ lot \ to \ 4 = I \ agree \ with \ the \ statement \ a \ lot$), with some questions being reversed coded. Examples of original questions from the measure included “I don’t worry about others abandoning me” and “Being close to someone gives me a source of strength for other activities.” The alpha levels for this measure are divided by categories: avoidance is .74, security is .69, ambivalence-merger is .74, and ambivalence-worry is .71.

**Procedure**

Upon IRB approval from the University of Central Florida, data was collected through an anonymous, online extra credit system used in the Psychology Department called Sona Systems. The participants were required to confirm that they were over 18-years of age and then were given the option to receive compensation for completing this study in the form of extra credit for an undergraduate class of their choice. Once participants consented, they were provided with an *Explanation of Research* form, assuring complete anonymity and informing them that they had the option to withdraw from the study at any time. Once they confirmed that they understood the terms and agreements of the consent document, participants then were asked to complete the measures described above in the given order. The order of the measures, such as having the Retrospective Bullying Questionnaire as one of the first measures, is assumed not to have an effect on the scales following it due to the fact that variables such as attachment and self-esteem do not fluctuate minute-by minute or even day-by-day. Upon completion of all the questionnaires, participants were provided a *Post-Participation Information* form that allowed
them to learn the purpose of the study and gave them some relevant research references, along with the contact information of the researchers in case of questions.
RESULTS

Descriptive Information

To examine these data initially, descriptive statistics were calculated and examined. See Table 2 for the means and standard deviations on each of the variables used in this study. With regard to the different types of bullying, 72.1% of participants were not bullied physically, whereas 27.9% indicated that they were bullied physically in some way across their schooling. Further, 30.1% of participants indicated that they were not bullied verbally, 69.1% of participants indicated that they were bullied verbally at some point in their life, and one participant declined to answer questions pertaining to verbal bullying. Last but not least, 35.3% of participants indicated that they were not bullied indirectly, and 64.7% of participants indicated that they were bullied indirectly. With regard to participants’ ratings of their behavior problems on the ASR, participants endorsed nonclinical levels of internalizing problems ($M = 53.56; SD = 12.09$) and externalizing problems ($M = 51.64; SD = 10.2$) on average relative to the clinical cutoffs designated for this measure. Of the 136 participants’ that took the ASR, 42 participants scored a frequency of 60 or higher on the internalizing score and 28 scored a frequency of 60 or higher on the externalizing score. Regarding the self-esteem and humanity-esteem variables, participants showed, in relative to the ranges for the scale, moderate to high levels of self-esteem ($M = 1.83; SD = .51$) and moderate to high levels of humanity-esteem ($M = 1.48; SD = 1.03$). Finally, participants reported a moderate level of attachment ($M = 2.26; SD = .42$).

Significant Differences
In comparing participants who were bullied to those who were not, there were significant differences on the physical bullying \((p < .008)\) and indirect bullying \((p < .03)\) variables. No other significant differences were present. See Table 4.

**Correlational Analyses**

To examine the relationships among retrospective bullying, behavior problems, self-esteem, humanity-esteem, and attachment, correlations among these variables were calculated and examined. See Table 3 for a matrix of these correlation findings.

Among the different types of bullying, physical bullying was correlated significantly with both verbal \((r = .40, p < .001)\) and indirect bullying \((r = .33, p < .001)\). Verbal bullying and indirect bullying also were correlated significantly \((r = .59, p < .001)\). In terms of retrospective bullying and current behavior problems, there were significant relationships found between verbal bullying and internalizing problems \((r = .33, p < .001)\) and externalizing problems \((r = .29, p < .001)\). There also were also significant relationships found between indirect bullying and internalizing problems \((r = .25, p < .005)\) and externalizing problems \((r = .22, p < .01)\). Physical bullying was not related significantly to either internalizing problems \((r = .15, p < .09)\) or externalizing problems \((r = .08, p < .39)\), however.

With regard to the relationship between retrospective bullying and self-esteem, there was a significant relationship found between verbal bullying and self-esteem \((r = .18, p < .04)\). There also was a significant relationship found between indirect bullying and self-esteem \((r = .21, p < .01)\). There was no significant relationship found between physical bullying and self-esteem \((r = .15, p < .09)\), however. Retrospective bullying and humanity esteem were not related.
significantly (i.e., physical bullying, \( r = -.10, p < .25 \); verbal bullying, \( r = -.12, p < .17 \); indirect bullying, \( r = -.06, p < .47 \)). Regarding retrospective bullying and attachment, there were significant relationships between physical bullying and attachment (\( r = .27, p < .002 \)) and between verbal bullying and attachment (\( r = .17, p < .05 \)). There was no relationship found between indirect bullying and attachment (\( r = .07, p < .39 \)), however.

Internalizing problems were found to have a significant relationship with externalizing problems (\( r = .53, p < .001 \)), self-esteem (\( r = .54, p < .001 \)), humanity-esteem (\( r = -.28, p < .002 \)), and attachment (\( r = .48, p < .001 \)). On the other hand, externalizing problems were correlated significantly with humanity-esteem (\( r = -.31, p < .001 \)) and attachment (\( r = .30, p < .002 \)), but not self-esteem (\( r = .14, p < .10 \)). With regard to the relationship between the other variables, significant relationships were found between self-esteem and humanity-esteem (\( r = -.24, p < .006 \)) and between self-esteem and attachment (\( r = .42, p < .001 \)). A significant relationship also was found between humanity-esteem and attachment (\( r = -.25, p < .004 \)).

**Regression Analyses**

To examine the predictive relationships among bullying, behavior problems, self-esteem, humanity-esteem, and attachment, two series of regression analyses were conducted. In the first series of regression analyses, bullying and humanity-esteem served as predictor variables, and participants’ internalizing problems, externalizing problems, and self-esteem served as the criterion variables. In particular, bullying variables were entered in Block 1, and humanity-esteem was entered in Block 2, so that incremental variance could be examined. Ratings of
participant’s internalizing problems, externalizing problems, and self-esteem served as criterion variables. See Table 5.

For internalizing problems, bullying predicted significantly participants’ internalizing problems, $F(3, 131) = 5.36, p < .003, R^2 = .11$, in Block 1. In particular, verbal bullying ($p < .01$) served as a significant individual predictor. When humanity-esteem was entered into Block 2, the regression equation remained significant, $F(4, 131) = 6.05, p < .001, R^2 = .16$. Specifically, verbal bullying ($p < .03$) and humanity-esteem ($p < .01$) served as significant individual predictors. Thus, verbal bullying and humanity-esteem provided unique incremental variance in predicting participants’ internalizing problems.

For externalizing problems, bullying predicted significantly participants’ externalizing problems, $F(3, 131) = 4.34, p < .007, R^2 = .09$, in Block 1. In particular, verbal bullying ($p < .01$) served as a significant individual predictor. When humanity-esteem was entered into Block 2, the regression equation remained significant, $F(4, 131) = 6.05, p < .001, R^2 = .16$. Specifically, verbal bullying ($p < .03$) and humanity-esteem ($p < .003$) continued to serve as a significant individual predictor. Thus, verbal bullying and humanity-esteem provided unique variance in predicting participants’ externalizing problems.

For self-esteem, bullying did not predict participants’ self-esteem, $F(3, 134) = 2.18, p < .09, R^2 = .03$, in Block 1. No variable served as a significant individual predictor. When humanity-esteem was entered into Block 2, the regression equation became significant, $F(4, 134) = 3.41, p < .01, R^2 = .07$. Specifically, humanity-esteem ($p < .02$) served as a significant individual predictor. Thus, humanity-esteem provided unique variance in predicting participants’ self-esteem.
In the second series of regression analyses, bullying and attachment served as predictor variables, and participants’ internalizing problems, externalizing problems, and self-esteem served as the criterion variables. In particular, bullying variables were entered in Block 1, and attachment was entered in Block 2, so that incremental variance could be examined. Ratings of participants’ internalizing problems, externalizing problems, and self-esteem served as criterion variables. See Table 6.

For internalizing problems, bullying predicted significantly participants’ internalizing problems, $F(3, 131) = 5.36, p < .003, R^2 = .11$, in Block 1. In particular, verbal bullying ($p < .01$) served as a significant individual predictor. When attachment was entered into Block 2, the regression equation remained significant, $F(4, 131) = 13.37, p < .001, R^2 = .30$. Specifically, verbal bullying ($p < .03$) and attachment ($p < .001$) served as significant individual predictors. Thus, verbal bullying and attachment provided unique incremental variance in predicting participants’ internalizing problems.

For externalizing problems, bullying predicted significantly participants’ externalizing problems, $F(3, 131) = 4.34, p < .007, R^2 = .09$, in Block 1. In particular, verbal bullying ($p < .01$) served as a significant individual predictor. When attachment was entered into Block 2, the regression equation remained significant, $F(4, 131) = 6.06, p < .001, R^2 = .16$. Specifically, verbal bullying ($p < .02$) and attachment ($p < .003$) were significant individual predictors. Thus, verbal bullying and attachment provided unique variance in predicting participants’ externalizing problems.

For self-esteem, bullying did not predicted participants’ self-esteem, $F(3, 134) = 2.18, p < .09, R^2 = .05$, in Block 1. No variable served as a significant individual predictor. When
attachment was entered into Block 2, the regression equation became significant, $F(4, 134) = 8.37, p < .001, R^2 = .21$. Specifically, indirect bullying ($p < .07$) served as a marginal individual predictor, and attachment ($p < .001$) served as a significant individual predictor. Thus, indirect bullying and attachment provided unique variance in predicting participants’ self-esteem.
DISCUSSION

The purpose of this study was to examine the relationships among retrospective bullying, behavior problems, self-esteem, humanity-esteem, and attachment. Previous findings suggested that previous victimization may have a significant relationship between psychopathology (Bellmore, Witkow, Graham, & Juvonen, 2004; Craig, 1998; Fitzpatrick & Bussey, 2011; Hawker & Boulton, 2000; Hodges & Perry, 1996; McLaughlin, Hatzenbuehler, & Hilt, 2009; Olweus, 1993; Rigby, 2001; Rigby & Slee, 1993; Salmon, 2000; Slee, 1995), self-esteem (Hawker & Boulton, 2000; Hodges & Perry, 1996; Juvonen, Nishina, & Graham, 2000; Olweus, 1993; Rigby & Slee, 1993; Schäfer et al., 2004; Tritt & Duncan, 1997), and attachment (Boulton et al., 1999; Hodges et al., 1999; Schäfer et al., 2004; Schmidt & Bagwell, 2007). On a similar note, since previous research suggested that humanity-esteem is influenced by past events and emotions (Luke, Maio, & Carnelley, 2004), this study also attempted to show a relationship between previous victimization from bullying and humanity-esteem.

The results of this study suggested that there is a significant relationship among retrospective bullying, behavior problems, self-esteem, and humanity-esteem. Additionally, participants’ humanity-esteem served as a significant predictor of later behavior problems and self-esteem. In fact, humanity-esteem was a significant predictor even after placing all three forms of bullying into a hierarchical regression equation. Therefore, the results of this study suggested that having a higher view of humanity is related to a decreased likelihood of future behavior problems and low self-esteem, even in the context of individuals having been victimized by bullying. These findings were consistent with the hypothesis formed by the previous research leading to the idea that humanity-esteem serves as a protective factor against
the effects of victimization. The higher individuals’ view of humanity is, the less likely that past experiences with situations like being bullied may continue to affect them.

The results of the hierarchical regression analyses between retrospective bullying, attachment, behavior problems, and self-esteem suggested that there were some significant relationships among these variables. Attachment provided unique incremental variance to the relationship between victimization and internalizing problems, externalizing problems, and self-esteem. Attachment also served as a significant predictor of later behavior problems and self-esteem and continued to be a significant predictor even in the context of the different types of bullying that were considered. Thus, these findings suggested that having a more secure attachment relationship with others after having been bullied previously bullied was related to lower levels of later behavior problems and higher self-esteem. These results supported previous research (Hodges et al., 1999; Schmidt & Bagwell, 2007) noting that having a reciprocated best friend may actually decrease the negative implications of being bullied. This study is unique, however, in that the current study used current attachment in conjunction with retrospective bullying (instead of current bullying).

After performing the hierarchical regressions, it became evident that verbal bullying, one of the direct types of bullying that is done directly to one’s face, is a predictor of several outcome variables. It is shown to be a predictor to internalizing and externalizing all by itself, and continued to be a predictor when adding in the humanity-esteem and attachment variables to the behavioral outcomes. This suggests that verbal bullying does more psychological harm and has more long-lasting negative outcomes than do physical bullying or indirect bullying.
The findings of this study should be interpreted within the context of its limitations. The first several limitations dealt with some of the demographic information of the participants. Despite a sample size of 136 individuals, a majority of the participants were single, Caucasian females. Due to the disproportionate number of males, analyzing for potential sex differences across the study’s variables was not possible. Similarly, the overwhelming number of Caucasian individuals in this sample prevented meaningful comparisons across individuals from different ethnic backgrounds on the variables of interest. Additionally, all of the participants that were considered for this study were enrolled in college and ranged in age from 18- to 24-years. Due to the limited variety of participants, the findings’ generalizability decreases.

Another limitation that was present in this study is the retrospective nature of the victimization variable. Although, the subject of this research was to see how retrospective bullying may play a role in future functioning variables, it could be argued that certain experiences after having been bullied may counteract the negative effects of previous victimization experience (Schäfer et al., 2004). Schäfer and Korn (2001) suggested that some individuals may recover from some of the negative effects of previous victimization from bullying in conjunction with the less rigid structure of university life and the length of time since the last victimization. Olweus (1993) also made similar suggestions but attributed recovery rates to individuals’ freedom to choose new social environments. These suggestions implied that future research should take into consideration the events that have occurred since individuals’ last victimization and what they did after they left elementary, secondary, and high school (e.g., university, career).
Despite these limitations, the literature concerning the relationships among victimizations from bullying, behavior problems, self-esteem, humanity-esteem, and attachment has expanded due to these results. In this study, participants’ humanity-esteem and attachment were significant predictors of their current behavior problems and self-esteem if they were bullied previously. Focusing on programs that foster positive outlooks on humanity and secure attachment behaviors may help prevent potentially unfavorable outcomes of victimization (e.g., internalizing and externalizing problems, low self-esteem). It will be important to continue research on other predictors and the significant relationships among victimization, behavior problems, self-esteem, humanity-esteem, and attachment.
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<th>Variables</th>
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<tr>
<td>Female</td>
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<td><strong>Age (in years)</strong></td>
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<tr>
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<td>African American</td>
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<tr>
<td>Hispanic</td>
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<tr>
<td>Asian American</td>
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<td>Indian</td>
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<tr>
<td>Other</td>
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<tr>
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<tr>
<td>Sophomore</td>
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<tr>
<td>Junior</td>
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<tr>
<td>Senior</td>
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Table 2. Descriptive Statistics for Variables of Interest

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### Table 3. Correlations Among Bullying, Behavior Problems, Self-Esteem, Humanity-Esteem, and Attachment

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**Note.** *p < .05  **p < .01  ***p < .001
Table 4. ANOVA

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Note.  * p < .05  ** p < .01  *** p < .001
Table 5. Hierarchical Regression Analyses for Bullying and Humanity-Esteem

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<th>$\beta$</th>
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<td>.04</td>
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*Note.* $* p < .05$  **$p < .01$  ***$p < .001$
Table 6. Hierarchical Regression Analyses for Bullying and Attachment

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<th>Variables</th>
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Note.  * $p < .05$    ** $p < .01$    *** $p < .001$
APPENDIX A: IRB APPROVAL LETTER
APPENDIX A: IRB APPROVAL LETTER

Approval of Exempt Human Research

From: UCF Institutional Review Board #1
FWA0000351, IRB00001138

To: Kimberly D. Renk and Co-PI: Lovina R. Bater

Date: January 23, 2013

Dear Researcher:

On 1/23/2013, the IRB approved the following activity as human participant research that is exempt from regulation:

Type of Review: Exempt Determination
Project Title: The Effect of Bullying and the Mediating Role of Parental Attachment on Later Attachment, Self-Esteem, Humanity-Esteem, and Behavioral Outcomes
Investigator: Kimberly D. Renk
IRB Number: SBE-13-09047
Funding Agency: N/A
Research ID: N/A

This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made and there are questions about whether these changes affect the exempt status of the human research, please contact the IRB. When you have completed your research, please submit a Study Closure request in IRIS so that IRB records will be accurate.

In the conduct of this research, you are responsible to follow the requirements of the Investigator Manual.

On behalf of Sophia Dziegielewski, Ph.D., L.C.S.W., UCF IRB Chair, this letter is signed by:

Signature applied by Joanne Muratori on 01/23/2013 11:42:21 AM EST

IRB Coordinator
APPENDIX B: INFORMED CONSENT
APPENDIX B: INFORMED CONSENT

The Effect of Bullying and the Mediating Role of Attachment and Humanity-Esteem on Self-Esteem, and Behavioral Outcomes

Informed Consent

Principal Investigators: Lovina Bater, Honors in the Major Student, and Kimberly Renk, Ph.D.

Faculty Supervisor: Kimberly Renk, Ph.D.

Investigational Site: University of Central Florida, Department of Psychology

Introduction: Researchers at the University of Central Florida (UCF) study many topics. To do this, we need the help of people who agree to take part in a research study. You are being invited to take part in a research study, which will include up to 400 undergraduates from the University of Central Florida. You must be between the age 18- and 25-years to be included in the research study.

The persons doing this research are Lovina Bater, an Undergraduate Student in the Honors in the Major Program at the University of Central Florida, and Kimberly Renk, Ph.D., an Associate Professor of Psychology at UCF and supervising faculty member.

What you should know about a research study:

- Someone will explain this research study to you.
- A research study is something you volunteer for.
- Whether or not you take part is up to you.
- You should take part in this study only because you want to.
- You can choose not to take part in the research study.
- You can agree to take part now and later change your mind.
- Whatever you decide it will not be held against you.
- Feel free to ask all the questions you want before you decide.
Purpose of the research study: The purpose of this research study is to examine how individuals’ experiences from previous bullying are related to their later functioning. In fact, studies that have been completed thus far suggest that childhood bullying experiences are related to the adult functioning of these individuals in many different ways later in life (e.g., internalizing and externalizing symptoms). Studies provide some information about the relationship between previous bullying and attachment, self-esteem, and some behavioral functioning, but no study examines these relationships in the context of individual’s view of humanity. Also, the potential for parental attachment to serve as a protective factor in the context of bullying has not been examined thoroughly. As a result, there is a need to further examine the relationships among these variables, particularly between individuals’ childhood bullying experiences and their later functioning.

What you will be asked to do in the study: As part of this study, you will be asked to complete several brief questionnaires that will take approximately one hour of your time. Sona Systems provides a link to these surveys. Alternatively, you will be able to complete a hard copy if you are unable to access the study online. Your responses as part of this study will be used to examine the relationships among childhood bullying experiences in the context of parental attachment, current attachment style, perceptions of yourself and of humanity, and emotional and behavioral functioning.

Location: Research for this project will be conducted in one of two methods in a location of your choice. You may choose to fill out the questionnaires either on a secure on-line survey site at a location of your choosing or attend a group data collection session that will be held in the Psychology Building on the UCF campus. If you complete the hard copy of questionnaires in a data collection session, you will be returning these questionnaires to the principal investigators immediately upon completion.

Time Required: We expect that you will participate in this research study for approximately one hour.

Risks: Although there are no anticipated risks that accompany your participation in this research study, it should be noted that some of the questionnaires that you will complete may bring up negative or unpleasant experiences from your childhood. Should you have a negative emotional reaction to any of the material presented, please notify the investigators listed on this form. In addition, you should consider contacting the University of Central Florida Student Counseling
Center at 407-823-2811 if you feel that you would like to discuss your childhood experiences in a therapeutic context.

**Benefits:** One benefit of participating in this project is that you will learn first-hand what it is like to participate in a research project and you may learn more about yourself. For example, by completing the questionnaire packet, you will increase your awareness of your childhood bullying experiences, attachment to other important figures in your life, and your emotional and behavioral functioning.

**Compensation or Payment:** Participants can expect to spend approximately one hour completing questionnaires and will receive extra credit toward a Psychology course of their choice through Sona Systems.

**Confidentiality:** We will limit the personal data that we collect in this study and will only have the investigators listed on this form reviewing the information that is collected. No names or identifying information will be collected. We cannot promise complete secrecy, however. Organizations that may inspect and copy your information include the IRB and other representatives of UCF. You can be assured that we will not be able to link your identity to your responses, however, as we will not be asking you for your name as part of this consent process. Upon completion of the online surveys, your responses will be linked with an identification number only. The principal investigators then will transfer your survey responses from the secure online server to an SPSS database that only the investigators will be able to access via a password protected computer. Your online survey responses then will be deleted from the secure online server. Thus, your responses will be entirely anonymous. If you elect to complete a paper packet, your completed packet will be stored in a locked filing cabinet in a locked psychology laboratory in the Psychology Building at the University of Central Florida. Only the investigators listed here will handle your surveys. The completed packets will be entered into a database using a research identification number only.

**Study contact for questions about the study or to report a problem:** If you have questions, concerns, or complaints or think the research has hurt you, talk to Kimberly Renk, Ph.D., Principal Investigator and Faculty Supervisor, Department of Psychology, at 407-823-2218 or by email at Kimberly.Renk@ucf.edu.

**IRB contact about your rights in the study or to report a complaint:** Research at the University of Central Florida involving human participants is carried out under the oversight of the Institutional Review Board (UCF IRB). This research has been reviewed and approved by the IRB. For information about the rights of people who take part in research, please contact:
Institutional Review Board, University of Central Florida, Office of Research & Commercialization, 12201 Research Parkway, Suite 501, Orlando, FL 32826-3246 or by telephone at (407) 823-2901. You may also talk to them for any of the following:

- Your questions, concerns, or complaints are not being answered by the research team.
- You cannot reach the research team.
- You want to talk to someone besides the research team.
- You want to get information or provide input about this research.

**Withdrawing from the study:** There are no adverse consequences for choosing to withdraw from your participation in the study. The person in charge of the research study or the sponsor can remove you from the research study without your approval if you are not 18-years of age or older.

**If you agree to participate in this research study, please click continue below.**
APPENDIX C: DEMOGRAPHICS QUESTIONNAIRE
APPENDIX C: DEMOGRAPHICS QUESTIONNAIRE

Demographics Questionnaire

Please circle, check, or fill in an answer to each of the following questions.

1. **Gender:** Male Female

2. **Age:** _____________

3. **Your ethnicity:** ________________________________

4. **Year in college:** Freshman Sophomore Junior Senior Graduate Non-degree seeking Other: ________________

5. **Have you been out of school for more than one semester since high school?** (Not including summer session.) Yes No

6. **What is your current marital status?** Single Married Divorced Living with Partner Other: ________________________________

7. **Do you have any children (biological or adopted)?** Yes No

8. a.) **Do you live with your parent(s)?** Yes No

   **If “Yes”, continue to #9.

   b.) If “No”, do your parents pay for your living expenses (rent, utilities)?

      Yes In part No

   **If “Yes”, continue to #9.

   c.) If “No”, do you pay your own living expenses?

      Yes In part No

9. a.) **How frequent is your contact with the person you consider you mother?**

   ________ At least once a day.

   ________ Less often than once a day, but at least once a week.

   ________ Less often than once a week, but at least once every two weeks.

   ________ Less often than every two weeks, but at least once a month.

   ________ Less often than once a month.
__________ None.

b.) Is this your biological mother?  Yes  No

1. a.) How frequent is your contact with the person you consider your father?
__________ At least once a day.
__________ Less often than once a day, but at least once a week.
__________ Less often than once a week, but at least once every two weeks.
__________ Less often than every two weeks, but at least once a month.
__________ Less often than once a month.
__________ None.

b.) Is this your biological father?  Yes  No

11. What is your mother’s occupation? __________________________

What was the last grade that your mother completed in school?__________

12. What is your father’s occupation? __________________________

What was the last grade that your father completed in school?__________

13. What is your family’s average yearly income? ________________

14. What was your high school grade point average (GPA)? ________________

15. What is your current university GPA? ________________
APPENDIX D: RETROSPECTIVE BULLYING QUESTIONNAIRE
APPENDIX D: RETROSPECTIVE BULLYING QUESTIONNAIRE

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

All answers will be treated confidentially.
Are you: Male Female
Age:

Please think back to your school days. You may have seen some bullying at school, and you may have been involved in some way. (Tick the choice which best describes your own experiences at school.)

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

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

PART I: PRIMARY SCHOOL
This part deals with your experiences in primary school (4 – 11 years).

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

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

The next questions are about physical forms of bullying – hitting and kicking, and having things stolen from you.

3. Were you physically bullied in primary school?
   Hit / punched Yes No
   Stolen from Yes No

4. Did this happen
   Never Rarely Sometimes Frequently Constantly

5. How serious did you consider these bullying-attacks to be?
   I wasn’t bullied Not at all Only a bit Quite serious Extremely serious

44
The next questions are about verbal forms of bulling – being called nasty names, and being threatened.

6. Were you verbally bullied in primary school?
   Called names Yes No
   Threatened Yes No

7. Did this happen
   Never Rarely Sometimes Frequently Constantly

8. How serious did you consider these bullying-attacks to be?
   I wasn’t bullied Not at all Only a bit Quite serious Extremely serious

The next questions are about indirect forms of bullying – having lies or nasty rumors told about you behind your back, or being deliberately excluded from social groups.

9. Were you indirectly bullied in primary school?
   Had lies told about you Yes No
   Excluded Yes No

10. Did this happen
    Never Rarely Sometimes Frequently Constantly

11. How serious did you consider these bullying-attacks to be?
    I wasn’t bullied Not at all Only a bit Quite serious Extremely serious

The next questions are about bullying in general.

12. How long did the bullying attacks usually last?
    I wasn’t bullied Just a few days Weeks Months A year or more

13. How many pupils bullied you in primary school?
    I wasn’t bullied
    Mainly by one boy
    By several boys
    Mainly by one girl
    By several girls
    By both boys and girls

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

PART II: SECONDARY SCHOOL
This part deals with your experiences at secondary school (11–18 years)

15. Did you have a happy time in secondary school?
   - Detested
   - Disliked
   - Neutral
   - Liked a bit
   - Liked a lot

16. Did you have a happy time at home with your family while in secondary school?
   - Detested
   - Disliked
   - Neutral
   - Liked a bit
   - Liked a lot

The next questions are about physical forms of bullying – hitting and kicking, and having things stolen from you.

17. Were you physically bullied in secondary school?
   - Hit / punched
     - Yes
     - No
   - Stolen from
     - Yes
     - No

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

19. How serious did you consider these bullying-attacks to be?
   - I wasn’t bullied
   - Not at all
   - Only a bit
   - Quite serious
   - Extremely serious

The next questions are about verbal forms of bullying – being called nasty name, and being threatened.

20. Were you verbally bullied in secondary school?
   - Called names
     - Yes
     - No
   - Threatened
     - Yes
     - No

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

22. How serious did you consider these bullying-attacks to be?
   - I wasn’t bullied
   - Not at all
   - Only a bit
   - Quite serious
   - Extremely serious

The next questions are about indirect forms of bullying – having lies or nasty rumors told about you behind your back, or being deliberately excluded from social groups.

23. Were you indirectly bullied in secondary school?
   - Had lies told about you
     - Yes
     - No
   - Excluded
     - Yes
     - No

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

25. How serious did you consider these bullying-attacks to be?
I wasn’t bullied  Not at all  Only a bit  Quite serious  Extremely serious

The next questions are about bullying in general.

26. How long did the bullying-attacks usually last?
   I wasn’t bullied  Just a few days  Weeks  Months  A year or more

27. How many pupils bullied you in secondary school?
   I wasn’t bullied
   Mainly by one boy
   By several boys
   Mainly by one girl
   By several girls
   By both boys and girls

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

PART III: GENERAL EXPERIENCES AT SCHOOL

29. Which were the main ways you used to cope with the bullying? (Please tick one or more options)
   I wasn’t bullied at school
   I tried to make fun of it
   I tried to avoid the situation
   I tried to ignore it
   I fought back
   I got help from friends
   I got help from a teacher
   I got help from family / parents
   I tried to handle it by myself
   I did not really cope
   Other

30. Did you ever take part in bullying anyone while you were at school? (Tick one or more options)
   Hit / punched  Yes  No
   Stolen from  Yes  No
   Called names  Yes  No
   Threatened  Yes  No
   Told lies about  Yes  No
   Excluded  Yes  No

31. Did this happen
   Never  Rarely  Sometimes  Frequently  Constantly
32. How often did you try to avoid school by pretending to be sick or by playing truant because you were being bullied?
   - I wasn’t bullied at school
   - Never
   - Only once or twice
   - Sometimes
   - Maybe once a week
   - Several times a week

33. When you were being bullied, did you ever, even for a second, think about hurting yourself or taking your own life?
   - I wasn’t bullied at school
   - No, never
   - Yes, once
   - Yes, more than once

34. Have you been bullied since leaving school?
   - I haven’t been bullied since leaving school
   - I have been bullied by my family
   - I have been bullied by others (please specify):

Recollections of being bullied at school
(Only answer those questions, if you were bullied):

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

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

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

38. Do you ever have sudden vivid recollections or ‘flashbacks’ to the bullying event(s)?
   - No, never
   - Not often
   - Sometimes
   - Often
   - Always

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

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

PART IV: BULLYING OR HARASSMENT IN COLLEGE

41. Were you bullied in college?
<table>
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<th>Yes</th>
<th>No</th>
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</table>

42. Did this happen
- Never
- Rarely
- Sometimes
- Frequently
- Constantly

43. How serious did you consider these bullying-attacks to be?
- I wasn’t bullied
- Not at all
- Only a bit
- Quite serious
- Extremely serious

44. How long did the bullying-attacks usually last?
- I wasn’t bullied
- Just a few days
- Weeks
- Months
- A year or more
APPENDIX E: ROSENBERG SELF-ESTEEM SCALE
APPENDIX E: ROSENBERG SELF-ESTEEM SCALE

Please record the appropriate answer for each item, depending on whether you Strongly Agree, Agree, Disagree, or Strongly Disagree with it.

1 = Strongly Agree
2 = Agree
3 = Disagree
4 = Strongly Disagree

___ 1. On the whole, I am satisfied with myself.
___ 2. At times I think I am no good at all.
___ 3. I feel that I have a number of good qualities.
___ 4. I am able to do things as well as most other people.
___ 5. I feel I do not have much to be proud of.
___ 6. I certainly feel useless at times.
___ 7. I feel that I’m a person of worth.
___ 8. I wish I could have more respect for myself.
___ 9. All in all, I am inclined to think that I am a failure.
___ 10. I take a positive attitude toward myself.
APPENDIX F: ACHENBACH ADULT SELF-REPORT
APPENDIX F: ACHENBACH ADULT SELF-REPORT

ADULT SELF-REPORT FOR AGES 18-59

YOUR FIRST MIDDLE LAST

FULL NAME

YOUR GENDER

☐ Male ☐ Female

YOUR AGE

ETHNIC GROUP OR RACE

TODAY'S DATE

YOUR BIRTHDATE

Mo. Date Yr. Mo. Date Yr.

For office use only ID#

YOUR USUAL TYPE OF WORK, even if not working now. Please be specific—for example, auto mechanic; high school teacher; homemaker; laborer; lathe operator; shoe salesman; army sergeant; student (indicate what you are studying & what degree you expect).

Your work

Spouse or partner's work

PLEASE CHECK YOUR HIGHEST EDUCATION

☐ 1. No high school diploma and no GED
☐ 2. General Equivalency Diploma (GED)
☐ 3. High school graduate
☐ 4. Some college but no college degree
☐ 5. Associate's Degree
☐ 6. Bachelor's or RN Degree
☐ 7. Some graduate school but no graduate degree
☐ 8. Master's Degree
☐ 9. Doctoral or Law Degree
☐ Other education (specify):

Please fill out this form to reflect your views, even if other people might not agree. You need not spend a lot of time on any item. Feel free to print additional comments. Be sure to answer all items.

I. FRIENDS:

A. About how many close friends do you have? (Do not include family members.)

☐ None ☐ 1 ☐ 2 or 3 ☐ 4 or more

B. About how many times a month do you have contact with any of your close friends? (include in-person contacts, phone, letters, e-mail.)

☐ Less than 1 ☐ 1 or 2 ☐ 3 or 4 ☐ 5 or more

C. How well do you get along with your close friends?

☐ Not as well as I'd like ☐ Average ☐ Above average ☐ Far above average

D. About how many times a month do any friends or family visit you?

☐ Less than 1 ☐ 1 or 2 ☐ 3 or 4 ☐ 5 or more

II. SPOUSE OR PARTNER:

What is your marital status?

☐ Never been married ☐ Married but separated from spouse
☐ Married, living with spouse ☐ Divorced
☐ Widowed ☐ Other—please describe:

At any time in the past 6 months, did you live with your spouse or with a partner?

☐ No—please skip to page 2.

☐ Yes—Circle 0, 1, or 2 beside items A-H to describe your relationship during the past 6 months:

0 = Not True 1 = Somewhat or Sometimes True 2 = Very True or Often True

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<th>0 1 2</th>
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</thead>
<tbody>
<tr>
<td>A</td>
<td>I get along well with my spouse or partner</td>
<td>E</td>
<td>My spouse or partner and I disagree about living arrangements, such as where we live</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>My spouse or partner and I have trouble sharing responsibilities</td>
<td>F</td>
<td>I have trouble with my spouse or partner's family</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>I feel satisfied with my spouse or partner</td>
<td>G</td>
<td>I like my spouse or partner's friends</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>My spouse or partner and I enjoy similar activities</td>
<td>H</td>
<td>My spouse or partner's behavior annoys me</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please be sure you have answered all items. Then see other sides.

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1 South Prospect St., Burlington, VT 05401-3456
www.ASEBA.org

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Page 1
III. FAMILY:

Compared with others, how well do you:

Worse than Average | Variable or Average | Better than Average | No Contact
A. Get along with your brothers? | I have no brothers |
B. Get along with your sisters? | I have no sisters |
C. Get along with your mother? | Mother is deceased |
D. Get along with your father? | Father is deceased |
E. Get along with your biological or adopted children? | I have no children |
   1. Oldest child | Not applicable |
   2. 2nd oldest child | Not applicable |
   3. 3rd oldest child | Not applicable |
   4. Other children | Not applicable |
F. Get along with your stepchildren? | I have no stepchildren |

IV. JOB: At any time in the past 6 months, did you have any paid jobs (including self-employment and military service)?

☐ No—please skip to Section V.
☐ Yes—please describe your job(s):

Circle 0, 1, or 2 beside items A-I to describe your work experience during the past 6 months:

0 = Not True | 1 = Somewhat or Sometimes True | 2 = Very True or Often True
A. I work well with others
B. I have trouble getting along with bosses
C. I do my work well
D. I have trouble finishing my work
E. I am satisfied with my work situation
F. I do things that may cause me to lose my job
G. I stay away from my job even when I'm not sick or not on vacation
H. My job is too stressful for me
I. I worry too much about work

V. EDUCATION: At any time in the past 6 months, did you attend school, college, or any other educational or training program?

☐ No—please skip to Section VI.
☐ Yes—what kind of school or program?

What degree or diploma are you seeking? Major?

When do you expect to receive your degree or diploma?

Circle 0, 1, or 2 beside items A-E to describe your educational experience during the past 6 months:

0 = Not True | 1 = Somewhat or Sometimes True | 2 = Very True or Often True
A. I get along well with other students
B. I achieve what I am capable of
C. I have trouble finishing assignments
D. I am satisfied with my educational situation
E. I do things that may cause me to fail

VI. Do you have any illness, disability, or handicap? ☐ No ☐ Yes—please describe:

VII. Please describe your concerns or worries about family, work, education, or other things: ☐ No concerns

VIII. Please describe the best things about yourself:
Please print your answers. Be sure to answer all items.

IX. Below is a list of items that describe people. For each item, please circle 0, 1, or 2 to describe yourself over the past 6 months. Please answer all items as well as you can, even if some do not seem to apply to you.

<table>
<thead>
<tr>
<th>0 = Not True</th>
<th>1 = Somewhat or Sometimes True</th>
<th>2 = Very True or Often True</th>
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</thead>
<tbody>
<tr>
<td>0 1 2</td>
<td>1. I am too forgetful</td>
<td>0 1 2 37. I get in many fights</td>
</tr>
<tr>
<td>0 1 2</td>
<td>2. I make good use of my opportunities</td>
<td>0 1 2 38. My relations with neighbors are poor</td>
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<tr>
<td>0 1 2</td>
<td>3. I argue a lot</td>
<td>0 1 2 39. I hang around people who get in trouble</td>
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<td>0 1 2</td>
<td>4. I work up to my ability</td>
<td>0 1 2 40. I hear sounds or voices that other people think aren't there (describe):</td>
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<tr>
<td>0 1 2</td>
<td>5. I blame others for my problems</td>
<td>0 1 2 41. I am impulsive or act without thinking</td>
</tr>
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<td>0 1 2</td>
<td>6. I use drugs (other than alcohol and nicotine) (describe):</td>
<td>0 1 2 42. I would rather be alone than with others</td>
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<tr>
<td></td>
<td></td>
<td>0 1 2 43. I lie or cheat</td>
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<td>0 1 2</td>
<td>7. I brag</td>
<td>0 1 2 44. I feel overwhelmed by my responsibilities</td>
</tr>
<tr>
<td>0 1 2</td>
<td>8. I have trouble concentrating or paying attention for long</td>
<td>0 1 2 45. I am nervous or tense</td>
</tr>
<tr>
<td>0 1 2</td>
<td>9. I can't get my mind off certain thoughts (describe):</td>
<td>0 1 2 46. Parts of my body twitch or make nervous movements (describe):</td>
</tr>
<tr>
<td>0 1 2</td>
<td>10. I have trouble sitting still</td>
<td>0 1 2 47. I lack self-confidence</td>
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<td>0 1 2</td>
<td>11. I am too dependent on others</td>
<td>0 1 2 48. I am not liked by others</td>
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<tr>
<td>0 1 2</td>
<td>12. I feel lonely</td>
<td>0 1 2 49. I can do certain things better than other people</td>
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<td>0 1 2</td>
<td>13. I feel confused or in a fog</td>
<td>0 1 2 50. I am too fearful or anxious</td>
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<tr>
<td>0 1 2</td>
<td>14. I cry a lot</td>
<td>0 1 2 51. I feel dizzy or lightheaded</td>
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<td>0 1 2</td>
<td>15. I am pretty honest</td>
<td>0 1 2 52. I feel too guilty</td>
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<tr>
<td>0 1 2</td>
<td>16. I am mean to others</td>
<td>0 1 2 53. I have trouble planning for the future</td>
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<td>0 1 2</td>
<td>17. I daydream a lot</td>
<td>0 1 2 54. I feel tired without good reason</td>
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<tr>
<td>0 1 2</td>
<td>18. I deliberately try to hurt or kill myself</td>
<td>0 1 2 55. My moods swing between elation and depression without known medical cause:</td>
</tr>
<tr>
<td>0 1 2</td>
<td>19. I try to get a lot of attention</td>
<td>0 1 2 a. Aches or pains (not stomach or headaches)</td>
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<tr>
<td>0 1 2</td>
<td>20. I damage or destroy my things</td>
<td>0 1 2 b. Headaches</td>
</tr>
<tr>
<td>0 1 2</td>
<td>21. I damage or destroy things belonging to others</td>
<td>0 1 2 c. Nausea, feel sick</td>
</tr>
<tr>
<td>0 1 2</td>
<td>22. I worry about my future</td>
<td>0 1 2 d. Problems with eyes (not if corrected by glasses) (describe):</td>
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<tr>
<td>0 1 2</td>
<td>23. I break rules at work or elsewhere</td>
<td>0 1 2 e. Rashes or other skin problems</td>
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<tr>
<td>0 1 2</td>
<td>24. I don't eat as well as I should</td>
<td>0 1 2 f. Stomachaches</td>
</tr>
<tr>
<td>0 1 2</td>
<td>25. I don't get along with other people</td>
<td>0 1 2 g. Vomiting, throwing up</td>
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<td>0 1 2</td>
<td>26. I don't feel guilty after doing something I shouldn't</td>
<td>0 1 2 h. Heart pounding or racing</td>
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<td>0 1 2</td>
<td>27. I am jealous of others</td>
<td>0 1 2 i. Numbness or tingling in body parts</td>
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<td>0 1 2</td>
<td>28. I get along badly with my family</td>
<td>0 1 2 57. I physically attack people</td>
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<tr>
<td>0 1 2</td>
<td>29. I am afraid of certain animals, situations, or places (describe):</td>
<td>0 1 2 58. I pick my skin or other parts of my body (describe):</td>
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<tr>
<td>0 1 2</td>
<td>30. My relations with the opposite sex are poor</td>
<td>0 1 2 59. I fail to finish things I should do</td>
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<tr>
<td>0 1 2</td>
<td>31. I am afraid I might think or do something bad</td>
<td>0 1 2 60. There is very little that I enjoy</td>
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<tr>
<td>0 1 2</td>
<td>32. I feel that I have to be perfect</td>
<td>0 1 2 61. My work performance is poor</td>
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<tr>
<td>0 1 2</td>
<td>33. I feel that no one loves me</td>
<td>0 1 2 62. I am poorly coordinated or clumsy</td>
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<td>0 1 2</td>
<td>34. I feel that others are out to get me</td>
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</tbody>
</table>
Please print your answers. Be sure to answer all items.

<table>
<thead>
<tr>
<th>0 = Not True</th>
<th>1 = Somewhat or Sometimes True</th>
<th>2 = Very True or Often True</th>
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<tbody>
<tr>
<td>0 1 2 63. I would rather be with older people than with people of my own age</td>
<td>0 1 2 93. I talk too much</td>
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<tr>
<td>0 1 2 64. I have trouble setting priorities</td>
<td>0 1 2 94. I tease others a lot</td>
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<td>0 1 2 65. I refuse to talk</td>
<td>0 1 2 95. I have a hot temper</td>
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<td>0 1 2 66. I repeat certain acts over and over (describe):</td>
<td>0 1 2 96. I think about sex too much</td>
<td></td>
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<tr>
<td>0 1 2 67. I have trouble making or keeping friends</td>
<td>0 1 2 97. I threaten to hurt people</td>
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<tr>
<td>0 1 2 68. I scream or yell a lot</td>
<td>0 1 2 98. I like to help others</td>
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<td>0 1 2 69. I am secretive or keep things to myself</td>
<td>0 1 2 99. I dislike staying in one place for very long</td>
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<tr>
<td>0 1 2 70. I see things that other people think aren’t there (describe):</td>
<td>0 1 2 100. I have trouble sleeping (describe):</td>
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<tr>
<td>0 1 2 71. I am self-conscious or easily embarrassed</td>
<td>0 1 2 101. I stay away from my job even when I’m not sick or not on vacation</td>
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<tr>
<td>0 1 2 72. I worry about my family</td>
<td>0 1 2 102. I don’t have much energy</td>
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<tr>
<td>0 1 2 73. I meet my responsibilities to my family</td>
<td>0 1 2 103. I am unhappy, sad, or depressed</td>
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<td>0 1 2 74. I show off or clown</td>
<td>0 1 2 104. I am louder than others</td>
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<tr>
<td>0 1 2 75. I am too shy or timid</td>
<td>0 1 2 105. People think I am disorganized</td>
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<td>0 1 2 76. My behavior is irresponsible</td>
<td>0 1 2 106. I try to be fair to others</td>
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<tr>
<td>0 1 2 77. I sleep more than most other people during day and/or night (describe):</td>
<td>0 1 2 107. I feel that I can’t succeed</td>
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<td>0 1 2 78. I have trouble making decisions</td>
<td>0 1 2 108. I tend to lose things</td>
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<tr>
<td>0 1 2 79. I have a speech problem (describe):</td>
<td>0 1 2 109. I like to try new things</td>
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<td>0 1 2 80. I stand up for my rights</td>
<td>0 1 2 110. I wish I were of the opposite sex</td>
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<tr>
<td>0 1 2 81. My behavior is very changeable</td>
<td>0 1 2 111. I keep from getting involved with others</td>
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<tr>
<td>0 1 2 82. I steal</td>
<td>0 1 2 112. I worry a lot</td>
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<tr>
<td>0 1 2 83. I am easily bored</td>
<td>0 1 2 113. I worry about my relations with the opposite sex</td>
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<tr>
<td>0 1 2 84. I do things that other people think are strange (describe):</td>
<td>0 1 2 114. I fail to pay my debts or meet other financial responsibilities</td>
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<tr>
<td>0 1 2 85. I have thoughts that other people would think are strange (describe):</td>
<td>0 1 2 115. I feel restless or fidgety</td>
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<tr>
<td>0 1 2 86. I am stubborn, sullen, or irritable</td>
<td>0 1 2 116. I get upset too easily</td>
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<tr>
<td>0 1 2 87. My moods or feelings change suddenly</td>
<td>0 1 2 117. I have trouble managing money or credit cards</td>
<td></td>
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<tr>
<td>0 1 2 88. I enjoy being with people</td>
<td>0 1 2 118. I am too impatient</td>
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<tr>
<td>0 1 2 89. I rush into things without considering the risks</td>
<td>0 1 2 119. I am not good at details</td>
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<tr>
<td>0 1 2 90. I drink too much alcohol or get drunk</td>
<td>0 1 2 120. I drive too fast</td>
<td></td>
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<tr>
<td>0 1 2 91. I think about killing myself</td>
<td>0 1 2 121. I tend to be late for appointments</td>
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<tr>
<td>0 1 2 92. I do things that may cause me trouble with the law (describe):</td>
<td>0 1 2 122. I have trouble keeping a job</td>
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<tr>
<td>0 1 2 123. I am a happy person</td>
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124. In the past 6 months, about how many times per day did you use tobacco (including smokeless tobacco)? ______ times per day.

125. In the past 6 months, on how many days were you drunk? ______ days.

126. In the past 6 months, on how many days did you use drugs for nonmedical purposes (including marijuana, cocaine, and other drugs, except alcohol and nicotine)? ______ days.
APPENDIX G: HUMANITY-ESTEEM SCALE
APPENDIX G: HUMANITY-ESTEEM SCALE

The following statements ask about your beliefs and perceptions of human beings in general, regardless of religion, ethnicity, or gender. That is, what are your thoughts about the average human being? Please rate the extent to which you agree or disagree with each of the following statements using the scale:

-3 = Strongly disagree
-2 = Moderately disagree
-1 = Slightly disagree
0 = Neither
1 = Slightly agree
2 = Moderately agree
3 = Strongly agree

___ 1. I feel that the human species is very valuable, at least on an equal plane with other species in the universe.
___ 2. I feel that human beings have a number of very good qualities.
___ 3. All in all, I am inclined to regard the human species as a failure.
___ 4. Human beings are able to prosper as well as any other species in the universe.
___ 5. I feel that human beings do not have much to be proud of.
___ 6. I take a positive attitude toward humanity.
___ 7. On the whole, I am satisfied with the evolution of humanity.
___ 8. I wish I could have more respect for humanity in general.
___ 9. Human beings are useless at times.
___ 10. At times, I think human beings are no good at all.
APPENDIX H: MEASURE OF ATTACHMENT QUALITIES
APPENDIX H: MEASURE OF ATTACHMENT QUALITIES

Respond to each of the following statements by expressing how much you agree with it (if you do generally agree) or how much you disagree with it (if you generally disagree). Make all your responses on the answer sheet only. Do not leave any items blank. Please be as accurate as you can be throughout, and try especially hard not to let your answer to any one item influence your answer to any other item. Treat each one as though it is completely unrelated to the others. There are no right or wrong answers, you are simply to express your own personal feelings and opinions. Choose from these response options:

1 = I DISagree with the statement a lot
2 = I DISagree with the statement a little
3 = I agree with the statement a little
4 = I agree with the statement a lot

1. When I'm close to someone, it gives me a sense of comfort about life in general.
2. I often worry that my partner doesn't really love me.
3. I have trouble getting others to be as close as I want them to be.
4. I find it easy to be close to others.
5. I often worry my partner will not want to stay with me.
6. Others want me to be more intimate than I feel comfortable being.
7. It feels relaxing and good to be close to someone.
8. I am very comfortable being close to others.
9. I don’t worry about others abandoning me.
10. My desire to merge sometimes scares people away.
11. I prefer not to be too close to others.
12. I find others are reluctant to get as close as I would like.
13. I get uncomfortable when someone wants to be very close.
14. Being close to someone gives me a source of strength for other activities.
APPENDIX I: POST PARTICIPATION INFORMATION
APPENDIX I: POST PARTICIPATION INFORMATION

PROJECT: The Effect of Bullying and the Mediating Role of Parental Attachment on Later Attachment, Self-Esteem, Humanity-Esteem, and Behavioral Outcomes

INVESTIGATORS: Lovina Bater, Honors in the Major Student, and Kimberly Renk, Ph.D.

Thank you for participating in this research project. This project is being conducted so that we may find out more about the relationships among previous bullying experiences in the context of parental attachment, general attachment, self-esteem, humanity-esteem, and emotional and behavioral functioning later in life. As part of your participation, you completed several questionnaires inquiring about your childhood bullying experiences, your attachment to your parents, your attachment to other individuals, your view of yourself, your view of humanity, and your current emotional and behavioral functioning. The responses to these questionnaires will be used to explore the relationships among these variables. In particular, we are expecting that those who exhibit insecure parental attachment during childhood will be more likely to have been vulnerable to bullying from their peers during childhood and currently. On the other hand, those who were bullied but who had secure parental attachment are postulated to have higher general attachment, self-esteem, and humanity-esteem in conjunction with less problematic emotional and behavioral functioning. If such findings occur, it may be that positive parental attachment is a protective factor against the effects of bullying.

If you would like more information about difficult childhood bullying experiences, attachment, self-esteem, humanity-esteem and behavioral functioning, please refer to the following sources:


If you have any further questions about this research study, please contact Kimberly Renk, Ph.D., by phone (407-823-2218) or e-mail (Kimberly.Renk@ucf.edu). If you feel that you would benefit from talking with a counselor about your own childhood experiences, please contact the UCF Counseling Center at 407-823-2811.
REFERENCES


sample: The role of perceived academic self-efficacy. *Journal of Educational Psychology, 100,* 754-764.


Williams, K., & Kennedy, J. H. (2012). Bullying behaviors and attachment styles. *North*