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Attachment Patterns and the Development of Depression: Path Analysis of Avoidant and Ambivalent Models

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ATTACHMENT PATTERNS AND THE DEVELOPMENT OF DEPRESSION: PATH ANALYSIS OF AVOIDANT AND AMBIVALENT MODELS

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by

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DEDICATION

This dissertation is dedicated in memory of my beloved little dog, Lucy, who was my constant companion through many hours of reading and studying leading up to this point and whose antics always brought a smile to my face.

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ABSTRACT

Two attachment-based models of depression were tested with path analysis. In the first model, it was proposed that avoidant attachments to one's father and mother and a family milieu supporting the suppression of feelings would influence one's attachment to partner and level of shame, making one susceptible to depression. In the second model, it was proposed that ambivalent attachments to one's father, mother, and partner would influence one's levels of rumination and shame, making one susceptible to depression. Data were from a previous study and consisted of 126 participants' de-identified *Beck Depression Inventory-II* and *Attachment and Clinical Issues Questionnaire* scores. Path analyses indicated good fit for the models. All hypothesized paths were significant. These findings have important implications for the treatment of depression.

CHAPTER 1

INTRODUCTION

Depressive symptoms are some of the most common presenting problems seen by both medical doctors and mental health professionals. In the United States, 4% of the adult population is suffering from major depression each year (Narrow, Rae, Robins, & Regier, 2002). In other words, approximately 8 million American adults a year are suffering from this disorder. Furthermore, it is estimated that within the next 15 to 20 years, major depression will be the leading cause of disability (World Health Organization [WHO], 2008). Major depression is also one of the most expensive maladies in the United States. Costs associated with treatment, as well as depressed individuals' lost productivity on the job, create a huge economic burden on society (Simon et al., 2000). In the United States, this burden was estimated to be approximately $83 billion in the year 2000 (Greenberg et al., 2003). Perhaps more important than the economic impact, however, is the loss of life attributed to major depression. Seventy percent of those who commit suicide were experiencing major depression (Barraclough, Bunch, Nelson, & Sainsbury, 1974). Due to the importance of treating this complex malady, it is imperative that its etiology be better understood. However, before proceeding with this discussion, it is important to first deal with several problems of definition.

Definitions and Etiological Theories of Depression

Depression has been defined in several ways. A standard way of defining major depression comes from the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision* (*DSM-IV-TR;* American Psychiatric Association [APA], 2000). The *DSM-IV-TR* defines major depression as an entity marked by the presentation of one or both of the following symptoms: 1) depressed mood or 2) markedly diminished interest or pleasure.

Either of these symptoms alone can signal major depression if the client also presents at least four of the following symptoms: 1) significant weight loss or gain, 2) insomnia or hypersomnia, 3) psychomotor agitation or retardation, 4) fatigue or loss of energy, 5) feelings of worthlessness or excessive or inappropriate guilt, 6) diminished ability to think or concentrate, or indecisiveness, and 7) suicidal ideation or attempt. To be diagnosed with major depression, the client must present his or her particular combination of symptoms for at least two weeks. Thus, this approach considers major depression to be a particular type of malady that is characterized by several distinctive markers.

Another approach to depression, which has been easier to define in terms of norms, is the *Beck Depression Inventory-II* (*BDI-II*; Beck, Steer, & Brown, 1996). The *BDI-II* is a 21-item questionnaire that measures the *DSM-IV-TR*'s symptoms of major depression. The client is told to rate himself or herself from zero to three on each item based on how he or she has been feeling during the past two weeks. Once these ratings are totaled, a score of zero to 13 indicates minimal depression, 14 to 19 indicates mild depression, 20 to 28 indicates moderate depression, and 29 to 63 indicates severe depression. Basing treatment on the previous definitions has been criticized as often not very effective because not everyone suffering from depression fits into the same exact mold (Cicchetti & Toth, 1998; Frank & Thase, 1999; Kendler, Gardner, & Prescott, 2002; Segal, Vincent, & Levitt, 2002).

Another current view of depression is the risk and resilience perspective. It focuses on specific genetic and environmental factors that interact to shape an individual's developmental trajectory (Suomi, 2006). Thus, the concern is with gene-environment (GxE) interactions that lead one to develop the impaired functioning associated with major depression. Caspi et al.'s (2003) study demonstrates that variation in the serotonin transporter (5-HTT) gene is associated

with depressive symptoms. However, this association is only found when the individual has experienced a stressful life event or has a childhood history of abuse or neglect. Similarly, animal studies indicate a short 5-HTT allele is related to deficient neurobehavioral functioning in infant monkeys as well as aggression and decreased levels of serotonin in adolescent monkeys who are reared without a mother (Suomi, 2006). In contrast, a long 5-HTT allele is related to normality in each of the previous areas regardless of whether a mother is present during rearing (Suomi, 2006). Therefore, a long 5-HTT allele fosters resiliency to adverse early attachment (Caspi et al., 2003), whereas a secure early attachment relationship fosters resiliency to the developmental risks associated with having a short 5-HTT allele (Suomi, 2005).

The aforementioned definitions and views of depression all seem to suggest that depression and depressotypic responses are maladaptive. However, according to evolutionary perspectives, depressive symptoms may have an adaptive side that needs to be recognized in conceptualizations of depression. Keller and Nesse (2006) reasoned that an individual's depressive symptoms are best conceptualized as behaviors and cognitions that are tailored to the adverse situation he or she is facing, enabling him or her to successfully resolve the problems associated with that situation. For example, being faced with failure leads to fatigue, guilt, pessimism, and rumination, which enable an individual to conserve his or her energy and figure out what he or she did that resulted in failure. In contrast, being faced with a social loss leads to crying, desire for social support, and sadness, which enable an individual to obtain empathy and comfort. Thus, in most individuals, depressive symptoms are considered to be normal and adaptive modes of coping with difficult life situations. However, there may be developmental pathways that lead some individuals to not use these coping mechanisms in an effective way, and instead, become debilitated by life stressors and negative affect.

The Developmental Systems Approach to Understanding Depression

A current view of depression that can be easily integrated into the risk and resilience and evolutionary perspectives is the developmental psychopathology approach (Cicchetti & Toth, 1998). The developmental psychopathology approach conceptualizes depression in terms of multifinality, which specifies that different presentations of depressive symptoms are likely to result from any one factor, and equifinality, which suggests that the same presentation of depressive symptoms may come from different factors. Thus, instead of simply identifying and treating the symptoms, the concern is with how they came about. In other words, the main emphasis is on the factors in each client's biological, psychological, and social life that played a causal role in his or her presentation of depression. Such concentration on individual differences and roads to resiliency leads to a much broader definition of depression than those provided by the *DSM-IV-TR* and the *BDI-II.*

The developmental psychopathology approach holds that there are salient biological, psychological, and social tasks associated with each stage of development (Cicchetti, 1993). How successful an individual is in resolving these stage-salient tasks influences his or her later development. Namely, successful resolution of earlier tasks enables an individual to successfully resolve later tasks, whereas poor resolution of earlier tasks reduces the likelihood that he or she will be able to successfully resolve later tasks. One of the earliest tasks that has been theorized to play an important role in the etiology of depression is developing an attachment relationship with a caregiver.

Developing an attachment relationship with a caregiver is a normal part of an infant's development (Weinfield, Sroufe, Egeland, & Carlson, 2008). Bowlby (1969/1982, 1973, 1980) viewed attachment as an instinctual process that serves the purpose of keeping an infant close to

his or her caregiver and helping him or her learn how to deal with stress and negative affect. However, individual differences occur in the quality of attachment relationships (Weinfield et al., 2008). As an infant develops, the interactions he or she has with his or her caregiver will determine the quality of the bond they share (Bowlby, 1969/1982, 1973, 1980). By separating and subsequently reuniting infants with their primary caregivers in the Ainsworth Strange Situation paradigm, Ainsworth, Blehar, Waters, and Wall (1978) identified three types of attachment: secure, avoidant, and ambivalent. Main and Solomon (1990) later identified a fourth type, disorganized/disoriented attachment.

Beginning in infancy, individuals can construct different internal working models, or sets of evaluations and expectations of themselves and their attachment figures, based on their attachment experiences (Bowlby, 1969/1982, 1973, 1980). Securely attached children, who experience sensitivity and support from their attachment figures, tend to develop a positive view of the self and turn to their attachment figures when experiencing stress and negative affect (Ainsworth et al., 1978). Avoidantly attached children, on the other hand, have parents who tend to avoid them during times of stress, and so as not to compound the negative affect, are theorized to turn away from their attachment figures when upset rather than risk the potential additional stress of rejection by the parent (Ainsworth et al., 1978). Ambivalently attached children do not receive predictable responses from their parents when they are upset and therefore display either approach or avoidance behaviors depending on their reading of the situation (Ainsworth et al., 1978). Children with disorganized/disoriented attachment have typically suffered abuse and/or very ineffective parenting and are often confused when experiencing negative affect (Main & Solomon, 1990). Each of these responses can be adaptive in the short term; however, they can negatively affect one's development in the long term (Weinfield et al., 2008).

These different developmental outcomes have been predicted by Bowlby (1969/1982, 1973, 1980). He held that secure attachments lead to the development of self-efficacy and self-worth. The relationship between attachment security and these self-constructs has been confirmed by several modern researchers. Feeney (2008) found that securely attached individuals are high on self-confidence and tend to be interpersonally oriented. They desire intimate relationships and seek a balance of closeness and autonomy in those relationships. Correspondingly, Bartholomew and Horowitz (1991) found that if one's internal working model of both self and others is positive, then he or she is more likely to have a sense of worthiness, or lovability, and expect that other people are more or less accepting and responsive.

Feeney (2008) found that avoidantly attached individuals, on the other hand, are low on self-confidence and do not tend to be interpersonally oriented. They keep their distance from and limit intimacy with others and place greater weight on achieving their goals. Likewise, their internal working model of both self and others is negative (Bartholomew & Horowitz, 1991). They have a sense of unworthiness, or unlovability, and expect that others will be untrustworthy and rejecting.

Ambivalently attached individuals have been found to desire extreme intimacy in their relationships (Feeney, 2008). They tend to be dependent and subservient in those relationships. They are low on self-confidence and fear rejection. In the same way, their internal working model of self is negative whereas their internal working model of others is positive (Bartholomew & Horowitz, 1991). They have a sense of unworthiness, or unlovability, but positively evaluate others. Therefore, their self-acceptance depends on being accepted by significant others.

From the above, it can be seen why the stage-salient task of developing a secure

attachment relationship is considered to be of utmost importance in the development of depression (Cicchetti & Toth, 1998). If a secure attachment relationship is not achieved by the end of an infant's first year, his or her behavioral, cognitive, and emotional growth may be jeopardized. More specifically, if a secure attachment is not achieved, the child is theorized to develop without an effective set of strategies and internal working models to deal with stress and negative affect (Cicchetti & Toth, 1998). Without such strategies of going to others to deal with negative affect effectively, one would expect increases in anxiety, behavior problems, difficulties with peers, withdrawal, and poor functioning in romantic relationships (Carnelley, Pietromonaco, & Jaffe, 1994; Cicchetti & Toth, 1998; Easterbrooks, Davidson, & Chazan, 1993; Kandel & Davies, 1986; Rubin, Booth, Zahn-Waxler, Cummings, & Wilkinson, 1991). In other words, insecure attachments can lead one to present the depressive symptoms that are measured by both the *DSM-IV-TR* and the *BDI-II*, and these could then increase the insecurity of attachment relationships, which then increase depressive symptomologies, and so on, in a cyclic dynamic.

Data supporting this formulation come from both human and animal studies. Spitz (1946) observed infants who had been separated from their mothers by hospitalization. Approximately 20% of these infants displayed what he termed anaclitic depression. They were initially agitated but then became inactive, socially withdrawn, and weepy. Upon being reunited with their mothers, these symptoms disappeared. Bowlby (1960) noted similar observations in older children who had been separated from their mothers and proposed that they went through stages of protest, despair, and sometimes detachment.

Animal researchers interested in mother-infant affection experimentally supported Spitz's (1946) and Bowlby's (1960) observations by separating six-month-old monkeys from their mothers for two to three weeks in order to disrupt the attachment bond between them (Seay,

Hansen & Harlow, 1962; Seay & Harlow, 1965). What resulted was an experimentally produced anaclitic depression. At separation, the infant monkeys tried to maintain contact with their mothers. When this did not happen, they exhibited agitation and seemed sad. During the separation, the infant monkeys' levels of play and exploration significantly decreased and they were instead noted to engage in self-clasping and lying face downward. As with children who have been separated from their mothers, successful treatment for the infant monkeys consisted of simply reuniting them with their mothers. However, if the infant monkeys had not been reunited with their mothers, they would have come to display deficits in most social behaviors, including grooming, playing, and having sexual relations (Harlow & Suomi, 1974).

The attachment bond between a child and his or her primary caregiver can also be disrupted when the caregiver is suffering from depression. Bowlby (1980) stated that children with depressed caregivers are subject to inconsistent care. He held that caregivers are psychologically unavailable to their children when they are experiencing a depressive episode. Their children, in turn, come to feel a sense of loss coupled with anxiety during these episodes. If this feeling of loss is prolonged, it will contribute to behavioral, cognitive, and emotional problems. These are the same types of problems associated with insecure attachments. Beck (1967) also asserted that, when these children face a loss of some kind later in life, they might experience a depressive episode of their own. In agreement with these theories, it has been suggested that a majority of depressive episodes are preceded by the occurrence of a life event involving loss without a secure base to which one can turn for help to deal with the negative affect (Brown, 1996).

Models of Insecure Attachment and Depression

The aforementioned studies show that the relationship between insecure attachment and

depression has been supported and replicated in the literature for more than 60 years. Modern researchers continue to study and shed light on this complex relationship by identifying attachment-based models of depression (Burnette, Davis, Green, Worthington, & Bradfield, 2009; Oliver & Whiffen, 2003; Roberts, Gotlib, & Kassel, 1996; Scharfe, 2007; Wei, Heppner, & Mallinckrodt, 2003; Wei, Mallinckrodt, Russell, & Abraham, 2004; Whiffen, 2005). For example, Oliver and Whiffen (2003) found that maternal rejection in childhood (avoidant attachment to mother) leads men to develop avoidant attachments to their romantic partners in adulthood, thereby making them vulnerable to depression. It was also found that paternal rejection in childhood (avoidant attachment to father) does not impact men's attachments to their romantic partners in adulthood, but it is associated with higher levels of depression as an adult.

Wei et al. (2004) found that anxious attachments lead individuals to engage in a maladaptive pattern of perfectionism. Similarly, it was found that avoidant attachments lead individuals to overuse perfectionism as a coping mechanism. In each case, maladaptive perfectionism was found to produce interpersonal needs that are hard to fulfill, thereby leading to depression. Whiffen (2005) found that husbands and wives who are avoidant of closeness are perceived as unresponsive to their spouses' emotional needs, which increased their spouses' insecure attachment. Increases in insecure attachment were found to contribute to husbands', but not wives', depressive symptoms over time.

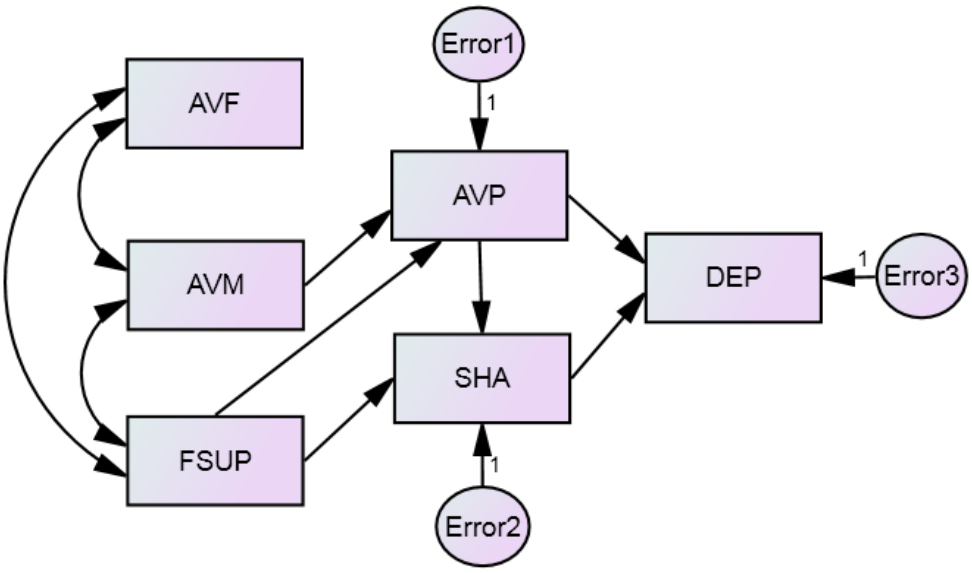
Scharfe (2007) found that anxious attachments during pregnancy make mothers vulnerable to higher levels of depressed mood during their early postpartum months. It was also found that higher levels of depressed mood during pregnancy lead women to isolate themselves, thereby increasing avoidant attachments during their early postpartum months. Last, Burnette et al. (2009) found that avoidant attachments lead individuals to lack empathy and perceive those

who offend them as being less worthy of their care. It was also found that anxious attachments lead individuals to engage in excessive and fearful rumination, perceiving their relationships to be less safe. In each case, insecure attachment was found to prevent individuals from forgiving those who offend them, thereby contributing to depressive symptoms.

The above models bring to light both direct and indirect effects of insecure attachment on depression. However, the exact mechanisms by which insecure attachment leads to depression remain unclear. The present study seeks to further explore the relations between avoidant versus ambivalent attachments and depression by proposing and analyzing two models which allow for specific contributions to depression from each of the major attachment figures: father, mother, and partner. A search of the literature did not find any prior study that tested the same combination of variables being tested in the present study.

The first goal of the present study is to evaluate a model linking avoidant attachment and depression. See Figure 1 for a path diagram of the hypothesized model. The main assumption behind the avoidant model is that individuals who have avoidant attachments to their father and mother and who have a family milieu supporting the suppression of feelings also have an internal working model of others as rejecting, and this negative internal working model indirectly leads to depression (Bartholomew & Horowitz, 1991; Bowlby, 1980). Avoidantly attached individuals expect that others will be rejecting so they maintain emotional distance in their relationships, which possibly functions as a self-fulfilling prophecy that brings about real rejection (Bartholomew & Horowitz, 1991; Oliver & Whiffen, 2003). Research has demonstrated that avoidant attachments to one's father and mother are associated with avoidance in one's romantic relationships (Carnelley & Janoff-Bulman, 1992). Accordingly, it is proposed that having an avoidant attachment to one's mother and a family milieu supporting the suppression of

Figure 1. *Avoidant path model*



Note. AVF = Avoidant Attachment to Father. AVM = Avoidant Attachment to Mother. FSUP = Family Suppression of Feelings. AVP = Avoidant Attachment to Partner. SHA = Shame. DEP = *BDI-II*.

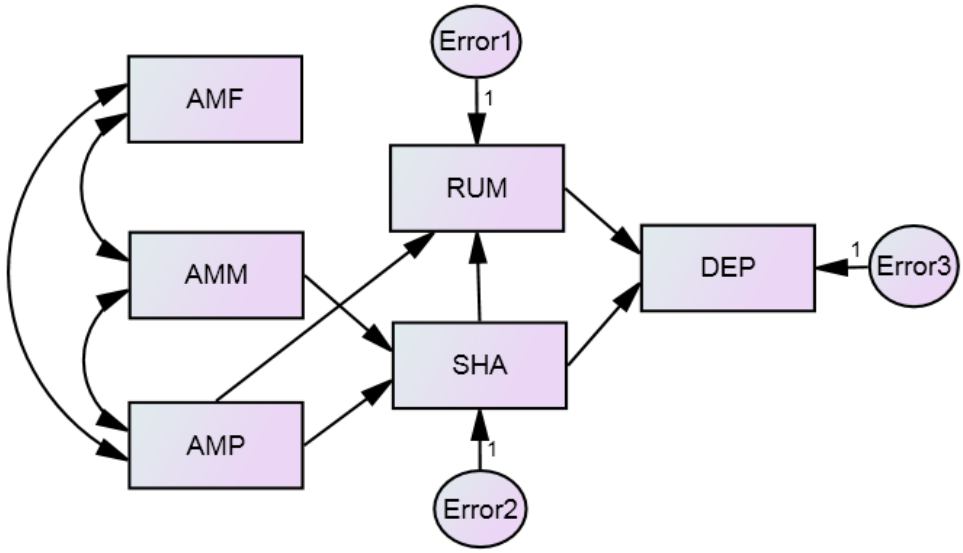
feelings increases one's likelihood of having an avoidant attachment to his or her partner. Having an avoidant attachment to one's partner is expected to be directly associated with higher levels of depression (Pettem, West, Mahoney, & Keller, 1993; Roberts et al., 1996). Avoidant attachment to one's father is not expected to significantly influence one's attachment to his or her partner because fathers are usually not primary caregivers and therefore are often weaker attachment figures than mothers (Cassidy, 2008; Grossmann, Grossmann, Kindler, & Zimmerman, 2008).

Given the sense of unworthiness, or unlovability, and low self-confidence that avoidantly attached individuals display (Bartholomew & Horowitz, 1991; Feeney, 2008), it makes sense that avoidant attachments would be significantly associated with shame. Accordingly, this is

exactly what researchers found when they examined the relationship between adult attachment and shame (Gross & Hansen, 2000; Lopez et al., 1997). Therefore, in line with this finding, it is proposed that having an avoidant attachment to one's partner and an associated family milieu supporting the suppression of feelings leads one to experience shame. Shame is then expected to be directly associated with higher levels of depression (Andrews, Qian, & Valentine, 2002; Barr, 2012; Highfield, Markham, Skinner, & Neal, 2010; Kim, Thibodeau, & Jorgensen, 2011; Matos & Pinto-Gouveia, 2010; Tangney, Wagner, & Gramzow, 1992; Thompson & Berenbaum, 2006; Webb, Heisler, Call, Chickering, & Colburn, 2007). To summarize, it is proposed that avoidant attachments to one's father and mother and a family milieu supporting the suppression of feelings would influence one's attachment to his or her partner and his or her level of shame, making him or her more susceptible to depressive symptoms.

The second goal of the present study is to evaluate a model linking ambivalent attachment and depression. See Figure 2 for a path diagram of the hypothesized model. The main assumption behind the ambivalent model is that ambivalently attached individuals engage in, rather than avoid, conflict in their attachment relationships. Engaging in conflict with one's attachment figures, particularly one's mother and partner, is predicted to lead one to experience shame and excessive rumination, which directly lead to depression. Given the sense of unworthiness, or unlovability, and low self-confidence that ambivalently attached individuals display (Bartholomew & Horowitz, 1991; Feeney, 2008), it makes sense that ambivalent attachments would be directly associated with shame. Accordingly, this is exactly what researchers found when they examined the relationship between ambivalent attachment and shame (Gross & Hansen, 2000; Lopez et al., 1997; Mikulincer & Shaver, 2005; Wei, Shaffer, Young, & Zakalik, 2005). In line with these findings, it is proposed that having ambivalent

Figure 2. *Ambivalent path model*



Note. AMF = Ambivalent Attachment to Father. AMM = Ambivalent Attachment to Mother. AMP = Ambivalent Attachment to Partner. RUM = Rumination. SHA = Shame. DEP = *BDI-II*.

attachments to one's mother and partner leads one to experience shame. Having an ambivalent attachment to one's father is not expected to significantly influence one's level of shame. As in the avoidant model, attachment to one's father is expected to have limited influence because fathers are usually not primary caregivers nor are they primary attachment figures in adulthood and therefore are often weaker attachment figures than mothers and partners (Cassidy, 2008; Grossmann, Grossmann, Kindler, & Zimmerman, 2008).

Ambivalently attached individuals fear rejection and tend to respond with excessive preoccupation when experiencing difficulty or problems in their relationship with their partner (Burnette et al., 2009; Campbell, Simpson, Boldry, & Kashy, 2005; Feeney, 2008; Simpson, Rholes, & Phillips, 1996). It has also been found that shame predicts excessive rumination (Cheung, Gilbert, & Irons, 2004; Orth, Berking, & Burkhardt, 2006). Accordingly, it is proposed

that having an ambivalent attachment to one's partner and shame leads one to internalize the relationship conflict he or she experiences, which is manifested by excessive and unproductive rumination. Rumination and shame are expected to be directly associated with higher levels of depression (Andrews et al., 2002; Barr, 2012; Cheung et al., 2004; Highfield et al., 2010; Kim et al., 2011; Matos & Pinto-Gouveia, 2010; Orth et al., 2006; Tangney et al., 1992; Thompson & Berenbaum, 2006; Thomsen, 2006; Webb et al., 2007). To summarize, it is proposed that ambivalent attachments to one's father, mother, and partner would influence his or her levels of rumination and shame, making him or her susceptible to depressive symptoms.

A comparison of the above models shows that the hypothesized paths to depression differ for individuals with avoidant versus ambivalent attachments. Based on attachment experiences with their parents, avoidantly attached individuals expect that others will be rejecting, whereas ambivalently attached individuals are able to maintain a positive evaluation of others (Bartholomew & Horowitz, 1991). Avoidantly attached individuals' expectation that others will be rejecting predisposes them to develop avoidant attachments to their partners in adulthood (Carnelley & Janoff-Bulman, 1992). Avoidantly and ambivalently attached individuals display a sense of unworthiness, or unlovability, and low self-confidence (Bartholomew & Horowitz, 1991; Feeney, 2008), which makes them vulnerable to shame (Gross & Hansen, 2000; Lopez et al., 1997; Mikulincer & Shaver, 2005; Wei et al., 2005). Partners are the primary attachment figures in adulthood so it is proposed that avoidant attachment to one's partner would be the most significant predictor of shame in the avoidant model and ambivalent attachment to one's partner would be the most significant predictor of shame in the ambivalent model. It is also proposed that ambivalent attachment to one's mother would be a significant predictor of shame in the ambivalent model.

However, the hypothesized path between attachment to one's mother and shame differs for avoidantly attached individuals. Having a mother who tends to avoid them during times of stress teaches avoidantly attached individuals to turn away from their attachment figures when upset and creates a family milieu supporting the suppression of feelings. Dealing with stress and negative affect by turning away from one's attachment figures and suppressing one's feelings predisposes one to develop avoidant attachments to his or her partners in adulthood (Carnelley & Janoff-Bulman, 1992). As such, it is proposed that an avoidant mother would indirectly influence her adult child's shame through her influence on her child's attachment to his or her partner and her association with the family milieu supporting the suppression of feelings in which her child was raised.

Given that avoidantly and ambivalently attached individuals are vulnerable to shame (Gross & Hansen, 2000; Lopez et al., 1997; Mikulincer & Shaver, 2005; Wei et al., 2005) and shame is directly associated with higher levels of depression (Andrews et al., 2002; Barr, 2012; Highfield et al., 2010; Kim et al., 2011; Matos & Pinto-Gouveia, 2010; Tangney et al., 1992; Thompson & Berenbaum, 2006; Thomsen, 2006; Webb et al., 2007), it is proposed that both avoidant and ambivalent attachments to one's partner would indirectly influence depression through their influence on shame. Avoidant attachment to one's partner is also proposed to have a direct effect on depression, whereas ambivalent attachment to one's partner is proposed to have only indirect effects on depression. Avoidantly attached individuals turn away from their partner when upset, which is not an effective strategy for dealing with stress and negative affect (Cicchetti & Toth, 1998). As such, it is proposed that having an avoidant attachment to one's partner would be directly associated with higher levels of depression (Pettem et al., 1993; Roberts et al., 1996).

Ambivalently attached individuals, on the other hand, either approach or avoid their partner when upset based on their reading of the situation. When they do approach their partner, it often results in an argument or disagreement. Ambivalently attached individuals fear rejection so they tend to respond to such conflict with excessive rumination (Burnette et al., 2009; Campbell et al., 2005; Feeney, 2008; Simpson et al., 1996). Given that excessive rumination is directly associated with higher levels of depression (Cheung et al., 2004; Orth et al., 2006), it is proposed that ambivalent attachment to one's partner would also indirectly influence depression through its influence on rumination.

CHAPTER 2

METHOD

Participants

Participants were 126 undergraduate students enrolled in introductory psychology classes at a mid-size university. The sample consisted of 94 (75%) females and 32 (25%) males. Their ages were as follows: 115 (91%) were between the ages of 17 and 21, 10 (8%) were between the ages of 22 and 35, and 1 (1%) was between the ages of 36 and 49. Race was predominantly White (84%), followed by African American (7%), other races (6%), and Hispanic American (3%). Most participants (95%) indicated they were not married. Of those not married, 67% reported being involved in a romantic relationship. Most indicated their relationship length as 0 to 6 months.

Measures

Demographic information. Information was obtained on participants' sex, age, race, marital/relationship status and duration, as well as level of family income and education.

Beck Depression Inventory-II (BDI-II; Beck et al., 1996). The *BDI-II* consists of 21 groups of statements. Each group of statements measures a particular depressive symptom as defined by the *DSM-IV-TR*. These include sadness, pessimism, past failure, loss of pleasure, guilty feelings, punishment feelings, self-dislike, self-criticalness, suicidal thoughts/wishes, crying, agitation, loss of interest, indecisiveness, worthlessness, loss of energy, changes in sleeping patterns, irritability, changes in appetite, concentration difficulty, tiredness/fatigue, and loss of interest in sex. The participant chooses the one statement in each group that best describes the way he or she has been feeling during the past two weeks.

Attachment and Clinical Issues Questionnaire (ACIQ; Lindberg & Thomas, 2011).

The *ACIQ* (see Appendix A) was designed as a research and clinical instrument to evaluate adolescent and adult attachments, as well as important clinical issues that are theorized to be useful when studying the origins and development of various psychopathologies, such as addiction, depression, and personality disorders. It uses a 4-point Likert-type response scale (A = never; B = sometimes; C = often; D = always) to assess the extent to which each of its 236 items is descriptive of a participant's thoughts and feelings and takes the typical participant 30 minutes to an hour to complete. It is comprised of 29 scales (see Appendix B for the scales and their representative questions), which vary in length from 5 to 14 items.

The *ACIQ* conceptualizes attachment as a construct which varies as a function of the attachment figure (Lindberg & Thomas, 2011). Therefore, twelve of its scales measure ambivalent, avoidant, codependent-enmeshed, and secure attachments to father, mother, and partner. Partner refers to the participant's spouse, fiancé, steady date, or significant romantic interest. The remaining 17 scales measure related issues, such as abuse, anger, anxiety, control, denial, family rigidity/chaos, family suppression of feelings, jealousy, rumination, peer relations, perfectionism, religion, sexual arousal, shame, sexual intimacy, mistrust and withdrawal/engagement. The *ACIQ* produces a profile of each person who takes it, showing his or her specific scores on each of the aforementioned scales and thereby allowing for the exploration of important individual differences.

By allowing an individual to score high on two or more dimensions, the *ACIQ* is a mathematically precise instrument. It has been shown to have an average coefficient alpha of .79, with the attachment scales having an average coefficient alpha of .83 (Lindberg & Thomas, 2011). The attachment scales have predicted to whom one turns in times of stress and partner

satisfaction, and have differentially predicted father versus mother warmth (Lindberg, Fugett, & Thomas, 2012). The clinical scales have been sensitive to different clinical populations (Lindberg & Lindberg, 2007; Lindberg, Thomas, & Smith, 2004). The *ACIQ* also demonstrates fair immunity to social desirability as measured by the *Marlowe-Crown Social Desirability Scale* (*MCSDS*) and has adequate "fake good" and "fake bad" scales (Lindberg & Thomas, 2003). The *ACIQ*'s method malingering scale can also help to determine whether a participant is carelessly responding without reading or understanding the items.

Procedure

The present study used de-identified data that were collected as part of a previous IRB-approved study (see Appendix C for a letter from the IRB indicating that the present study does not require approval). In the previous study, participants were recruited via announcements in introductory psychology classes and sign-up sheets on a bulletin board in the university psychology department. The demographic questions, *BDI-II*, and *ACIQ* were administered to small groups of participants who signed up for one of several data collection times. Participants were given Scantron sheets on which to enter their responses. They were instructed to not put their name or any identifying information on the Scantron sheets in order to guarantee their anonymity. Completion of all measures typically required 30 minutes to an hour. Participants were given extra credit slips to compensate them for their time spent in the study. The participants' responses were automatically entered into the computer from the machine-read Scantron sheets. In the present study, the Scantron data were opened in Excel and then imported into SPSS.

CHAPTER 3

RESULTS

The means and standard deviations of the measured variables are shown in Table 1. Participants' mean *BDI-II* score was 9.4 with a standard deviation of 9.5. Therefore, on average, participants reported a minimal level of depression. Individual *BDI-II* scores were classified as follows: 93 (74%) were between 0 and 13, indicating minimal depression, 17 (13%) were between 14 and 19, indicating mild depression, 9 (7%) were between 20 and 28, indicating moderate depression, 7 (6%) were between 29 and 63, indicating severe depression. Correlations between the variables in the avoidant and ambivalent models are shown in Tables 2 and 3, respectively. The independent variables in each model correlated significantly, and in the predicted direction, with depression.

Table 1. *Means and standard deviations of the measured variables*

	M	*SD*
AMF	1.93	0.66
AMM	1.87	0.65
AMP	1.94	0.63
AVF	2.14	0.59
AVM	2.08	0.59
AVP	1.96	0.54
FSUP	2.12	0.63
RUM	2.55	0.59
SHA	1.69	0.41
DEP	9.4	9.5

Note. AMF = Ambivalent Attachment to Father. AMM = Ambivalent Attachment to Mother. AMP = Ambivalent Attachment to Partner. AVF = Avoidant Attachment to Father. AVM = Avoidant Attachment to Mother. AVP = Avoidant Attachment to Partner. FSUP = Family Suppression of Feelings. RUM = Rumination. SHA = Shame. DEP = *BDI-II*.

Table 2. *Correlations between the variables in the avoidant model*

	AVF	AVM	AVP	FSUP	SHA	DEP
AVF	1.00					
AVM	.35**	1.00				
AVP	.19*	.51**	1.00			
FSUP	.35**	.40**	.44**	1.00		
SHA	.27**	.47**	.57**	.51**	1.00	
DEP	.29**	.44**	.52**	.38**	.63**	1.00

Note. AVF = Avoidant Attachment to Father. AVM = Avoidant Attachment to Mother. AVP = Avoidant Attachment to Partner. FSUP = Family Suppression of Feelings. SHA = Shame. DEP = *BDI-II*.
* $p < .05$; ** $p < .01$.

Table 3. *Correlations between the variables in the ambivalent model*

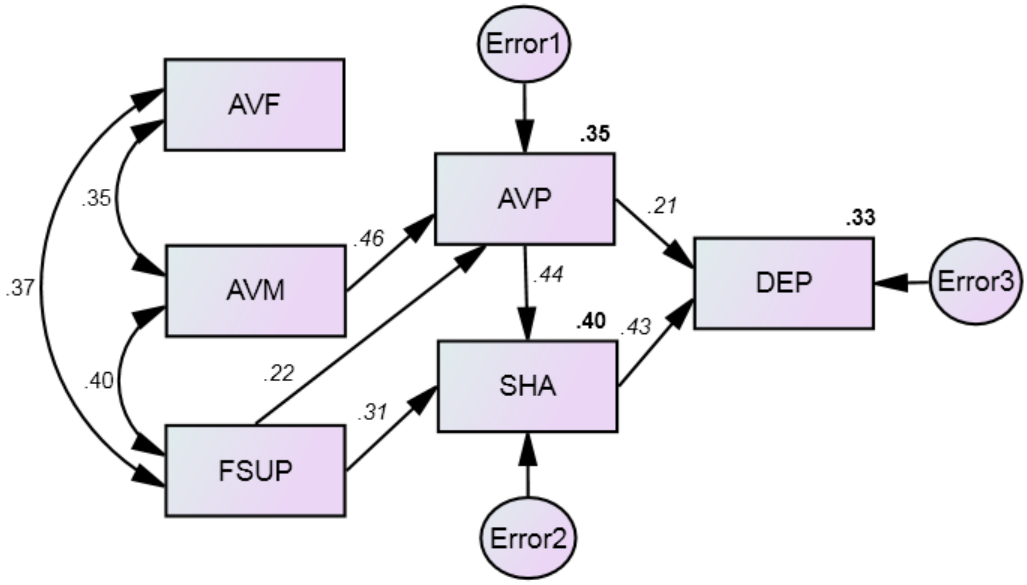
	AMF	AMM	AMP	RUM	SHA	DEP
AMF	1.00					
AMM	.39**	1.00				
AMP	.35**	.54**	1.00			
RUM	.16	.36**	.54**	1.00		
SHA	.25**	.55**	.57**	.52**	1.00	
DEP	.20*	.40**	.49**	.53**	.63**	1.00

Note. AMF = Ambivalent Attachment to Father. AMM = Ambivalent Attachment to Mother. AMP = Ambivalent Attachment to Partner. RUM = Rumination. SHA = Shame. DEP = *BDI-II*.
* $p < .05$; ** $p < .01$.

The data were checked for normality. Results indicated moderate positive skew for all measured variables. Therefore, base-10 logarithm transformations were conducted for all of the variables (Sheskin, 2004). Critical values for the skew and kurtosis of each of the transformed variables were between +2 and -2, indicating normal distributions. Each of the original variables was highly correlated with its transformed version ($p < .01$). Therefore, the transformed variables were used in the following analyses.

The proposed models were tested with path analysis, using maximum likelihood estimation in AMOS. Several indices were used to evaluate the goodness-of-fit between the models and the data: the model chi-square (χ^2; non-significant values indicate good fit), the comparative fit index (CFI; values close to 1 indicate good fit) and the root-mean-square error of approximation (RMSEA; values less than or equal to .05 indicate good fit). Goodness-of-fit indices for the avoidant model indicated good overall model fit, with χ^2 (6, N = 126) = 7.99, *ns*; CFI = .99; and RMSEA = .05. See Figure 3 for a path diagram of the model with standardized regression (β) coefficients for each path and squared multiple correlation (R^2) coefficients for each endogenous variable.

Figure 3. *Avoidant path model with β and R^2 coefficients.*

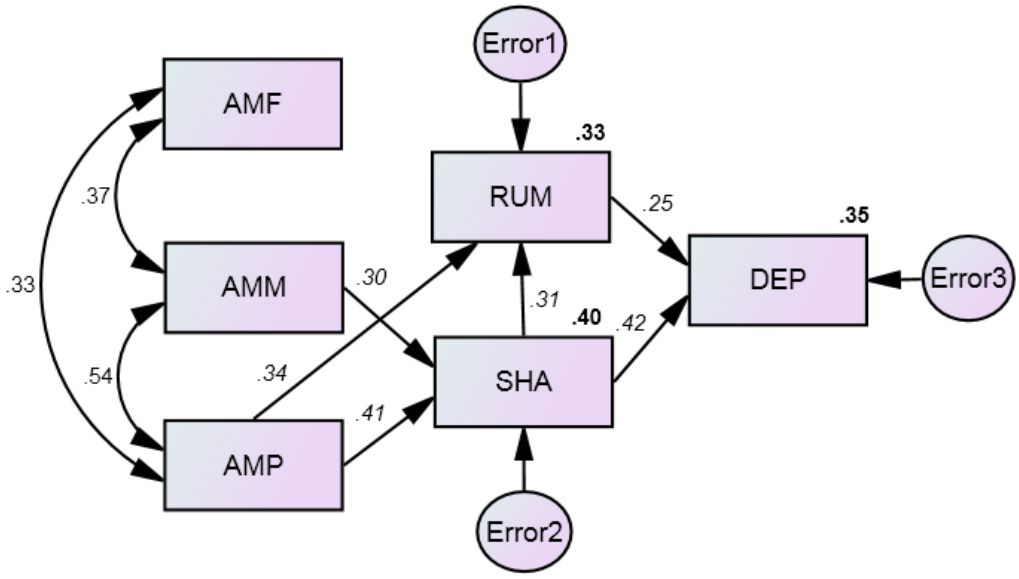


Note. Standardized regression (β) coefficients, which represent the effect of one variable on another when other variables are controlled, are shown in italics. Squared multiple correlation (R^2) coefficients, which represent the amount of variance the predictor variables explain in the observed variable, are shown in bold. AVF = Avoidant Attachment to Father. AVM = Avoidant Attachment to Mother. FSUP = Family Suppression of Feelings. AVP = Avoidant Attachment to Partner. SHA = Shame. DEP = *BDI-II*.

All of the hypothesized paths in the avoidant model were significant. Having an avoidant attachment to one's mother (β = 0.46, t = 5.84, p < .001) and a family milieu supporting the suppression of feelings (β = 0.22, t = 2.81, p < .01) indicated one's increased likelihood of having an avoidant attachment to his or her partner. Having an avoidant attachment to one's partner was directly associated with higher levels of depression (β = 0.21, t = 2.40, p < .05). Having an avoidant attachment to one's partner (β = 0.44, t = 5.80, p < .001) and an associated family milieu supporting the suppression of feelings (β = 0.31, t = 4.10, p < .001) predicted the experience of shame. Shame was then directly associated with higher levels of depression (β = 0.43, t = 4.76, p < .001). Also, as expected, modification indices did not suggest a path from AVF to AVP.

Goodness-of-fit indices for the ambivalent model indicated good overall model fit, with χ^2 (6, N = 126) = 2.21, *ns*; CFI = 1.00; and RMSEA = .00. See Figure 4 for a path diagram of the model with standardized regression (β) coefficients for each path and squared multiple correlation (R^2) coefficients for each endogenous variable. All of the hypothesized paths were significant. Having ambivalent attachments to one's mother (β = 0.30, t = 3.63, p < .001) and partner (β = 0.41, t = 4.99, p < .001) predicted the experience of shame. Having an ambivalent attachment to one's partner (β = 0.34, t = 3.74, p < .001) and shame (β = 0.31, t = 3.46, p < .01) predicted excessive rumination. Rumination (β = 0.25, t = 2.91, p < .01) and shame (β = 0.42, t = 5.02, p < .001) were directly associated with higher levels of depression. Also, as expected, modification indices did not suggest a path from AMF to SHA.

Figure 4. *Ambivalent path model with β and R^2 coefficients.*



Note. Standardized regression (β) coefficients, which represent the effect of one variable on another when other variables are controlled, are shown in italics. Squared multiple correlation (R^2) coefficients, which represent the amount of variance the predictor variables explain in the observed variable, are shown in bold. AMF = Ambivalent Attachment to Father. AMM = Ambivalent Attachment to Mother. AMP = Ambivalent Attachment to Partner. RUM = Rumination. SHA = Shame. DEP = *BDI-II*.

CHAPTER 4

DISCUSSION

The relationship between insecure attachment and depression has been supported and replicated in the literature for more than 60 years. However, the exact mechanisms by which insecure attachment leads to depression have remained unclear. The present study sought to further explore the relations between avoidant versus ambivalent attachments and depression by proposing and analyzing two models that allow for specific contributions to depression from each of the major attachment figures: father, mother, and partner. By testing models containing combinations of variables which have not been tested in any prior study, the present study also sought to extend research in the areas of attachment and depression.

The first model linked avoidant attachment and depression. It was proposed that avoidant attachments to one's father and mother and a family milieu supporting the suppression of feelings would influence one's attachment to his or her partner and his or her level of shame, making him or her more susceptible to depressive symptoms. The independent variables in the model correlated significantly, and in the predicted direction, with depression. Goodness-of-fit indices for the model indicated good fit. All of the hypothesized paths were significant.

Having an avoidant attachment to one's mother and a family milieu supporting the suppression of feelings indicated one's increased likelihood of having an avoidant attachment to his or her partner, which is consistent with other research demonstrating that avoidant attachments to one's father and mother are associated with avoidance in one's romantic relationships (Carnelley & Janoff-Bulman, 1992). Having an avoidant attachment to one's partner was directly associated with higher levels of depression, which is also consistent with other studies (Pettem et al., 1993; Roberts et al., 1996). As expected, modification indices did

not suggest a direct relationship between avoidant attachment to one's father and avoidant attachment to one's partner. The reason attachment to one's father had limited influence is likely because fathers are usually not primary caregivers and therefore are often weaker attachment figures than mothers (Cassidy, 2008; Grossmann, Grossmann, Kindler, & Zimmerman, 2008). Having an avoidant attachment to one's partner and an associated family milieu supporting the suppression of feelings predicted the experience of shame, which is consistent with what other researchers found when they examined the relationship between adult attachment and shame (Gross & Hansen, 2000; Lopez et al., 1997). Shame was then directly associated with higher levels of depression, which is also consistent with other studies (Andrews et al., 2002; Barr, 2012; Highfield et al., 2010; Kim et al., 2011; Matos & Pinto-Gouveia, 2010; Tangney et al., 1992; Thompson & Berenbaum, 2006; Webb et al., 2007).

The ambivalent model linked attachment and depression in a different way. It was proposed that ambivalent attachments to one's father, mother, and partner would influence his or her levels of rumination and shame, making him or her susceptible to depressive symptoms. The independent variables in the model correlated significantly, and in the predicted direction, with depression. Goodness-of-fit indices for the model indicated good fit. All of the hypothesized paths were significant.

Having ambivalent attachments to one's mother and partner predicted the experience of shame, which is consistent with what other researchers found when they examined the relationship between ambivalent attachment and shame (Gross & Hansen, 2000; Lopez et al., 1997; Mikulincer & Shaver, 2005; Wei et al., 2005). As expected, modification indices did not suggest a direct relationship between ambivalent attachment to one's father and shame. As in the avoidant model, the reason attachment to one's father has limited influence is likely because

fathers are usually not primary caregivers nor are they primary attachment figures in adulthood and therefore are often weaker attachment figures than mothers and partners (Cassidy, 2008; Grossmann, Grossmann, Kindler, & Zimmerman, 2008). Having an ambivalent attachment to one's partner also predicted excessive rumination, which is consistent with other studies demonstrating that ambivalently attached individuals tend to respond with excessive preoccupation when experiencing difficulty or problems in their relationship with their partner (Burnette et al., 2009; Campbell et al., 2005; Simpson et al., 1996). The path from shame to excessive rumination is consistent with other studies demonstrating that shame predicts excessive rumination (Cheung et al., 2004; Orth et al., 2006). Rumination and shame were directly associated with higher levels of depression. These findings are also consistent with several other studies (Andrews et al., 2002; Barr, 2012; Cheung et al., 2004; Highfield et al., 2010; Kim et al., 2011; Matos & Pinto-Gouveia, 2010; Orth et al., 2006; Tangney et al., 1992; Thompson & Berenbaum, 2006; Thomsen, 2006; Webb et al., 2007).

The data also supported differences in the paths to depression for individuals with avoidant versus ambivalent attachments. First, having an ambivalent attachment to one's mother predicted the experience of shame. However, as expected, modification indices did not suggest a direct relationship between avoidant attachment to one's mother and shame. Instead, the model demonstrated that having an avoidant attachment to one's mother indirectly influenced one's shame through its influence on attachment to one's partner and its association with the family milieu supporting suppression of feelings in which one was raised. Given that attachment to one's partner was the most significant predictor of shame in each model, an explanation for this finding is likely related to the influence that avoidant versus ambivalent mothers have on their children's adult attachment. Children of avoidant mothers learn to expect that others will be

rejecting, which predisposes them to develop avoidant attachments to their partners in adulthood (Bartholomew & Horowitz, 1991; Carnelley & Janoff-Bulman, 1992).

Having an avoidant attachment to one's partner was directly associated with higher levels of depression. However, as expected, modification indices did not suggest a direct relationship between ambivalent attachment to one's partner and depression. Instead, ambivalent attachment to one's partner indirectly influenced depression through its influence on rumination and shame. The way in which avoidant versus ambivalent individuals deal with stress and negative affect easily explains this finding. Avoidantly attached individuals turn away from their partner when upset, which is not an effective strategy and is likely to result in increased depression (Cicchetti & Toth, 1998). Ambivalently attached individuals, on the other hand, either approach or avoid their partner when upset based on their reading of the situation. When they do approach their partner, it often results in an argument. Ambivalently attached individuals fear rejection so they tend to respond to such conflict with excessive rumination (Burnette et al., 2009; Campbell et al., 2005; Feeney, 2008; Simpson et al., 1996).

Implications for the Treatment of Depression

The present study has important implications for the treatment of depression. It is generally not reasonable for depression treatment to try to alter an adult's insecure attachment to his or her parents. Instead, it is likely more reasonable for depression treatment to try to alter the clinical issues which link insecure attachment and depression. If these issues are improved, then the link between insecure attachment and depression will be broken and an individual's depression will likely be reduced. By identifying specific variables that link avoidant versus ambivalent attachments to depression, the present study indicates which clinical issues should be the focus of treatment for which individuals.

First, shame was the most significant predictor of depression in both models. Therefore, depressed individuals who have either avoidant or ambivalent attachments would likely benefit from interventions to decrease their level of shame. One intervention could consist of helping these individuals be more accepting of negative emotions and develop a set of strategies to effectively deal with them. Another intervention could consist of trying to alter the sense of unworthiness, or unlovability, and low self-confidence that makes avoidantly and ambivalently attached individuals vulnerable to shame by helping them identify and restructure shame-related thoughts (e.g., I do not amount to much as a person).

Second, avoidant attachment to one's partner was a significant predictor of depression in the avoidant model. Therefore, depressed individuals who have an avoidant attachment to their partner would likely benefit from interventions to increase their attachment security. Couples therapy may be useful in this particular situation. Interventions could focus on helping the avoidantly attached individual learn to turn to, rather than away from, his or her partner when upset and helping his or her partner ensure that he or she is responding with acceptance, rather than rejection. Last, rumination was a significant predictor of depression in the ambivalent model. Therefore, depressed individuals who have ambivalent attachments would likely benefit from interventions to decrease their level of rumination. Interventions could consist of teaching these individuals mindfulness skills and training them in relaxation techniques.

Methodological Limitations and Future Research

The present study had several methodological limitations that should be considered. First, the participants were predominantly White college students, which potentially makes the results less generalizable to individuals of other races and/or levels of education. Similarly, 75% of the participants were female. Having significantly more females than males in the sample

may limit the conclusions that can be made regarding the direct and indirect effects of insecure attachment on men's depression. Second, the *BDI-II* and the *ACIQ* are both self-report questionnaires. With regard to the *BDI-II*, in particular, it may be that an individual's self-report of depression does not correspond with an actual diagnosis of depression. As such, it is possible that the results of the present study do not generalize to a clinically depressed population. It would therefore be valuable to repeat this study with participants who have a formal diagnosis of depression, such as individuals receiving inpatient depression treatment. Last, the present study used a cross-sectional design. It would be valuable to repeat this study using a longitudinal design, as it would likely provide a better test of the models and more definitive results regarding causality among the variables. However, even with these limitations, the present study led to important confirmations regarding the relations between avoidant versus ambivalent attachments and depression.

The present study brought to light both direct and indirect effects of insecure attachment on depression. However, it should be noted that there may be variables not included in this study which contribute to the relationship between insecure attachment and depression. As such, researchers should continue to study and shed light on this complex relationship by identifying attachment-based models of depression. One option which may be productive would be to incorporate significant variables (e.g., perfectionism and forgivingness) from other models into the combination of variables tested in the present study. It is believed that the ongoing study of depression through the lens of attachment holds the key to better treatment, and ultimately quality of life, for individuals who are currently struggling with depression.

REFERENCES

Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall, S. (1978). *Patterns of attachment: A psychological study of the Strange Situation.* Hillsdale, NJ: Erlbaum.

American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text rev.). Washington, DC: Author.

Andrews, B., Qian, M., & Valentine, J. (2002). Predicting depressive symptoms with a new measure of shame: The Experience of Shame Scale. *British Journal of Clinical Psychology, 41*, 29-42.

Barr, P. (2012). A dyadic analysis of negative emotion personality predisposition effects with psychological distress in neonatal intensive care unit parents. *Psychological Trauma: Theory, Research, Practice, and Policy, 4*(4), 347-355.

Barraclough, B., Bunch, J., Nelson, B., & Sainsbury, P. (1974). A hundred cases of suicide: Clinical aspects. *The British Journal of Psychiatry, 125*, 355-373.

Bartholomew, K., & Horowitz, M. (1991). Attachment styles among young adults: A test of a four-category model. *Journal of Personality and Social Psychology, 61,* 226-244.

Beck, A. (1967). *Depression: Clinical, experimental, and theoretical aspects.* New York: Harper & Row.

Beck, A. T., Steer, R. A., & Brown, G. K. (1996). *Manual for the Beck Depression Inventory-II.* San Antonio, TX: Psychological Corporation.

Bowlby, J. (1960). Grief and mourning in early infancy and early childhood. *Psychoanalytic study of the child, 15*, 9-32.

Bowlby, J. (1969/1982). *Attachment and Loss: Vol. 1. Attachment.* New York: Basic Books.

Bowlby, J. (1973). *Attachment and Loss: Vol. 2. Separation.* New York: Basic Books.

Bowlby, J. (1980). *Attachment and Loss: Vol. 3. Loss: Sadness and depression.* New York: Basic Books.

Brown, G. W. (1996). Onset and course of depressive disorders: Summary of a research programme. In C. Mundt, M. J. Goldstein, K. Hahlweg, & P. Fiedler (Eds.), *Interpersonal factors in the origin and course of affective disorders* (pp. 151-167). London: Gaskell/Royal College of Psychiatrists.

Burnette, J. L., Davis, D. E., Green, J. D., Worthington, E. L., Jr., & Bradfield, E. (2009). Insecure attachment and depressive symptoms: The mediating role of rumination, empathy, and forgiveness. *Personality and Individual Differences, 46,* 276-280.

Campbell, L., Simpson, J., Boldry, J., & Kashy, D. (2005). Perceptions of conflict and support in romantic relationships: The role of attachment anxiety. *Journal of Personality and Social Psychology, 88,* 510-531.

Carnelley, K. & Janoff-Bulman, R. (1992). Optimism about love relationships: General vs. specific lessons from one's personal experiences. *Journal of Social and Personal Relationships, 9,* 5-20.

Carnelley, K., Pietromonaco, P., & Jaffe, K. (1994). Depression, working models of others, and relationship functioning. *Journal of Personality and Social Psychology, 66,* 127-140.

Caspi, A., Sugden, K., Moffitt, T., Taylor, A., Craig, I. W., Harrington, H., et. al. (2003). Influences of life stress on depression: Moderation by a polymorphism in the 5-HTT gene. *Science, 301,* 386-389.

Cassidy, J. (2008). The nature of the child's ties. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (2nd ed., pp. 3-22). New York: The Guilford Press.

Cheung, M., Gilbert, P., & Irons, C. (2004). An exploration of shame, social rank and rumination in relation to depression. *Personality and Individual Differences, 36*, 1143-1153.

Cicchetti, D. (1993). Developmental psychopathology: Reactions, reflections, projections. *Developmental Review, 13*, 471-502.

Cicchetti, D., & Toth, S. L. (1998). The development of depression in children and adolescents. *American Psychologist, 53*(2), 221-241.

Easterbrooks, M., Davidson, C., & Chazan, R. (1993). Psychosocial risk, attachment, and behavior problems among school-aged children. *Development and Psychopathology, 5*, 389-402.

Feeney, J.A. (2008). Adult romantic attachment: Developments in the study of couple relationships. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (2nd ed., pp. 456-481). New York: The Guilford Press.

Frank, E. & Thase, M. E. (1999). Natural history and preventative treatment of recurrent mood disorders. *Annual Review of Medicine, 50*, 453-468.

Greenberg, P. E., Kessler, R. C., Birnbaum, H. G., Leong, S. A., Lowe, S. W., Berglund, P. A., et al. (2003). The economic burden of depression in the United States: How did it change between 1990 and 2000? *Journal of Clinical Psychiatry, 64*, 1465-1475.

Gross, C. & Hansen, N. (2000). Clarifying the experience of shame: The role of attachment style, gender, and investment relatedness. *Personality and Individual Differences, 28*(5), 897-907.

Grossmann, K., Grossmann, K. E., Kindler, H., & Zimmermann, P. (2008). A wider view of attachment and exploration: The influence of mothers and fathers on the development of psychological security from infancy to young adulthood. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of Attachment: Theory, research, and clinical applications* (2nd ed., pp. 857-879). New York: The Guilford Press.

Harlow, H. F. & Suomi, S. J. (1974). Induced depression in monkeys. *Behavioral Biology, 12,* 273-296.

Highfield, J., Markham, D., Skinner, M., & Neal, A. (2010). An investigation into the experience of self-conscious emotions in individuals with bipolar disorder, unipolar depression and non-psychiatric controls. *Clinical Psychology and Psychotherapy, 17,* 395-405.

Kandel, D. & Davies, M. (1986). Adult sequelae of adolescent depressive symptoms. *Archives of General Psychiatry, 43,* 255-262.

Keller, M. C. & Nesse, R. M. (2006). The evolutionary significance of depressive symptoms: Different adverse situations lead to different depressive symptom patterns. *Journal of Personality and Social Psychology, 91*(2), 316-330.

Kendler, K. S., Gardner, C. O., & Prescott, C. A. (2002). Toward a comprehensive developmental model for major depression in women. *American Journal of Psychiatry, 159*(7), 1133-1145.

Kim, S., Thibodeau, R., & Jorgensen, R. (2011). Shame, guilt, and depressive symptoms: A meta-analytic review. *Psychological Bulletin, 137*(1), 68-96.

Lindberg, M. A., Fugett, A., & Thomas, S. W. (2012). Comparing measures of attachment: "To whom one turns in times of stress," parental warmth, and partner satisfaction. *The Journal of Genetic Psychology, 173*(1), 41-62.

Lindberg, M. A. & Lindberg, C. Y. (2007, March). *The roles of attachment patterns in the development of alcoholism.* Paper presented at the meeting of the Society for Research in Child Development, Boston, MA.

Lindberg, M. A., Thomas, M., & Smith, L. (2004, May). *Empirical support for an attachment hypothesis of eating disorders.* Paper presented at the meeting of the American Psychiatric Association, New York, NY.

Lindberg, M. A. & Thomas, S. W. (2003, March). *The psychometric properties of the Attachment and Clinical Issues Questionnaire: A new measure of attachments.* Paper presented at the meeting of the Society for Research in Child Development, Tampa, FL.

Lindberg, M. A. & Thomas, S. W. (2011). The Attachment and Clinical Issues Questionnaire (ACIQ): Scale development. *The Journal of Genetic Psychology, 172*(4), 329-352.

Lopez, F., Gover, M., Leskela, J., Sauer, E., Schirmer, L., & Wyssman, J. (1997). Attachment styles, shame, guilt, and collaborative problem-solving orientations. *Personal Relationships, 4*, 187-199.

Main, M. & Solomon, J. (1990). Procedures for identifying infants as disorganized/disoriented during the Ainsworth Strange Situation. In M. Greenberg, D. Cicchetti, & E. M. Cummings (Eds.), *Attachment during the preschool years.* Hillsdale, NJ: Erlbaum.

Matos, M. & Pinto-Gouveia, J. (2010). Shame as a traumatic memory. *Clinical Psychology and Psychotherapy, 17*, 299-312.

Mikulincer, M. & Shaver, P. (2005). Attachment theory and emotions in close relationships: Exploring the attachment-related dynamics of emotional reactions to relational events. *Personal Relationships, 12,* 149-168.

Narrow, W. E., Rae, D. S., Robins, L. N., & Regier, D. A. (2002). Revised prevalence estimates of mental disorders in the United States: Using a clinical significance criterion to reconcile 2 surveys' estimates. *Archives of General Psychiatry, 59,* 115-123.

Oliver, L. E. & Whiffen, V. E. (2003). Perceptions of parents and partners and men's depressive symptoms. *Journal of Social and Personal Relationships, 20*(5), 621-635.

Orth, U., Berking, M., & Burkhardt, S. (2006). Self-conscious emotions and depression: Rumination explains why shame but not guilt is maladaptive. *Personality and Social Psychology Bulletin, 32,* 1608-1619.

Pettem, O., West, M., Mahoney, A., & Keller, A. (1993). Depression and attachment problems. *Journal of Psychiatry and Neuroscience, 18,* 78-81.

Roberts, J., Gotlib, I., & Kassel, J. (1996). Adult attachment security and symptoms of depression: The mediating roles of dysfunctional attitudes and low self-esteem. *Journal of Personality and Social Psychology, 70,* 310-320.

Rubin, K., Booth, L., Zahn-Waxler, C., Cummings, E., & Wilkinson, M. (1991). Dyadic play behaviors of children of well and depressed mothers. *Development and Psychopathology, 3,* 243-251.

Scharfe, E. (2007). Cause or consequence: Exploring causal links between attachment and depression. *Journal of Social and Clinical Psychology, 26*(9), 1048-1064.

Seay, B., Hansen, E. W., & Harlow, H. F. (1962). Mother-infant separation in monkeys. *Journal of Child Psychology & Psychiatry, 3,* 123-132.

Seay, B. & Harlow, H. F. (1965). Maternal separation in the rhesus monkey. *Journal of Nervous and Mental Disease, 140,* 434-441.

Segal, Z., Vincent, P., & Levitt, A. (2002). Efficacy of combined, sequential, and crossover psychotherapy and pharmacotherapy in improving outcomes in depression. *Journal of Psychiatry & Neuroscience, 27*(4), 281-290.

Sheskin, D. J. (2004). *Handbook of parametric and nonparametric statistical procedures* (3rd ed.). Boca Raton, FL: Chapman & Hall/CRC.

Simon, G.E., Revicki, D., Heiligenstein, J., Grothaus, L., Vonkorff, M., Katon, W. J., et al. (2000). Recovery from depression, work productivity, and health care costs among primary care patients. *General Hospital Psychiatry, 22,* 153-162.

Simpson, J., Rholes, W., & Phillips, D. (1996). Conflict in close relationships: An attachment perspective. *Journal of Personality and Social Psychology, 71,* 899-914.

Spitz, R. A. (1946). Anaclitic depression. *Psychoanalytic Study of the Child, 2,* 313-347.

Suomi, S. J. (2005). How gene-environment interactions shape the development of impulsive aggression in rhesus monkeys. In D. M. Stoff & E. J. Sussman (Eds.), *Developmental psychobiology of aggression*. New York: Cambridge University Press.

Suomi, S. J. (2006). Risk, resilience, and gene X environment interactions in rhesus monkeys. *Annals of the New York Academy of Sciences, 1094,* 52-62.

Tangney, J., Wagner, P., & Gramzow, R. (1992). Proneness to shame, proneness to guilt, and psychopathology. *Journal of Abnormal Psychology, 101*(3), 469-478.

Thompson, R. & Berenbaum, H. (2006). Shame reactions to everyday dilemmas are associated with depressive disorder. *Cognitive Therapy and Research, 30,* 415-425.

Thomsen, D. (2006). The association between rumination and negative affect: A review. *Cognition & Emotion, 20*, 1216-1235.

Webb, M., Heisler, D., Call, S., Chickering, S., & Colburn, T. (2007). Shame, guilt, symptoms of depression, and reported history of psychological maltreatment. *Child Abuse & Neglect, 31*, 1143-1153.

Wei, M., Heppner, P., & Mallinckrodt, B. (2003). Perceived coping as a mediator between attachment and psychological distress: A structural equation modeling approach. *Journal of Counseling Psychology, 50*, 438-447.

Wei, M., Mallinckrodt, B., Russell, D. W., & Abraham, W. T. (2004). Maladaptive perfectionism as a mediator and moderator between adult attachment and depressive mood. *Journal of Counseling Psychology, 51*(2), 201-212.

Wei, M., Shaffer, P., Young, S., & Zakalik, R. (2005). Adult attachment, shame, depression, and loneliness: The mediation role of basic psychological needs satisfaction. *Journal of Counseling Psychology, 52*(4), 591-601.

Weinfield, N., Sroufe, A., Egeland, B., & Carlson, E. (2008). Individual differences in infant-caregiver attachment. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (2nd ed., pp. 78-101). New York: The Guilford Press.

Whiffen, V. E. (2005). The role of partner characteristics in attachment insecurity and depressive symptoms. *Personal Relationship, 12*, 407-423.

World Health Organization. (2008). The global burden of disease: 2004 update. Geneva, Switzerland: Author.

APPENDIX A: Attachment and Clinical Issues Questionnaire

Thank you for agreeing to fill out this survey for Marshall University. Do not put your name on this, as all responses will be confidential. (We are interested in averaging your responses with others at this point in time).

The word "partner" refers to your most important spouse, fiancé, steady date or a significant romantic interest in your life. If you are not currently involved in such a relationship, think about your most significant past partner and answer the questions with that relationship in mind. If you never had a steady or meaningful relationship in your life, leave the questions on partners blank.

Questions about your family, mother, and father refer to the family you grew up in. When answering questions about members of your family, think about who or what was true, typical, or most important while you were growing up (during the school age years). If you didn't have a mother or father figure, leave those questions blank. Although it may seem as if you are answering the same questions over and over, you are not. It is just that the same question is asked about different people.

Write your answers on the scoring sheets by filling in the appropriate circle. When you get to item 201, please start on the next answer sheet with # 1. Please use the following scale to estimate how often these statements apply to you.

A = never B = sometimes C = often D = always

1. When my mother felt sad for days, I did too.
2. When it comes to anger, those close to me have a short fuse.
3. If I don't trust other people then I will not be disappointed.
4. I like to withdraw from people when I am stressed.
5. I satisfy my partner's sexual needs.
6. I feel scared.
7. I felt bad when I did not include my father in things.
8. I need a close relationship with my partner.
9. When I had an argument with my mother, I got very angry.
10. Some people deserve to be hit.
11. The same thoughts run through my head for days.
12. I am worthless.
13. When I have an argument with my partner, I get very angry.
14. My father had hostile feelings towards me.
15. Family rules were unclear.
16. I liked being taken care of by my mother.
17. I go to great lengths to prevent my partner from being angry with me.
18. My family followed rules.
19. I worry that my partner will find somebody else.
20. It was good to keep your feelings to yourself in our family.
21. I had a safe secure relationship with my father.
22. I like to be the best at things.
23. I change my feelings to make my partner happy.

A = never B = sometimes C = often D = always

24. I feel better about myself when I win.
25. A higher power/God is important to me.
26. My partner and I have a special sexual connection.
27. I was more committed than my mother in our relationship.
28. My family did things the same way each time.
29. I had a good relationship with my father.
30. I tried to please my mother.
31. I feel good when I change my partner for his/her own good.
32. I feel fearful.
33. I do not amount to much as a person.
34. My father tried to change me for my own good.
35. I can usually depend on other people when I need them.
36. I like to get away from everyone when there is too much confusion.
37. My mother got angry with me.
38. I try to figure out what my partner wants.
39. I created an image of who I thought I was supposed to be in my own family.
40. It is important for me to be right.
41. I tried to like the same things that my mother did.
42. My father and I were close in every way.
43. I feel like a punching bag for other people.
44. My family made decisions the same way every time.
45. I feel uncomfortable with my friends.
46. I am distracted in conversations with others because I am thinking about something else that is important.
47. I feel like hitting those people who are close to me.
48. When I was stressed, I liked to stay away from my father.
49. It was good to keep feelings from my family.
50. It is important for me to know what my partner is doing.
51. I feel resentful because I cannot pursue my own interests.
52. I needed a close relationship with my father.
53. My partner makes me angry.
54. I went to great lengths to get my mother to like me.
55. A disagreement with my partner ends in a shouting match.
56. I like to be alone when I am troubled.
57. I had a safe secure relationship with my mother.
58. I feel guilty for not taking care of my family's duties.
59. My partner gets hostile feelings towards me.
60. I say I am fine when I am really not.
61. Being by myself without my father was painful.
62. When my partner feels sad for days, I do too.
63. After an argument with my father, I tried to avoid him.
64. I try harder in our relationship than my partner.

A = never B = sometimes C = often D = always

65. I feel tense.
66. I miss what others say because I am working on something else in my head.
67. I went to great lengths to prevent my mother from being angry with me.
68. I had the greatest father in the world.
69. I like to do things right or not do them at all.
70. I am turned on if I see a pornographic movie.
71. People in my family had firm expectations for how we were supposed to feel.
72. It is important for me to achieve.
73. I wish others would not call or talk to me when I am upset.
74. When it comes to anger I am patient.
75. When someone is mean to me I feel like hitting them.
76. I liked being taken care of by my father.
77. Other people should work hard.
78. I worry about what my partner is doing during the day.
79. I am turned on sexually when I see someone in a magazine half undressed.
80. It is good to trust other people.
81. Being by myself without my partner is painful.
82. My anger is a good cover-up for other feelings that I have.
83. If I am really upset, my partner is not good at helping me deal with it.
84. I trust other people.
85. My mother did not fully understand me.
86. I have a hard time getting my mind off of problems.
87. I say I am happy when I really am not.
88. Other people feel better about themselves when they win.
89. I tried to please my father.
90. After an argument with my partner, I try to avoid him/her.
91. It was important to look good in my family.
92. I worry about being left alone without my partner.
93. I was more committed than my father in our relationship.
94. When it comes to anger, I have a short fuse.
95. I tried harder in our relationship than my mother.
96. My family believed that family rules should not change.
97. My partner is there when I need to talk about a problem.
98. When I got angry with my father, I liked to get away from him for a while.
99. I do not want others to know what is going on in my life.
100. My feelings for my father were confusing.
101. A higher power/God is not important to me.
102. When I was stressed, I liked to stay away from my mother.
103. My church/place of worship is important to me in my life.
104. When I had an argument with my father, I got very angry.
105. My partner and I are close in every way.
106. I am afraid of losing control.
107. I tried to like the same things my father did.

A = never B = sometimes C = often D = always

108. Some people deserve to be put in their place.
109. I say I am not angry when I really am.
110. My partner is sexually appealing to others.
111. When I was really upset, my mother was not good at helping me deal with it.
112. Some people deserve to be criticized.
113. A higher power/God guides my life.
114. I try to like the same things that my partner does.
115. I changed my feelings to make my mother happy.
116. Emotional extremes were frowned upon in my family.
117. I go to great lengths to get my partner to like me.
118. I have fun with friends.
119. When I was upset, my father helped me deal with it.
120. It is good to be suspicious about the motives of others.
121. I am easily turned on sexually.
122. My mother had hostile feelings towards me.
123. I wish others would leave me alone.
124. My partner does not fully appreciate me.
125. Sex is best when it is accompanied by warm feelings.
126. I had the greatest mother in the world.
127. I should work hard.
128. I worried about being left alone without my mother.
129. When I got really mad at my father, I felt cold and rejecting towards him.
130. Arguments with my mother involved a shouting match.
131. I hate it when my partner is around people who might flirt.
132. My friends know how I feel.
133. It is good to keep a stiff upper lip even when I hurt inside.
134. Once I start thinking about a problem, I think about it over and over again.
135. Basically I am good.
136. I have pressed for and gotten sex even though my partner wasn't interested at the time.
137. Being by myself without my mother was painful.
138. I am very concerned about details.
139. I went to great lengths to get my father to like me.
140. I am more strongly committed in our relationship than my partner.
141. I feel afraid, but do not know why.
142. I went to great lengths to prevent my father from being angry with me.
143. I tried to figure out what my mother wanted.
144. My partner does not understand me fully.
145. Others are turned on sexually when they see someone in a magazine half undressed.
146. I use a lot of energy trying to get people to do what I want them to do.
147. After an argument with my mother, I tried to avoid her.
148. I feel ashamed when I feel sad, rejected, fearful, lonely, dependent or hurt.
149. I feel comfortable with my friends.

A = never B = sometimes C = often D = always

150. I try to change my partner for his/her own good.
151. I needed a close relationship with my mother.
152. Other people like me.
153. If I have an argument with my partner, I want to run away from them for a while.
154. It is hard to get some things out of my mind.
155. Keeping busy helps me ignore my feelings.
156. When I had an argument with my mother, I wanted to run away from her for a while.
157. I changed my feelings to make my father happy.
158. I avoid people who do not do what I expect them to do.
159. My feelings for my partner are confusing.
160. My mother was there when I needed to talk about a problem.
161. When my father felt sad for days, I did too.
162. I enjoy playing or going out with my friends.
163. Sex with my current partner is good.
164. When I am upset, my partner helps me deal with it.
165. I think about every little detail of a problem, and then think about it again and again.
166. My mother and I were close in every way.
167. When bad feelings come to me, I want to be by myself.
168. It is hard to know what my partner wants.
169. Arguments with my mother were like a love-hate kind of thing where feelings went back and forth.
170. I feel better about myself when I lose.
171. I tried harder in our relationship than my father.
172. I get angry when others flirt with my partner.
173. My father was there when I needed to talk about a problem.
174. I go from one thing to another trying to be satisfied.
175. I am concerned with being moral.
176. I like sex.
177. I want to be alone.
178. My partner and I are equally committed in our relationship.
179. My mother tried to change me for my own good.
180. I think about sex with others.
181. It is easy to ask my friends for help.
182. I can think about the same person or thing for days.
183. When I got angry with my mother, I liked to get away from her for a while.
184. I worry about little things.
185. My father did not fully understand me.
186. Sometimes I fear getting too close to my partner.
187. It was hard to know what my mother wanted.
188. I worried about being left alone without my father.
189. My mother was supportive when I had a problem.
190. My partner gets angry with me.
191. It is best to avoid situations that I cannot control.

A = never B = sometimes C = often D = always

192. I attend a place of worship/church.
193. Family rules were clear.
194. When I am sick or upset, I like to be with my partner.
195. I had a good relationship with my mother.
196. My partner satisfies my sexual needs.
197. I repeat the same habits over and over.
198. I am a bad person.
199. My friends will always be there when I need them.
200. A disagreement with my mother ended in a shouting match.

GO TO NEXT ANSWER SHEET AND PUT QUESTION 201 ON 1, 202 ON 2 ETC.

A = never B = sometimes C = often D = always

201. When I had an argument with my father, I wanted to run away from him for a while.
202. I feel bad when I do not include my partner in things.
203. When I was upset, my mother helped me deal with it.
204. If I get angry with my partner, I like to get away from him/her for a while.
205. I felt good when I changed my father for his own good.
206. I feel ashamed when I have to stand up for myself.
207. I need to know where my partner is.
208. I wish others would come over and visit when I am upset.
209. When I got really mad at my mother, I felt cold and rejecting towards her.
210. I have a lot to be ashamed of.
211. My father was supportive when I had a problem.
212. When I get angry, I explode.
213. Arguments with my partner are like a love-hate kind of thing where feelings go back and forth.
214. I felt bad when I did not include my mother in things.
215. A disagreement with my father ended in a shouting match.
216. I use a lot of energy worrying about my problems.
217. My partner is supportive when I have a problem.
218. I talk about what turns me on sexually with my partner.
219. Arguments with my partner involve a shouting match.
220. My feelings for my mother were confusing.
221. I make my partner angry.
222. I feel that something bad is about to happen.
223. When I get really mad at my partner, I feel cold and rejecting towards him/her.
224. If people would just change a little bit then most of my problems would go away.
225. I try to please my partner.
226. I tried to figure out what my father wanted.
227. I avoid situations that I cannot control.
228. When I was really upset, my father was not good at helping me deal with it.
229. It is important for me to know what my partner is doing.
230. When I am angry, I take it out on others.

A = never B = sometimes C = often D = always

231. My partner has a bad temper.
232. I have a lot of good friends.
233. When I was sick or upset, I liked to be with my mother.
234. I like being taken care of by my partner.
235. I hate it when someone does something the wrong way.
236. If someone treats you too well, it is wise to be suspicious of them.
237. If I was answering the above questions about my relationship with my mother, based on our present relationship, I would still respond the same way.
238. If I was answering the above questions about my relationship with my father, based on our present relationship, I would still respond the same way.
239. If I was answering the above questions about my relationship with my family, based on our present relationship, I would still respond the same way.
240. Your sex: a) Male b) Female
241. Your age: a) 17-21 b) 22-35 c) 36-49 d) 50-65 e) 66+
242. Did either of your parents die while you were growing up?
a) mother b) father c) both d) neither
243. Were your parents divorced? a) Yes b) No
244. If yes on parental death or divorce, how long ago was it? a)0-2yrs b) 3-5 c) 8-12 d) 13-20 e) 21+
245. If yes on parental death or divorce, who did you live with? a) mother b) father c) relative d) friends e) others
246. How long did you live in a single parent home? a) 0 b) 1-2 yrs. c) 2-5 yrs. d) 6-10 yrs. e) 11+ yrs.
247. How many brothers and/or sisters do you have?
a) 0 b) 1 c)2 d)3 e)4 or more
248. Were you the: a) oldest b)middle c) youngest
249. Your father's education a) 3-11 grade b) high school grad. c) some college d) college grad e) graduate school.
250. Your mother's education a) 3-11 grade b) high school grad. c) some college d) college grad e) graduate school.
251. Your race: a) Hispanic b) Black c) Native American d) White e) other
252. Are you married? a) Yes b) No c) Divorced d) widowed
253. If not married, are you currently in a relationship? a) Yes b) No
254. If yes, to the above questions(#252 or #253), how long? a) 0-6mo b) 7mo-1yr c) 1-2 yrs. d) 2-4 yrs. e) 5+ yrs.
255. Your religion a) Christian b) Jewish c) Muslim d) other religion not listed e) no religion
256. Family income growing up a) $1,000 - $10,000 b) $11,000 - $20,000 c) $21,000 - $50,000 d) $51,000 - $100,000 e) $100,000+
257. Family income now a) $1,000 - $10,000 b) $11,000 - $20,000 c) $21,000 - $50,000 d) $51,000 - $100,000 e) $100,000+
258. Your education a) 3-11 grade b) high school grad. c) some college d) college grad e) graduate school.

APPENDIX B: ACIQ Scales and Representative Questions

1. ABUSE
   I feel like hitting those people who are close to me.
   Some people deserve to be put in their place.

2. AMBIVALENT ATTACHMENT - FATHER
   My feelings for my father were confusing.
   Arguments with my father were a love-hate kind of thing.

3. AMBIVALENT ATTACHMENT - MOTHER
   My feelings for my mother were confusing.
   Arguments with my mother were a love-hate kind of thing.

4. AMBIVALENT ATTACHMENT - PARTNER
   My feelings for my partner are confusing
   Arguments with my partner are a love-hate kind of thing.

5. ANGER
   I feel resentful because I cannot pursue my own interests.
   When I get angry, I explode.

6. ANXIETY
   I feel that something bad is about to happen.
   I use a lot of energy worrying about my problems.

7. AVOIDANT ATTACHMENT - FATHER
   After an argument with my father, I tried to avoid him.
   When I got really mad at my father, I felt cold and rejecting towards him.

8. AVOIDANT ATTACHMENT - MOTHER
   After an argument with my mother, I tried to avoid her.
   When I got really mad at my mother, I felt cold and rejecting towards her.

9. AVOIDANT ATTACHMENT - PARTNER
   After an argument with my partner, I tried to avoid him/her.
   When I got really mad at my partner, I felt cold and rejecting towards him/her.

10. CODEPENDENT-ENMESHED - MOTHER
    I changed my feelings to make my mother happy.
    When my mother felt sad for days, I did too.

11. CODEPENDENT-ENMESHED - FATHER
    I changed my feelings to make my father happy.
    When my father felt sad for days, I did too.

12. CODEPENDENT-ENMESHED - PARTNER
    I change my feelings to make my partner happy.
    When my partner felt sad for days, I did too.

13. CONTROL
    I avoid situations that I cannot control.
    If people would just change a little bit then most of my problems would go away.

14. DENIAL
    It is good to keep a stiff upper lip even when I hurt inside.
    I say I am happy when I really am not.

15. FAMILY RIGIDITY VS. CHAOS
    My family believed that family rules should not change.
    Family rules were clear.

16. FAMILY SUPPRESSION OF FEELINGS
    People in my family had firm expectations for how we were supposed to feel.
    It was good to keep your feelings to yourself in our family.

17. JEALOUSY
    I worry that my partner will find somebody else.
    I get angry when others flirt with my partner.

18. RUMINATION
    Once I start thinking about a problem, I think about it over and over again.
    I am distracted in conversations with others because I am thinking about something else that is important.

19. PEER RELATIONS
    My friends will always be there when I need them.
    My friends know how I feel.

20. PERFECTIONISM
    I like to be the best at things.
    I like to do things right or not do them at all.

21. RELIGION
    I attend a place of worship/church.
    A higher power/God is important to me.

22. SEXUAL AROUSAL
    I am turned on if I see a pornographic movie.
    I am easily turned on sexually.

23. SECURE ATTACHMENT - FATHER
    My father was there when I needed to talk about a problem.
    When I was upset, my father helped me deal with it.

24. SECURE ATTACHMENT - MOTHER
    My mother was there when I needed to talk about a problem.
    When I was upset, my mother helped me deal with it.

25. SECURE ATTACHMENT - PARTNER
    My partner is there when I need to talk about a problem.
    When I am upset, my partner helps me deal with it.

26. SHAME
    I feel ashamed when I feel sad, rejected, fearful, lonely, dependent or hurt.
    I do not amount to much as a person.

27. SEXUAL INTIMACY
    I talk about what turns me on sexually with my partner.
    Sex is best when it is accompanied by warm feelings

28. MISTRUST
    It is good to be suspicious about the motives of others.
    If I don't trust other people then I will not be disappointed.

29. WITHDRAWAL/ENGAGEMENT
    I like to withdraw from people when I am stressed.
    I do not want others to know what is going on in my life.

APPENDIX C: Letter from Institutional Review Board

MARSHALL UNIVERSITY
www.marshall.edu

Office of Research Integrity

July 27, 2012

Jessica Taylor
230-B North Virginia Avenue
Bridgeport, WV 26330

Dear Ms. Taylor:

This letter is in response to the submitted dissertation abstract titled "Attachment Patterns and the Development of Depression: Path Analysis of Avoidant and Ambivalent Models." After assessing the abstract it has been deemed not to be human subject research and therefore exempt from oversight of the Marshall University Institutional Review Board (IRB). The Code of Federal Regulations (45CFR46) has set forth the criteria utilized in making this determination. Since the study involves the analysis of de-identified data that was made available to you from a previously approved IRB study it is not considered human subject research. If there are any changes to the abstract you provided then you would need to resubmit that information to the Office of Research Integrity for review and determination.

I appreciate your willingness to submit the abstract for determination. Please feel free to contact the Office of Research Integrity if you have any questions regarding future protocols that may require IRB review.

Sincerely,

Bruce F. Day, ThD, CIP
Director
Office of Research Integrity