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## UNIVERSITY OF NORTHERN COLORADO

Greeley, Colorado

The Graduate School

### FORGIVENESS AS A MEDIATING VARIABLE BETWEEN ATTACHMENT STYLE AND ADULT LOVE RELATIONSHIPS

A Dissertation Submitted in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy

Dayna Northart

College of Education and Behavioral Sciences Department of Applied Psychology and Counselor Education Counseling Psychology

August 2015

This Dissertation by: Dayna Northart

Entitled: Forgiveness as a Mediating Variable between Attachment Style and Adult Love Relationships

has been approved as meeting the requirement for the Degree of Doctor of Philosophy in the College of Education and Behavioral Sciences in the Department of Counseling Psychology

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#### ABSTRACT

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The current study investigated the role forgiveness might play in enhancing romantic relationships of people with various attachment styles. A sample of 90 adults aged 25 years and older in committed relationships participated. A mediation analysis was conducted to examine if forgiveness accounted for higher levels of love in committed relationships among individuals with insecure attachment styles. Love was conceptualized utilizing Robert Sternberg's triangular love theory (1986), and was analyzed as three separate components: *intimacy, commitment,* and *passion*. The Baron Kenny (1986) model of mediation was utilized to assess the data. A mediation effect for forgiveness between attachment style and love was not found; however, this may have occurred because individuals with insecure attachment styles were under-represented in the sample. However, a significant effect was found between forgiveness and love, which may indicate the value of forgiveness in romantic relationships. Discussions of the results as well as a consideration of potential future directions are explored.

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#### **CHAPTER I**

#### **INTRODUCTION**

Attachment theory describes the patterns that people form when developing and maintaining interpersonal relationships (Bowlby, 1982). These patterns are learned in early childhood and continue into adulthood. The way in which individuals learn to relate to their caregivers as children may lead to their perception of how they can expect to be treated by others as they grow into adults. This in turn affects how people develop interpersonal relationships into adulthood, including professional, platonic, and romantic relationships. The theory of attachment style is also closely intertwined with the theory of love. Attachment style provides the foundation for how and why people grow to love other people (Shaver, Hazan, & Bradshaw, 1988). If one develops a maladaptive attachment style as a child, then she or he will likely continue these maladaptive patterns when attempting to form attachments to other people in their adult love relationships. This raises the concern that individuals with poor attachment histories in childhood may not have sufficient skills to form healthy relationships as adults.

Love has long been a topic among poets and scholars. As a psychological construct, love has been examined on platonic, friendly, and romantic levels (Ellis, 1950; Freud, 1952; Kendrick, 2006; Murstein, 1988; Nygren, 1953). Berscheid (2006) proposed four categories of love: (a) attachment love—the instinctual need for a baby to stay close to his or her caregiver for protection; (b) compassionate love—an altruistic,

innate desire to create bonds with others for emotional support in times of distress; (c) companionate love/liking—in which friendships are formed based on a reward and punishment system, which is divided into categories of familiarity, similarity, and attractiveness toward the other person; and (d) romantic love—may be described as companionate love/liking with an additional component of sexual attraction.

In addition to attachment and love, forgiveness is a third variable that may be important in forming and sustaining relational bonds (Worthington, 2006). Just as attachment styles form in early childhood, patterns of forgiveness are learned as children develop and increase their social interactions with others (Denham, Neal, Wilson, Pickering, & Boyatzis, 2005). Forgiveness may be both an emotional and decisional process that involves a shift from negative to positive emotions through a willful choice (Strelen & Covic, 2006). As such, caregivers and other models may teach children how to develop skills of emotional healing when relational injuries occur.

A substantial amount of research has been conducted in studying the relationship between attachment style and adult romantic, consummate love relationships (i.e., Derrick & Murray, 2007; Feeney & Noller, 1990; LaGuardia, Ryan, Couchman, & Deci, 2000; Levy & Davis, 1988; Madey & Rodgers, 2009; Sprecher & Fehr, 2010). There has also been considerable research on forgiveness and consummate love relationships (Allemand, Amberg, Zimprich, & Fincham, 2007; Finkel, Rushbult, Kumashiro, & Hannon, 2002; Kachadourian, Fincham, & Davila, 2004; McCullough et al., 1998; Vuncannon, 2007) as well as attachment style and forgiveness (Kachadourian et al., 2004). The research has revealed common emotional threads among these three constructs that merit consideration as to how these three variables interact with one another. Although the research is limited on all three topics in a single study, a metaanalysis examining the correlations among these three variables (Northart & Wright, 2013) yielded low to moderate effect sizes. According to Cohen (1988) a small effect size is defined as "a standard deviation of K population means one-tenth as large as the standard deviation of the observations within the populations" (p. 285) and a medium effect size is defined as "a standard deviation of K population means one-quarter as large as the standard deviation of the observations within the populations" (p. 286). While the above mentioned meta-analysis did not find any strong effect sizes, there were very few articles available for this analysis (Northart & Wright, 2013). Further research is needed to better understand these abstract concepts, how they impact individuals, and how clinicians may incorporate knowledge of their respective interactions into interventions.

#### **Attachment Style**

Attachment styles were originally proposed by John Bowlby (1969/1982) as a way to understand how a person relates to the self and others. Attachment also brings to light patterns of relationships individuals have with their caregivers from infancy throughout their lifespans (Bowlby, 1969/1982). Mary Ainsworth and Barbara Wittig (1969) expanded upon Bowlby's theory based on observations made among 1-year-old children and their mothers in a laboratory setting. In this experiment, the child experienced periods of being separated from his or her mother, both when a stranger was in the room with the child and when the child was alone. When children with insecure attachment styles were separated from their mothers, a predictable pattern of behavior was observed. First, the child would cry, look for his or her mother, and would reject attempts from other caregivers to be soothed. This stage is known as *protest*. Next, the

child would enter the *despair* stage in which he or she became visibly sad. *Detachment* began when the mother returned and the child intentionally avoided her. The pattern a child exhibited was a manifestation of what is known as an *internal working model* or the expectations an individual may have about caretakers or attachment figures (Bowlby, 1969/1982). Children with secure attachment styles were upset when their mother left the room but were happy to see her and were easily soothed when she returned.

Bowlby (1973) first developed three propositions of attachment based on these three stages. The first stated that if a child believed the attachment figure would be available when the he or she sought comfort, the child would be less vulnerable to fearful and unpredictable situations or people than would a child who did not believe he or she could rely on the attachment figure to be there. The second was that there is a developmental period in which a person establishes a belief system and level of confidence that the attachment figure will or will not tend to his or her needs. This stage begins in early infancy and continues through adolescence. The degree of confidence is dependent upon expectations of the child toward the attachment figure and whether the attachment figure either fulfills or disappoints these expectations. The third proposition spoke to the fact that the actual attentiveness the caregiver provided the child was directly reflective of the attachment style the child will establish. A child who developed a secure attachment would have received sensitivity and responsiveness from the primary caregiver, resulting in a sense of safety. This allowed the child to explore the world and experience a sense of safety when interacting with others.

A child who is insecurely attached received inconsistent care or an insufficient amount of care that resulted in anxiety, hyper-vigilance, and anger. The child may frequently experience a sense of rejection that manifests in dependency, neediness, and vulnerability when exploring the world and seeking relationships with others. Ainsworth, Blehar, Waters, and Wall (1978) further defined these phenomena in their study of mothers' attentiveness to their children. These researchers found that mothers who were inconsistent in attending to their crying children or who impeded their children's playing had children who did not explore as much and who cried more than those mothers who were attentive. The children of inconsistent mothers also tended to be more angry and anxious. Mothers who frequently did not attend to children emotionally and rarely engaged in physical contact with them tended to have children who avoided their mothers. Based on the observations of these mother-child interactions, the authors defined three styles of attachment: secure, anxious/ambivalent, and avoidant.

A recent description of these styles was provided by Levy, Ellison, Scott and Bernecker (2011) who found (proposed) that secure attachment manifests in children who are open, collaborative, trusting, and able to apply feedback provided by adults into their behaviors. Children with an anxious/ambivalent attachment may be interpersonally engaged and willing to discuss problems and their contribution to problems; however, they are very needy and have difficulty separating from caregivers. Individuals with dismissing or avoidant attachment styles had difficulty seeking help and became distressed or confused when confronted about their emotions. Feeney and Noller (1990) found that children with secure attachment styles created a positive perspective of family life from an early age. On the other hand, children with anxious attachment styles tended to experience separation anxiety from their mothers and had more difficulty trusting others. Children with avoidant attachment styles seemed to show a lack of desire to develop deep commitment in relationships.

#### Love

The idea of love can have alternative meanings in various situations. People may describe loving their grandmothers, their pets, their siblings, their romantic partners, their favorite television programs, and practically anything else; however, the emotional meaning behind each of these connections is not the same. The scientific study of love has produced a variety of theories to explain how and why people love each other, animals, objects, and ideas. Love has been suggested to serve as the bridge between the ideal and real self (Murstein, 1988), a system of positive reinforcement (Miller & Siegel, 1971), an instinctual impulse that will lead to sex (Freud, 1952), a road to the divine that will provide pure benevolence (Nygren, 1953), an evolutionary process of bonding that provides mutual protection and safety (Leckman, Hrdy, Keverne, & Carter, 2006), a social construct that affords a certain status in society (Kendrick, 2006), or simply an emotional response (Ellis, 1950). With so many types of loving relationships, it may be overwhelming to attempt to define how and why people love. What is clear is that love is a process through which individuals feel connected to others in one way or another.

The various manifestations of love may be better understood when considering the components of what Robert Sternberg (1988) referred to as a consummate love relationship. He posited that three components may exist in any love relationship: *passion, intimacy,* and *commitment*. Passion is defined as sexual desire, attraction, hyperarousal, and romance. Intimacy is feelings of connectedness, bond formation, and the sensation of knowing one's significant other on a highly personal level. Commitment involves the choice to love, maintain love, make sacrifices, and the willingness to give up seeking potential other mates. Some relationships have only one or two of these components, whereas a successful consummate relationship consists of all three.

According to Sternberg (1988), a relationship that is made up of intimacy alone is one best described as two individuals who like one another, but do not necessarily have any sort of commitment to maintain the relationship. This may describe friendships that are only present for a period of time in one's life and eventually dissipate. A relationship with commitment alone is an empty love. Both individuals have decided to stay with one another for a longer period of time, but there is no intimacy or passion. This may be descriptive of couples who have been married for a long period of time, but no longer feel emotionally or romantically connected to one another. This may also be the case in arranged marriages when the partners in the marriage are committed to one another, but do not know each other well enough to have an intimate or passionate connection. When passion is the only component in a relationship, the dominating theme between the couple is infatuation. This may be a relationship based on lust and physiological draw to one another (Sternberg, 1988).

When two components are present in a relationship, there is a more complex connection. A relationship made up of intimacy and passion is a romantic relationship that is lacking any sort of commitment. Partners may feel they are in love with one another, but this love may be fleeting, and the relationship may not survive. A relationship of companionate love consists of intimacy and commitment. This is descriptive of friendships that last for long periods of time, perhaps throughout a lifetime, but the individuals do not feel a physiological desire for one another. Other relationships that fit into this category are relationships between family members who are committed to be in each other's life. Passion and commitment without intimacy result in a fatuous relationship. This is what is found in couples who feel love-at-first sight, but do not know each other well enough to feel the connection intimacy provides. This love can also be fleeting, but can also be successful if intimacy can be developed (Sternberg, 1988).

All three components produce ideal, consummate, complete, and fulfilling love relationships. Persons in such relationships are committed to stay with one another for a long period of time, feel connected to one another, experience a friendship, and also have a passionate, romantic draw to each other (Sternberg, 1988).

Diessner, Frost, and Smith (2004) explored the congruence between Sternberg's (1988) theory of love to neoclassical philosophical views of the human psyche. These authors cited the writings of Socrates as authored by Plato that explained the psyche in three parts: *logiston, thymia*, and *epithymia*. Logiston is the process of cognition and willfulness that aligns with Sternberg's construct of commitment. Thymia is the affect and emotional side of the human psyche that is related to intimacy. Epithymia is human desire that is conceptualized by Sternberg as passion. Also cited were more recent philosophers such as Thomas Aquinas, ibn Sina, ibn 'Arabi, and Immanuel Kant who all explored the three parts of the human psyche as cognition, emotion, and desire or willful action. The discussion on the philosophical roots of how humans experience love indicates that Sternberg's current theory of love was informed by a long history of philosophers.

#### Forgiveness

Forgiveness has been defined by Worthington and Wade (1999) as "victim's internal choice (either unconscious or deliberate) to relinquish unforgiveness and to seek reconciliation with the offender if safe, prudent, and possible to do so," whereas unforgiveness is defined as: "a 'cold' emotion involving resentment, bitterness, and perhaps hatred, along with the motivated avoidance of or retaliation against a transgressor" (p. 386). Other definitions include the process of replacing negative thoughts, emotions, and behaviors with positive thoughts and emotions (Enright & Fitzgibbons, 2000) or a re-direction of one's motivations (McCullough, Fincham, & Tsang, 2003). Along with many other descriptions of forgiveness, these definitions carry a common idea that forgiveness is not only a relinquishing of negative affect and a presence of positive affect in its place, but also as an intentional process. Worthington (2005) articulates these two aspects of forgiveness as emotional forgiveness and decisional forgiveness.

When proceeding through the steps that lead one to decide to either forgive or withhold forgiveness, he or she may consider the costs and benefits of forgiving (McCullough, 2008). Many potential positive consequences may result from choosing to forgive. Forgiving may result in a relief of the negative emotions that the transgressed had been harboring toward the transgressor. The relationship between those involved in the offense may be reconciled, and the future of the relationship may flourish. It may also result in skill building that will prevent such a transgression from occurring in the future, if the transgressor learns from his or her mistake, appreciates the mercy of the transgressed, and makes more of an effort to avoid making the same mistake again. Many people may find that forgiveness is aligned with their spiritual values or personal morals. Forgiveness is at times a social expectation that has become so common in society that clichés have developed such as "forgive and forget." Although this may not be the congruent with definitions of forgiveness, the idea of social expectations of forgiveness has been observed in primates and other animals. The benefits reaped in the animal world include the restoration of the collective animal tribe, alleviating social anxiety, and preventing the animals from growing lonely (Simpson & Campbell, 2005). The same benefits may also be seen in human social groups. Studies have also indicated that forgiveness is positively correlated with physical and mental health (Berry & Worthington, 2001; Brown, 2003; Krause & Ellison, 2003).

On the other hand, there are costs to forgiveness. Deterrents to forgiving include a feeling that if one forgives, he or she is no longer justified in seeking revenge or collecting retribution for the offense (Worthington, 2005). Some may also wonder if forgiveness is excusing the offense and acts as a positive reinforcement for the transgressor to repeat the offense. It might be construed as a sign of weakness, a sign of low self-esteem, or permission to release the transgressor from his or her responsibility of the offense. McCullough (2008) states that forgiveness and lack of forgiveness or revenge-seeking are natural human responses to being on the receiving end of an offense. Seeking revenge may be for the benefit of society, rather than for the satisfaction of the victim alone. Punishment through revenge may act as a disincentive for the transgressor to commit the offense again, perhaps toward a different potential victim.

#### **Summary**

Research has indicated that individuals with insecure attachment styles may be less likely to form healthy and fulfilling adult love relationships. People with anxious attachment styles may be dependent, needy, and vulnerable in their adult relationships (Ainsworth et al., 1978). Those with avoidant attachment styles may feel rejected, abandoned, detached, and less likely to reach out to their partners for support in times of distress in love relationships as adults. These negative experiences are directly related to Sternberg's (1986) components of love that are theorized to result in satisfying love relationships (Mikulincer & Shaver, 2007). With regard to passion, those with anxious attachment styles may become easily jealous of their partners or may be smothering, while those with avoidant styles may show too little interest, causing their partners to feel rejected or unwanted. This could in turn impact the intimacy component for the insecurely attached person's partner; lack of trust may be the result of having an overbearing partner or a partner who shows little or no sexual interest in him or her. Intimacy may also be affected by insecure people and their partners' feelings as though they cannot safely disclose feelings to one another. Commitment may also be compromised by an insecure attachment style--those with anxious attachment may become overly dependent and may not allow personal space for their partners, while those with avoidant attachment styles may not reach a point of commitment in a relationship (Mikulincer & Shaver, 2007).

Emotional consequences to the above scenarios may be anger, anxiety, uncertainty, hurt, confusion, resentment, and even hate. Forgiveness may work to alter those negative emotions and replace them with positive emotions through communication, honesty, and empathy. As a result, forgiveness may serve as a mediating variable between attachment styles and adult love relationships.

#### **Purpose of the Study**

A history of research on early childhood development has found that those who have received insufficient attention and care in early childhood tend to develop insecure attachment styles throughout childhood, adolescence, and into adulthood (Bowlby, 1969/1982). In relationships, people with insecure attachment styles may experience feelings such as a lack of trust in self and others, fear of intimacy, social avoidance, or obsession over being close to their partners (Brennan, Clark, & Shaver, 1998).

These emotions have been found to negatively impact adult love relationships (Mikulincer & Shaver, 2007). Individuals with insecure attachment styles reported lower relationship satisfaction and have more turmoil in attempting repair painful experiences that may occur between two partners in a romantic relationship than those with secure attachment. These data indicate that people with insecure attachment styles may have more difficulty creating and sustaining fulfilling love relationships than those with secure attachment styles. However, further investigation into this area is warranted.

Forgiveness may be a mediating variable between individuals with insecure attachment increase their satisfaction in love relationships. The aim of forgiveness is to decrease negative emotions and replace them with positive emotions (Worthington, 2005). Many of the emotions experienced more frequently among individuals with insecure attachment, (e.g., distrust, fear, depression, and rumination) may benefit from forgiveness-based interventions that work to shift these emotions (Worthington, 2005). Some research indicates that interventions focused on forgiveness have benefited couples who had experienced betrayal. Additional research is needed to clarify the relationships among these variables.

Understanding the way in which people experience love is a necessary piece of the puzzle to find how attachment style, love, and forgiveness are related to one another. A consensus in the literature indicates there are different styles and intensities of love (Hendrick & Hendrick, 1986; Lee, 1988; Sternberg, 1988). Conceptualizing love on a multifaceted level that will assess what type of love and the magnitude of the love felt in a relationship is the natural conclusion to ensure the most adequate construct of love is being assessed. By applying the knowledge of different, the complexities of love will inform research as to how those with varying attachment styles tend to experience love and also how and why people experience love.

Current literature indicates ties between attachment style and love (Sprecher & Fehr, 2010), love and forgiveness (Berry & Worthington, 2001), and attachment style and forgiveness (Nosko, Tieu, Lawford, & Pratt, 2011). The low to moderate effect sizes found in previous research are likely due to the small amount of research that has actually been pursued in this area. One meta-analysis (Northart & Wright, 2013) directly examining insecure attachment styles and forgiveness found only one study to be relevant that also examined forgiveness and love. So few studies existed among these variables that, in order to examine love and attachment and forgiveness and attachment, all attachment styles were analyzed as insecure-secure because there were insufficient data to consider the anxious and avoidant styles of insecure attachment on their own. This lack of research has limited specific findings related to how people with varying attachment styles may experience love and forgiveness differently. One study incorporating forgiveness as an intervention in attachment-based couples therapy was shown to be effective (Woldarsky Meneses & Greenberg, 2010), possibly indicating the value of understanding the relationships among attachment, love, and forgiveness as applied in counseling. However, there is still insufficient evidence in the literature to suggest how to better identify the interactions of these variables. The current study would benefit the field of counseling and psychology by providing data as to the appropriate utilization of forgiveness as an intervention in couples therapy. Based on the review of literature, the following research questions were constructed:

- Q1 Does forgiveness mediate the relationship between anxious attachment and commitment in adult love relationships?
- Q2 Does forgiveness mediate the relationship between anxious attachment and intimacy in adult love relationships?
- Q3 Does forgiveness mediate the relationship between anxious attachment and passion in adult love relationships?
- Q4 Does forgiveness mediate the relationship between avoidant attachment and commitment in adult love relationships?
- Q5 Does forgiveness mediate the relationship between avoidant attachment and intimacy in adult love relationships?
- Q6 Does forgiveness mediate the relationship between avoidant attachment and passion in adult love relationships?

#### Limitations

One of the major populations targeted in this study were individuals with insecure attachment styles. By definition, people in this population might be untrusting of others including psychological researchers. As in Ainsworth et al.'s (1978) study, the majority of the participants willing to respond to this study were those with secure attachment styles. Further, those with insecure attachments might not participate in social activities

targeted to solicit participants (e.g., community centers) resulting in a large portion of this population not having the opportunity to participate in this study due to lack of contact. Data were collected and analyzed from individuals with all styles of attachment. However, as expected, those with secure attachment styles were overrepresented because in the general population, 60% of people have a secure attachment style, 20% have an avoidant attachment style, and 20% have an anxious attachment style (Hazan & Shaver, 1987).

To assess levels of love, this study limited participation to individuals who had at some point been in a committed relationship. Participation was also limited to individuals who were currently or had in the past been in a committed relationship as defined by Sternberg's (1986) construct of commitment. The constructs of love, forgiveness, and attachment style were also difficult to measure, as they are all fairly recent constructs in the field of psychology, and there are no agreed-upon instruments to measure any of them (Cassidy, 2008; Weis, 2006; Worthington, 2005).

Finally, the methods of data collection that were implemented in the current study had some limitations as well. Utilizing self-report measures has been shown to have some limitations since they might be less accurate than other modes of assessing psychological constructs (Hill & Lambert, 2004). Accessing the internet to contact participants might also be limiting. This modality of data collection has shown that participants have low trust in the legitimacy of online measures, provide low levels of attention to the measures, and they might choose to opt out of the study due to lack of human contact (Dillman, Smyth, & Christian, 2009). In fact, Dillman et al. (2009) noted that potential participants might not even be aware of the email solicitation because the email is sent to a junk-email folder and never viewed, or if the potential participant has no internet access. This may have limitation may have narrowed the inclusion of many potential respondents in this study.

The instruments utilized in this study have been normed on undergraduate populations ages 18 and older (Brennan et al., 1998; Enright & Rique, 2000/2004; Sternberg, 1998). The current study excluded any participants below the age of 25, as this age was commensurate with current developmental models defining adulthood (McCarthy, 1999; Sprecher & Hendrick, 2004). Another potential limitation in this study was that the sample in this study did not align with the normed population of the instruments. However, the relatively older sample in this study provided additional data for the use of these instruments among individuals of differing age groups.

#### **Definition of Terms**

Attachment style—Attachment style refers to the pattern of relating to others and involves emotional, cognitive, and behavioral aspects of forming interpersonal bonds (Bowlby, 1969/1982). Various styles of attachment will be defined on a two-dimensional continuum of anxious to avoidant attachment that encompasses insecure and secure attachment.

**Consummate love**—High ratings of commitment, intimacy, and passion in a romantic love relationship as defined by Sternberg as "complete love . . . from the full combination of the three components" (Sternberg, 1986, p. 124).

**Forgiveness**—Forgiveness is defined as the shift from negative emotions, thoughts, and behaviors to positive emotions following the occurrence of an offense (Worthington, 2005).

**Love**—Love is defined as the conglomeration of emotions, cognitions, and behaviors that are made up of one or more of three components—*commitment, intimacy,* and *passion*—in accordance with Sternberg's (1986) triangular theory of love.

**Commitment**—An intentional cognitive decision to make personal sacrifices for the partner and willingness to abstain from engaging in personal relationships with other potential partners (Sternberg, 1986).

**Intimacy**—An emotional sense of connectedness and bonding to a partner, having trust with the partner, willingness to share one's personal thoughts and feelings of the partner, reciprocate listening to the partner's thoughts and feelings in return, and sharing personal possessions including one's self with the partner (Sternberg, 1986).

**Passion**—Sexual and physical attraction toward a partner including romantic feelings and the urge to be physically close to the partner (Sternberg, 1986).

#### **CHAPTER II**

#### **REVIEW OF LITERATURE**

In this chapter, a review of the literature will provide a thorough discussion of the background and research on important constructs of this study. First, an exploration of the history and development of attachment theory and its theoretical foundations are discussed, followed by decisional and process models of forgiveness. Finally, various definitions and theoretical propositions of love are explored.

#### **Attachment Style**

Attachment theory was studied in animals in as far back as 1935 when Konrad Lorenz published data of infant geese imprinting onto their mothers and forming an attachment. Harry Harlow (1962) also explored attachment of infants with caregivers in his research with rhesus monkeys that clung to a surrogate cloth mother in times of distress as opposed to a surrogate wire mother who provided food. These studies indicate attachment as a process that is observed in animals that serves survival and emotional needs. Robertson and Bowlby (1952) found patterns of emotional attachment in human children who exhibited a predictable pattern of distress, anger, and anguish when separated from their mothers.

Bowlby's (1969/1982) framework of attachment development describes several components of attachment including evolution, behavior, emotion, cognition, and

biology. The evolutionary perspective of attachment explains that children who attach to their mothers form a bond that increases the likelihood of reciprocity of the emotional connection, which in turn, increases chances of protection from the caregiver. The behavioral component relates to when children bond to their mothers to learn about their environments. The mothers act as natural models to teach their children about the world. Messages transmitted from one generation to the next work ensure the survival of the species. Bowlby (1979) described emotions as being most intensely experienced during attachment events in life; e.g., the formation or ending of a relationship, grief, and falling in love. The inclination to attach for both behavioral learning and satisfaction of emotional needs has been found to be so strong that even children with abusive caregivers are not deterred from attaching to them; children will attach to their primary caregivers, regardless of whether or not the child's needs are being met (Bowlby, 1956).

Cognitively, attachment to caregivers is directly related to formations of the self in relation to the environment and others (Bowlby, 1969/1982). Children begin to form their worldviews and their beliefs around whether or not their needs will be attended by their caregivers. As these worldviews develop, children begin to make predictions about how others, not just their caregivers, will respond to them.

Biological differences account for the perspectives of whether or not the child believes the caregiving figure is available and willing to tend to his or her needs. The perception that a child forms around this has to do with temperament of the child with regard to feeling safe. Temperament is the biological process that impacts cognitive perception and the way in which a child relates his or her environment. This, in turn, affects the child's internal processing of external information, which results in the perspective and prediction the child has for the world around him or her (Leve, Scaramella, & Fagot, 2001). The emotional and behavioral interactions the child has with the caregiver allow the child to form what Bowlby (1969/1982) referred to as "internal working models" that were constructs of the child's representation of the caregiver. Through internal working models, the child anticipates how and to what degree his or her needs will be met by the caregiver based on the understanding he or she has from the caregiver's previous behavior (Bowlby, 1969/1982).

These components come into play when a child forms either a secure or insecure attachment. While a secure attachment may be characterized by an individual who feels comfortable and safe with him or herself as well as with others, those with insecure attachment styles fall on the spectrum of attachment between anxious and ambivalent and exhibit negative feelings about the self, others, or both (Bartholomew & Horowitz, 1991). Insecure attachments frequently form when there is a separation of the child and his or her caregiver (Kobak & Madsen, 2008). Children's reactions to separation may vary, but all children tend to exhibit some form of anger, fear, sadness, and anxiety when separated from their caregivers. Robertson and Bowlby (1952) found that these emotions are experienced through a series of three phases: protest, despair, and detachment. The protest phase may last from a few hours to a week during which time the child screams, cries, chases after the caregiver, and may even pound on the door after the caregiver leaves the room. Surrogate caregivers may attempt to soothe the child, but tend to be unsuccessful. Emotions that tend to be experienced in this protest stage include anger, fear, and distress. As the child moves into the despair stage, he or she becomes hopeless that the caregiver will return and may have depressed physical movement. The child

disengages with other adults, becomes mournful, and may sometimes become physically aggressive toward other children or objects. The intensity of these behaviors tends to increase as more time elapses. Detachment is noted when the child begins to allow surrogate caregivers to comfort him or her. If the mother or caregiver returns to the child during this stage, the child will be apathetic to his or her reappearance.

In the 1940s, John Bowlby began work with the World Health Organization (WHO; 1951), researching the impact severe neglect from a caregiver had on young children; this project became known as the WHO project. The results of this research found that when children did not receive adequate contact from a maternal figure they were deemed "affectionless," developed insincere relationships, did not express emotions, were hostile, and exhibited antisocial behaviors (Kobak & Madsen, 2008). Bowlby (1973) theorized that the behavioral reactions to a lack of maternal support were part of an instinctual system triggered in children to alert them to the fact danger was imminent. This was not a reaction to a lack of food source, but rather an emotion-based reaction resulting in behaviors that varied depending on which stage the child was in during the progression of separation anxiety (Bowlby, 1973).

Further confirmation of the emotional ties of attachment theory was provided through the Strange Situation experiment conducted by Mary Ainsworth and Barbara Wittig in 1969. During the 20-minute procedure, 1-year-old children and their mothers would start out playing together in a room. Soon thereafter, a stranger entered the room and began to interact with the child. Then, the mother then left the room, and the child was alone with the stranger. Typically, the child became upset, and the stranger would attempt to soothe the child. The mother then returned and played with the child, and the stranger left the room. Once again, the mother left, and the child was left alone. As the child became upset, the stranger returned to the room and tried to comfort the child. Finally, the mother would return to the room.

Several patterns emerged from this experiment that led to conclusions about the attachment styles of young children. First, it was found that children who cried less at home cried significantly more in the experimental setting of the strange situation. Second, much of the data were gathered from the children's behaviors when the mother left the room; children who were securely attached were grateful when the mother returned, ran to her for comfort, were able to be soothed, and went back to playing. Children with what came to be called ambivalent attachment styles tended to explore the toys and the play area less at the beginning of the experiment. These children had reactions such as getting angry at the mother, not allowing her to soothe them, and exhibiting behaviors such as kicking or arching their backs when their mother picked them up to comfort them once she returned. Children with what came to be called avoidant attachment styles were less upset when their mothers left the room, were slow to run to her, or were non-responsive when she reentered the room (Davidson & Davidson, 2005).

The different attachment styles have shown that children with secure attachments have caregivers who are able to pick up on cues provided by the children who are seeking safety or comfort. These caregivers have also tended to the cues of their babies in a very timely manner within the first six months of life. Babies with avoidant attachment styles have had caregivers who have encouraged the babies to be more independent than developmentally appropriate early in life. Children with ambivalent attachments tend to have been discouraged from exploring in early childhood and may have had caregivers whose behaviors were inconsistent and who may have exhibited anger or confusion when tending to the children's needs (Davidson & Davidson, 2005).

Ainsworth and Wittig (1969) found that the securely attached child explored the environment more and had a higher degree of pleasure in play when the mother was present. This behavior became known as the "secure base" the child had for the caregiver. It was also found that children who felt a threat in the environment, such as a stranger entering the room, would run to the caregiver for safety. The termed coined for this behavior is the child's "safe haven." Bowlby (1969/1982) noted that when a child perceives a threat in the environment, he or she will engage in proximity seeking by running to the caregiver for protection. Proximity seeking behaviors in young infants may be crying or screaming, while toddlers may physically run to the caregiver and reach out his or her arms to be picked up.

As individuals mature, attachment style continues to develop. Adolescents enter a stage of life when they begin to separate and gain more independence from their primary caregivers. Individuals at this age begin to extend attachment to friends and peers and learn to rely on emotional needs being met by others besides their primary caregiver. Emotional and behavioral transitions of attaching to others that develop as adolescents seek more independence will continue into adulthood as well (Allen, 2008).

As infants begin to develop into young children, cognitive shifts occur and language develops, which allow children to communicate their desires to their caregivers and are able to make plans to have their needs met. Verbal skills enable children to continue to expand the internal working model that allows them to trust their needs will be tended to even if the caregivers are temporarily absent (Ainsworth, 1989). Physical advances in development enable the child to travel further away from the caregiver during playtime, and he or she begins to interact more with peers at a greater distance from the secure base. In middle childhood, individuals spend more time with siblings and same-aged peers. Research indicates that at this point, peers are not attachment figures (Koback, Rosenthal, & Serwik, 2005) and primary caregivers maintain the attachment figure role.

Adolescence yields more cognitive development, resulting in more introspection for individuals to reflect on their emotional bonds and relationships (Allen, 2008). Adolescents may begin to see flaws in their parents and examine different aspects of their relationships with their caregivers. They may also begin to view themselves as care providers to their peers and siblings, rather than the receivers of care only (Ainsworth, 1989).

Internal working models that formed in early childhood provide a foundation from which children predict the behaviors of others. This informs how individuals select friends, partners, and caregivers outside of their parents or early childhood caregivers through adolescence and into adulthood (Zeifman & Hazan, 2008). The sense of safety found in childhood is sought after in a significant other, and the same level of safety is reciprocated by the newly chosen adult attachment figure. Proximity seeking is no longer the primary goal to attachment since the individual is capable of recalling comforting memories or may have symbols representing the attachment figure that serve to relieve separation anxiety in the presence of a threat (Mikulincer & Shaver, 2007). Symbols of the attachment figure and of the sense of identity an adult has about him or herself may begin to provide security in the place of the physical proximity to the caregiver (Mikulincer & Shaver, 2007). This may include recalling encouragement the individual received from a caregiver or a feeling of capability and self-esteem that motivated one to stand up in the face of a threat. Ultimately, securely attached people are able to feel confident and secure enough in the presence of danger that they are able to manage any distress while still protecting him or herself. This sense of security may be something one can provide for him or herself, but it may also be felt by the presence, symbolic or physical, of an attachment figure.

The basis of attachment systems is largely rooted in emotion (Bowlby, 1973, 1980). Individuals perceive a threat, experience fear, sadness, loss, anxiety, and anger, and seek protection and safety to alleviate negative emotions and promote feelings of comfort and well-being. Attachment figures in adulthood, which include friends, spouses, mentors, in addition to parents or primary caregivers from childhood, help individuals maintain a level of emotional homeostasis by the individual engaging in the same attachment behaviors he or she had as a child (Ainsworth, 1989).

Bartholomew and Horowitz (1991) built on Bowlby's (1973, 1980) and Ainsworth's (1989) work and provided a comprehensive two-dimension model based on anxiety and avoidance that classified attachment styles into four categories: *dismissing avoidant, preoccupied, fearful avoidant,* and *secure* (see Figure 1). Dismissing avoidant is characterized by low anxiety and high avoidance, which manifests as evading intimacy and being intentionally distant from close relationships to protect one self. *Preoccupied* attachment is high anxiety and low avoidance, which results in obsessive type behaviors with intimate partners such as a constant seeking of approval from others. Fearful avoidant is high on both anxiety and avoidance; it is characterized by being fearful of intimacy and avoidant of social situations. Finally, secure attachment is low in both anxiety and avoidance; it is shown as self-esteem, autonomy, esteem for others, and an expectation of being accepted and loved by others. This model of attachment has been utilized in studies with adults (Burnett, Taylor, Worthington, & Forsyth, 2006; Lawler-Row, Piferi, Younger, & Jones, 2006; Sprecher & Fehr, 2010; Webb, Call, Chickering, Colburn, & Heisler, 2006), people of varying gender identities (Levy, Blatt, & Shaver, 1998; Levy & Kelly, 2010), and people across various racial and ethnic backgrounds (Monteoliva & Garcia-Martinez, 2005; Yarnoz Yaben, 2009).

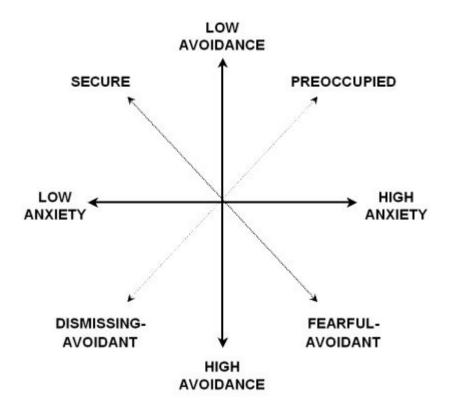


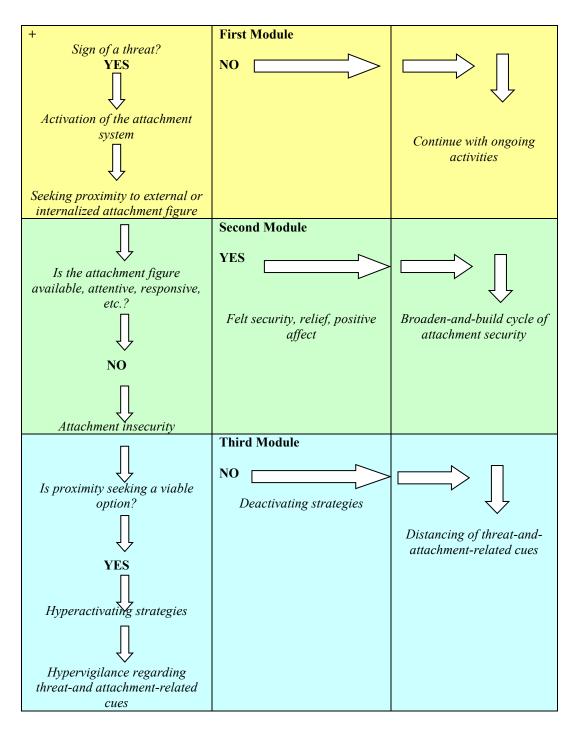
Figure 1. Four categories of attachment styles.

Bartholomew and Horowitz (1991) developed their theory based on the observation that no previous research had provided a sufficient framework for the different styles of attachment. Attachment theory is based on how an individual views him or herself as well as how the individual views others. On the two-dimensional spectrum on attachment with avoidant on one end and anxious on the other, the additional variables of the view of self and view of others would necessitate a theory that supported four categories. Thus, the four categories describe a positive view of self and others (secure), positive view of self and negative view of others (dismissing), negative view of self and positive view of others (preoccupied), and negative view of self and others (fearful).

Mikulincer and Shaver (2007) articulated a theoretical model of adult attachment based on the work of the above researchers that begins in early childhood and continues into adulthood. This model is based on three different stages, or modules, through which an individual passes in the face of risky situations in an attempt to return to an emotional homeostasis. The first module is to understand the risk and seek proximity to an attachment figure. Risks include both behavioral and emotional risks that would prevent the person from having his or her biological or emotional needs met. The second module is an assessment of whether or not it is possible to become close to the caregiver and, if the attachment figure is available, to soothe the individual's emotional disturbance. If not, the individual reaches the third module—to either engage in what Mikulincer and Shaver (2007) referred to as hyperactivity or deactivity behaviors.

Hyperactivity tends to be chosen by individuals with anxious or ambivalent attachment styles. Hyperactive behaviors manifest as frantic efforts to seek alternative ways to find safety; e.g., crying or clinging to the caregiver in an attempt to elicit comforting behaviors that are not being offered. These behaviors in adulthood resulting from a lack of safety provided from one's partner may lead one to engage in activities such as close monitoring of the partner's activities, controlling behaviors, exaggerating distress, and overdependence on the partner. Deactivity, present in individuals with avoidant attachment styles, includes passive-aggression, hostility, and withdrawing. In adulthood, these behaviors aim to provide the individual with a sense of complete selfreliance; i.e., physical distancing from the partner or denying that needs are not being met. Individuals with secure attachment styles move through the modules differently. In the first module, once the person perceives a risk, he or she will seek comfort from the caretaker and will be able to be soothed. In the second module of the model, the caretaker's role in this relationship is to be available, attentive, and responsive to the person. If the caregiver is not available, the securely attached person engages in selfsoothing behaviors such as self-confirmation or imagining receiving comfort from a caregiver.

The modules in Mikulincer and Shaver's (2007) model of attachment style operate in a feedback loop that becomes a part of a person's internal working model. The way a person moves through these modules can be seen in Figure 2. This develops into an interpersonal pattern he or she employs throughout life across interpersonal relationships as a method of attempting to have one's safety needs met. This is dependent on how the individual views safety and trust with others and with him or herself.



*Figure 2*. Attachment-system activation and functioning in adulthood. Adapted from Mikulincer and Shaver's (2007) model (p. 31).

Studies have found evidence supporting those adults with specific attachment styles react to threats in the environment in similar ways. When faced with a threat, securely attached adults tend to direct their thinking to focus on the attachment figure and symbols of figures that provide comfort (Mikulincer, Birnbaum, Woodis, & Nachmias, 2000), are more likely to seek out social support from loved ones, and reciprocate support to their partners (Florian, Mikulincer, & Bucholtz, 1995). Those with anxious attachment styles tend to seek out attention from their partners, while those with avoidant attachment detach and isolate from their partners (Dewitte & De Houwer, 2008). Individuals with avoidant attachment styles have been shown to have ineffective care-seeking behaviors such as maintaining physical and psychological distance from caregivers. Those with anxious attachment styles have not provided sufficient support to partners by not attending to their partners' emotional and physical needs (Collins & Feeney, 2000). In studies focusing on providing care for others, it was found that people with insecure attachment styles had higher incidents of intimate partner violence (Wilson, Gardner, Brosi, Topham, & Bugsby, 2013).

Brumbaugh and Fraley (2006) found evidence that people will tend to seek out partners who are similar to previous partners and important attachment figures. Participants in this study were first asked to complete the Experiences in Close Relationships-Revised (ECR-R) while answering in terms of their relationship with their most important past relationship. They also selected desirable characteristics in a significant other from a list of personality traits. The participants were then given a description of two potential mates. One of the potential mates had a high degree of matching the participant's desired characteristics, while the other was low in those characteristics. The ECR-R was again completed by participants to anticipate how he or she would feel in a relationship with each potential mate. It was found that people with anxious attachment styles anticipated experiencing anxiety and those with avoidant attachment styles predicted being avoidant to both potential mates. These data indicate that people tend to have the same patterns in their process of attaching and interacting with significant others even when the significant other is highly desirable.

Individuals with anxious attachment styles tend to have difficulty regulating negative emotions that may lead to cognitive disorganization, excessive worry, depression related to real or imagined failure, problems with anger management, impulsive behavior, neuroticism, and a higher risk of developing anxiety-related symptoms following a traumatic event, such as intrusive thoughts, images, dreams, or flashbacks (Mikulincer & Shaver, 2007). Interpersonally, these individuals tend to be seen by others as clingy, needy, and dependent and strive to earn love from a partner.

Attachment-avoidant people may also experience difficulties with emotion regulation, although they may come across to others as calm and composed (Mikulincer & Shaver, 2007). These individuals tend to suppress both positive and negative emotions and present with a façade of feeling confident. Internally, however, people with avoidant attachment tend to feel incapable of coping with conflict and confrontation. In trauma situations they may manifest more avoidance-related symptoms, such as avoiding situations and thoughts that are reminiscent of the traumatizing event, or dissociation. In relationships with others, these individuals tend to fear rejection and may abstain from becoming close to others in order to evade abandonment. Both attachment-anxious and attachment-avoidant individuals tend to experience more symptoms of depression and anxiety, and those with anxious attachment styles endorse these symptoms at a higher level of intensity than do those with avoidant attachment styles (Mikulincer & Shaver, 2007). These two groups indicate different symptoms of depression; anxious attachment tends to result in feeling depressed as a result of interpersonal difficulties, such as lacking autonomy and feeling dependent on others, whereas those with avoidant attachment tend to self-criticize and feel as though they are imperfect. Studies of suicidal ideation have found that suicide attempts made by those who are attachment-anxious tend to be related to feeling a lack of love from others and crying out for help. Avoidant-attached individuals who attempt suicide tend to report having negative emotions toward the self and feeling guilty, worthless, and socially isolated (Orbach, 1997).

Differences in other psychological disorders have been found to differ among people with anxious and avoidant attachment. Candelori and Ciocca (1998) found that individuals with anorexia nervosa tended to be avoidant-attached and experienced feelings of rejection, helplessness, and in search of control. Those with anxiousattachment with disordered eating expressed desire to be loved by others and tended to fit the criteria for bulimia nervosa with expressed symptoms of binging and purging. A study of schizophrenia spectrum disorders found that individuals with anxious attachment styles had more distressing and severe auditory hallucinations than did those with avoidant attachment styles (Berry et al., 2012). Studies of attachment in substance abuse have shown that anxiously attached individuals may use drugs and alcohol to numb or suppress uncontrollable negative emotions, while those with avoidant attachment may use alcohol and other drugs as a means to detach from one's self (Hull, Young, & Jouriles, 1996). In regards to personality disorders, Crawford et al. (2006) found that avoidant attachment was correlated with Cluster A traits (paranoid, schizoid, and schizotypal personality disorders), and anxious attachment was correlated with Cluster B (antisocial, borderline, histrionic, and narcissistic personality disorders) as well as Cluster C (avoidant, dependent, and obsessive-compulsive personality disorders). However, earlier research suggested that avoidant personality was also correlated with avoidant attachment (Brennan & Shaver, 1998).

### **Measures of Attachment**

Theory has inspired several different scales for measuring attachment. The Adult Attachment Questionnaire (AAQ) was developed from Ainsworth's coding system in the Strange Situation study (Ainsworth & Wittig, 1969) and Hazan and Shaver's (1987) model. Hazan and Shaver had borrowed from Ainsworth's coding system of categorizing relationships styles into secure, avoidant, and anxious, and adapted the system into a measurement of attachment behaviors in romantic relationships (Mikulincer & Shaver, 2007). Hazan and Shaver's questionnaire had poor psychometric properties, so Simpson, Rholes, and Phillips (1996) created a 17-item scale based on Ainsworth's (1989) original theory. In the Simpson et al. study, 90 couples arrived together to the experiment. The mean age of men was 20.10 and 19.03 for women. Couples were required to have been dating for at least three months; mean length of a relationship was 17.03 months. Participants were administered the assessment consisting of items such as "T'm not very comfortable having to depend on other people," "Others often want me to be more intimate than I am," and "I rarely worry about my partner(s) leaving me." Items were

rated on a 7-point Likert-type scale (1 = *Strongly Agree*, 7 = *Strongly Disagree*). Five days later, all couples returned to complete the assessments a second time. Globally, the scale was found to have adequate internal consistency reliability with Cronbach's alpha coefficients of  $\alpha$  = .70 on avoidance and  $\alpha$  =.72 on anxious for men and  $\alpha$  =.74 on avoidance and  $\alpha$  =.76 on anxiety for women (Mikulincer & Shaver, 2007). The AAQ was found to have excellent divergent validity with the Adult Attachment Interview, which was originally designed by Ainsworth (Simpson, Rholes, Orina, & Grich, 2002).

The Adult Attachment Scale (AAS) developed by Collins and Reed (1990) incorporates items related to trusting in one's partner to be there in troubled times and how one would react to being separated from one's partner. Participants in this study were 406 undergraduate students, 206 women and 184 men. Ages ranged from 17 to 37 with a mean age of 18.8. The developers of the 18-item inventory reported alpha coefficients of  $\alpha$  = .52 to .75. Items were rated on a 5-point Likert-type scale ranging from "not at all characteristic of me" to "very characteristic of me." A retest two months later yielded a range of  $\alpha$  = .52 to .71. Revision of this scale (Collins, 1996) found alpha coefficients ranging from  $\alpha$  = .78 to .85 by changing the wording on several items and removing two items that asked the participant about wanting to "merge" with a partner and replacing them with items regarding ambivalence about the relationship (Mikulincer & Shaver, 2007). This measure has been found to have convergent validity (*r* = .74) with other measures of attachment (Brennan et al., 1998).

The Attachment Style Questionnaire (ASQ) designed by Feeney, Noller, and Hanrahan (1994) aimed to measure attachment to significant others using language that was less romantic-based. Participants in this study were 374 undergraduate students, 162 men, 212 women. Ages ranged from 17 to 58 with two-thirds of the participants being between 17 and 19 years old. This measure has 40 items that load on five subscales assessing lack of confidence in self and others, discomfort with closeness, need for approval from others, preoccupation with relationships, and viewing the relationship as secondary to other issues in life. The items are rated on a 6-point Likert-type scale (Mikulincer & Shaver, 2007). The reliability on the five subscales was found to have alpha coefficients ranging from r = .76 to .84 with test-retest coefficients of r = .67 to .78 after 10 weeks (Feeney et al., 1994). A factor analytic study by Brennan et al. (1998) found correlates on the subscales with discomfort with closeness (r = .90) with avoidant attachment as well as viewing the relationship as secondary with avoidant attachment (r =.61). Karantzas, Feeney, and Wilkinson (2001) found evidence of construct validity by means of a factor analysis in this measure (r's > .60).

Bartholomew (1990) designed the Relationship Questionnaire (RQ), which assessed characteristics of anxious and avoidant attachment with peers, that loaded on attachment styles subscales of *secure* (low in anxiety and avoidance), *fearful* (high in anxiety and avoidance), *preoccupied* (high in anxiety, low in avoidance), and *dismissing* (low in anxiety, high in avoidance) on a 5-point Likert-type scale (Mikulincer & Shaver, 2007). The prototype of this measure asked participants to rate certain phrases that they believed most accurately described them (Hazan & Shaver, 1987). Participants were solicited through a newspaper that allowed people to mail in a response questionnaire. Responses were received from 620 individuals, of whom 205 were men and 415 were women. Ages of participants ranged from 14 to 82 with a median age of 34 and a mean age of 36. Researchers utilized these data in both a categorical and continuous manner, and found internal consistency kappas of approximately .35 with test-retest *r*'s of approximately .50 over a two-week period. Convergent validity on this measure was found to range from .34-.50 in a study with undergraduate students (Griffin & Bartholomew, 1994a). Also using Hazan and Shaver's (1987) theory, Griffin and Bartholomew (1994b) created a more sophisticated 30-item measure, the Relationship Style Questionnaire (RSQ) (Mikulincer & Shaver, 2007), compared to the 4-item RQ. The RSQ yielded a somewhat higher degree of reliability overall because it contained more items, but the internal reliability coefficients on the subscales were still low.

Finally, the Experiences in Close Relationships (ECR) scale was developed by Brennan et al. (1998) to measure the anxious and avoidant styles based on Ainsworth et al.'s (1978) coding scales. This measure consists of 36 items—18 items loading on an anxious attachment subscale, and the other 18 loading on an avoidant attachment subscale using a 7-point Likert-type scale. A study of this measure with adults found internal consistency alpha coefficients of approximately  $\alpha = .90$  with test-retest reliability coefficients ranging from r = .50 to .75, depending on the time interval (Mikulincer & Shaver, 2007). Predictive validity on this instrument produced r's of around .50 (Sibley, Fisher, & Liu, 2005). This measure was revised by Fraley, Waller, and Brennan (2000) by accessing the original pool of 323 items from which the original assessment was created and conducting an exploratory factor analysis and selected the 36 items that were more highly aligned with the two dimensions of anxious and avoidant in order to better align the instrument with the theory on which it was based. Studies of the revised measure found test-retest reliability over a six-week interval of r = .86 (Sibley & Liu, 2004) and internal consistency estimates with Cronbach's alpha of  $\alpha = .93$  on the anxiety

subscale and  $\alpha = .94$  on the avoidance subscale, with evidence of convergent validity with the RQ of r = .86 on the anxiety subscale and r = .64 on the avoidant subscale (Sibley, Fischer, & Liu, 2005). Participants in this study were 197 undergraduate students, 34 men and 104 women (ages: M = 21.78, SD = 5.71).

Table 1

	# of		Avoidant	Anxious	
	Items	Туре	Attachment	Attachment	Validity
Adult Attachment Questionnaire (AAQ)	17	7-point Likert- type	Internal consistency: 0.70 - men 0.72 - women	Internal consistency: 0.72 - men 0.76 - women	Strong convergent with AAI
Adult Attachment Style –revised (AAS-R)	18	5-point Likert-type	Two-month test-retest 0.78	Two-month test-retest 0.85	Convergent validity 0.74
Attachment Style Questionnaire (ASQ)	40	6-point Likert-type	10-week test- retest 0.67-0.78	10-week test- retest 0.67-0.78	Concurrent validity .60
Relationship Style Questionnaire (RSQ)	30	5-point Likert-type	Internal consistency 0.50	Internal consistency 0.50	Convergent validity 0.34-0.50
Experiences in Close Relationships (ECR-R)	36	7-point Likert-type	Six-week interval test- retest 0.86	Six-week interval test- retest 0.86	Convergent validity 0.64-0.86

Reliability and Validity of Measures of Attachment Style

The current study utilized the Experiences in Close Relationships-Revised scale because, ECR-R has demonstrated the most robust reliability and validity. Additionally, the ECR-R was selected due to it being consistent with the theory posited from the work of Ainsworth and Bowlby.

### Love

Love exists on many different planes across varying relationships. It may take on a different meaning and a different look depending upon who is involved in the relationship. As an abstract entity, it may be difficult to describe love, especially since there are diverse manifestations of love. Lee (1988) provided a description of three primary styles and three secondary styles of love in order to better understand the experiences people have in loving relationships. The first primary style is *Eros*, or erotic love, that includes ideas of love at first sight. *Storge* is a style of love that occurs in close friendships Lee described as "love without fever or folly" (p. 43). *Ludus* is the third style, and its name comes from the Latin word meaning "play" or "game" (Lee, 1988). The person with this style of love is not particular about the mate he or she obtains, but is rather interested in exploring the options of potential others. This style may be seen as playing games or playing the field.

The secondary love styles are a combination of two of the primary love styles. *Mania* is the first of the secondary styles; it is a love that is very possessive and controlling. The lover with this style may recognize the intense urge to be with and control his or her partner and is able to repress some of these feelings to avoid scaring off his or her mate. Mania is a combination of *eros* and *ludus*. With manic love, the lover may not feel a close friendship with his or her partner, but is obsessed with the excitement of being with the significant other. *Pragma* is a conscientious love style that is rational about whom to love, when to love, and the purpose of the loving relationship. This style of love occurs with individuals who are looking for the most compatible mate and often includes seeking a partner with the same religion, socioeconomic status, family background, education, desire for children, and so forth. This type of love tends to be more of a combination between *ludus* and *storge*—friendship is central to the relationship, but the individual with this style of love is also willing to continue playing the field to find the best fit in a mate. Finally, *agape* love is most commonly associated with divine love, especially in relation to the Christian faith (Lee, 1988). This type of love is selfless, and the act of loving is considered to be a duty. *Agape* is a combination of *eros* due to the passionate dedication that may be seen in clerics as a passion or duty to God, and *storge* for the platonic style of love that can remove the erotic sense of love that accompanies *eros*.

Sternberg (1988) described his triangular theory of love as akin to Lee's (1988) theory. Sternberg's theory took the idea of different love styles and drew out three different components that contributed to each: *commitment, intimacy, and passion*. Commitment is a decision that involves committing to love a partner in the short-term and to make considerable effort to maintain the commitment in the long-run. Intimacy involves feelings of connectedness and bonding with one's partner. Passion is the component that results in romance, sexual attraction, and sexual behaviors. Taken alone or combined with one another, these components may be used to describe different love relationships (see Figure 3).

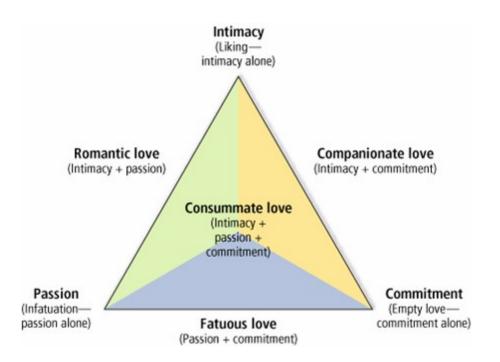


Figure 3. Triangular theory of love (Sternberg, 1988).

Wojciszke's (2002) work supports the various components of love as described by Sternberg (1988) and provides evidence for how varying degrees of commitment, intimacy, and passion manifest in different types of relationships across time. While no two romantic relationships are exactly the same, a six-stage model proposing the progression of love has been posited by Wojciszke (2002). The first stage is falling in love, which consists of passion. The romantic beginning occurs as intimacy begins to be introduced in the relationship. In instances where the passion is no longer present, companionate love occurs. Wojciszke (2002) refers to a relationship that is reduced to commitment only as empty love. Finally, dissolution occurs when the commitment component is also lost. Wojciszke tested this theory with 972 individuals and found that the duration of the relationship could be predicted based on the level of passion and intimacy (but not commitment) along with relationship satisfaction. Sternberg's components of love—commitment, intimacy, and passion specifically inform how issues related to secure and insecure attachment styles impact a global experience of love among different people. Complete love is what Sternberg (1988) refers to as commensurate love and occurs when commitment enters the relationship. As a relationship begins to lower in one or more of the components of love, the relationship may regress into companionate love, empty love, or dissolution.

# Commitment

One of the main defining aspects of commitment is willingness to sacrifice potential other mates once a relationship begins. One study found that attention to potential other mates was the greatest predictor of relationship failure (Miller, 1997). Participants completed a series of surveys intended to measure relationship commitment and the amount of attention each individual directed to alternative potential others. It was found that the more attention to alternative partners reported predicted the termination of the relationship within two months of the completion of the surveys (F = -0.48, F(1, 162)= 17.09, p < .01.). This study provided a more concrete definition to commitment individuals who are more willing to sacrifice potential other mates tend to stay in relationships longer than those who are not willing to devote their attention to their partners.

More modern trends of coupling and marriage of family life cycle development have been occurring later in life than in past generations. Some research has emerged examining the high divorce rates in modern society and how this is impacting young adults' view of marriage. A study conducted by Muraco and Curran (2012) investigated adults' perceptions of marriage and reasons to delay marriage among individuals who had been in a romantic relationship for a minimum of six weeks. The researchers found that high commitment and high love were predictive of fewer doubts of whether or not the relationship would last. No significant difference was found between gender and reasons to delay marriage.

This shift in individuals putting off marriage until a later age has been examined by psychologists and sociologists to understand how young adults today experience love relationships. Implementing a feeling of control in a young individual's life has yielded results indicating satisfaction with one's choices. Schindler and Tomasik (2010) conducted an experiment in which college students completed online surveys measuring the satisfaction with their relationships as well as their decisiveness of choosing a major from intake of the student throughout the entire experimental study. Participants began the study between August, 2006, and April, 2007, and all data collection was completed by August, 2007. The college major portion of the survey was completed monthly and contained questions pertaining to decisions surrounding declaring a major, reasons the major was selected, and satisfaction with the choice of the major. The romantic partner satisfaction survey was completed weekly and included questions regarding level of commitment to one's partner as well as relationship satisfaction. It was found that college-aged individuals who had more intentionality in declaring a major and beginning to establish a career path while still in college tended to have higher levels of satisfaction with their careers than peers who did not. Similarly, students who were intentional in mate selection tended to be happier with their mate. Commitment, whether it came to being dedicated to one's career or to one's partner, seemed to indicate satisfaction with decisions that were made.

Alternatively, Rauer, Pettit, Lansford, Bates, and Dodge (2013) described the social construct of marriage in previous generations as a rite of passage, one that commonly accompanied entrance into adulthood which occurred when children were individuated from their families of origin. The recent trend for young adults to delay entering into marriage as early as previous generations may not be a lack of readiness to commit to romantic partners, but desire to develop professional careers on their own (Rauer et al., 2013).

Another study (Weigel, 2007) considered how children of divorce perceived commitment in their relationships as adults. Children of unhappy and divorced parents reported receiving messages that marriage and committed relationships were not necessarily permanent, that romantic partners were not to be completely trusted, that he or she should enter any romantic relationship cautiously, and other messages that communicated the dangers of entering a committed romantic relationship (Weigel, 2007).

Commitment has been found to be a complex development of emotional connection in relationships. External variables, such as family of origin, society, and peer coupling, correlate with trends in individual decisions to commit. Similarly, internal variables, such as willingness to self-sacrifice and perceived ability to make independent choices, also affect the decision to commit or not. The combination of these variables explain the process of commitment.

# Intimacy

The word intimate comes from the Latin work *intimus*, meaning "inner most" (Hatfield, 1988). It has been defined as the emotional and behavioral interdependence of people in a relationship that can be considered the friendship piece of love (Levinger,

1988). As dyads grow in intimacy, each person is willing to reveal personal thoughts and feelings to one another (Hatfield, 1988). This is a reciprocal process in which each person is also attentive to the needs of the other as personal histories, values, fears, and hopes are shared. As a result, each member of the pair feels affectively close to one another, cares deeply for one another, and seeks to be physically close to each other.

Sternberg and Grajek (1984) specified 10 signs of intimacy including a desire to contribute to the well-being of one's partner, sharing happy events and memories with the loved one, having a high regard for the partner, feeling as though one can rely on the partner in trying times, having a mutual understanding of one another, sharing possessions and one's physical self with the partner, obtaining emotional support from the partner, providing emotional support to the partner, communicating intimately with the partner, and highly valuing the life of the partner. The component of intimacy has been examined by Sprecher and Hendrick (2004) with regard to self-disclosure among couples in committed relationships. These researchers found that individuals who self-disclosed more frequently not only had a positive association with intimacy, but also with commitment, reiterating Sternberg's theory that there is a positive interaction among the components of love.

Sternberg (1986) originally posited that intimacy and passion may go hand in hand. Some relationships may quickly develop passion. Once the passion is established, the desire to be physically close to one another increases and leads the couple's increasing desire to be emotionally close, which is a piece of the relationship that comes with intimacy. Other relationships, such as those that begin as friendships, may start off

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with intimacy, later develop into mutual sexual attraction, and passion is born into the relationship.

### Passion

Passion is an intense psychological and physiological urge to be close to another person (Levinger, 1988). In romantic relationships, it is sexual attraction; it is also the zealousness that a religious person may feel toward God or a parent may feel about wanting to always be close to his or her child. It may also manifest as obsessive, possessive, jealous, or an impulse to be in control of one's significant other. Passion may inspire pure excitement about a partner; conversely, it may bring about despair when the partner is lost (Hatfield, 1988).

According to Sternberg (1986), individuals have a level of control over the amount of commitment and intimacy they experience in a relationship; these two components involve more intentional decisions about how one interacts with his or her partner. This is not the case with passion. Passion tends to fluctuate, which implies that physical attractiveness, only one aspect of sexual attraction that is also fairly unstable, is not sufficient to engage one's passion for his or her significant other. According to Hatfield and Walster (1981), other aspects of passion include self-esteem, support, warmth, dominance, submission, affection, and self-actualization. These aspects are not addressed simply by the physical attractiveness of one's partner. Instead, it is emotional connection between a couple that satisfies these needs.

Passion is also involved with the motivation to seek out and maintain a partnership, at least until the point of sexual satisfaction (Sternberg, 1986). This motivation helps carry each partner through the beginning stages of a relationship until

commitment and intimacy are also developed and consummate love may occur. The developmental progression of the three components of love often tend to appear in a predictable pattern.

Hill, Blakemore, and Drumm (1997) examined passion among individuals with mutual and unrequited love experiences across four age groups. Unrequited love was defined by these authors as a feeling of love that is felt by one partner, but is not reciprocated by the other partner. They found that men tended to have fewer experiences of reciprocated passionate love experiences between ages 16-20 than did women at the same age; it was also found that men in this age group reported experiencing less passionate love experiences than in other age groups. This indicated that a gender difference of shared feelings of passionate love may occur for individuals at this age.

Another study examining passion considered the sexual aspect of this component. Kaestle and Halpern (2007) found that couples in committed relationships experienced higher degrees of overall satisfaction of relationship quality among those who participated in diverse sexual behaviors.

#### **Measures of Love**

In 1970, Rubin constructed a 26-item scale that supported his theory on the differences between loving and liking in relationships. Participants were 198 undergraduate students. Items on the liking scale pertained to respecting and valuing the opinion of the significant other, looking up to him or her in a moral sense, and finding him or her to pleasurable to be around. Items on the loving scale items described more emotional connections—feeling possessive of the partner, wanting to be physically close to the significant other, and the willingness to sacrifice one's own welfare for the benefit

of the partner. Responses were endorsed on a 9-point Likert-type scale. This scale was shown to have high internal consistency reliability ( $\alpha$  = .84 for women;  $\alpha$  = .86 for men). The loving scale was differentiated by items that Sternberg (1986) would classify as also falling under commitment or passion. Intimacy was highlighted as the component of love that encompasses trust and respect. Self-disclosure was also identified as an aspect of intimacy by Sprecher and Hendrick (2004) that served as a protective factor for the stability of the relationship. A study which yielded evidence for concurrent validity with the Triangular Love Scale (TLS) and Rubin's Love scales of *r*'s ranging from .56 to .76 across the subscales of both measures (Sternberg, 1997).

Hendrick and Hendrick (1986) designed the Love Attitudes Scale (LAS), which assessed love on the six style types described by Lee (1973): *eros, ludus, storge, mania, agape,* and *pragma*. All were found to have internal consistency coefficients of .70 or higher, with the exception of *storge*, which had an alpha coefficient of .62. Hendrick and Hendrick (1986) found criterion validity ranging from -.25 on opposite-valued items (i.e., sexual attraction and *agape*) to .27 on positively-valued items (i.e., sexual attraction and *eros*). Forty-two total items on this measure are on a 5-point Likert-type scale loaded on each subscale. Participants in this study were 807 undergraduate students, 466 men, 341 women. Forty-one percent of participants were age 18 or less, 29% were 19, and 30% were 20 or older.

The Triangular Love Scale (TLS) was developed by Sternberg (1997) to measure experiences of love in terms of commitment, intimacy, and passion. Fifteen items per subscale were rated on a 9-point Likert scale. The internal consistency reliability coefficients on these scales had r's ranging from .79 to .90 across all items. This study also provided evidence for concurrent validity of the TLS with Rubin's (1970) Love scales; *r*'s ranged from .56 to .76. Eighty-four participants in this study were 19 to 62 years old (M = 28, SD = 8). Gender was split in half, 42 men and 42 women. Table 2 presents the reliability and validity of the measures of love.

Table 2

Scale	# of Items	Type of Assessment	Reliability Coefficient	Validity
Rubin Love Scales (RLS)	26	9-point Likert-type	Internal consistency 0.86 - men 0.84 – women	Concurrent validity 0.56 to 0.76
Love Attitudes Scale (LAS)	42	5-point Likert-type	Internal consistency 0.62-0.70 and up	Criterion validity -0.25 to 0.27
Triangular Love Scale (TLS)	45	9-point Likert-type	Internal consistency 0.79-0.90	Concurrent validity 0.56 to 0.76

Reliability and Validity of Measures of Love

### Love and Attachment Style

While both love and attachment style are abstract ideas describing relationships people make with each other, they are different constructs. Attachment style refers to a skill set that an individual utilizes when forming and maintaining interpersonal relationships (Bowlby, 1980). This skill set becomes a pattern that will mold the manner in which the person forms all future relationships. Love is the emotional, cognitive, and behavioral connection that one feels as a result of feeling attached to another person (Sternberg, 1986). Attachment and love are intertwined, but are their own unique psychological phenomena. Main, Kaplan, and Cassidy (1985) found evidence that individuals with insecure attachment styles had different experiences of love than did those with secure attachment. An interview process found those with insecure attachment tended to have more negative experiences and ideas about love, had shorter romantic relationships, and provided more unfavorable descriptions of their childhood relationships with their parents when compared to those with a secure attachment. Individuals with insecure attachment styles also tended to report higher levels of self-doubt and lower levels of being accepting of others.

Feeney and Noller (1990) and Levy and Davis (1998) conducted studies that examined the relational manifestations of love among people with varying attachment styles. Certain attachment styles were significantly associated with the types and components of love defined by both Lee (1988) and Sternberg (1988). Individuals with secure attachment styles exhibited *eros* and *agape* love styles and scored high on commitment, intimacy, and passion. People with avoidant attachment styles exhibited *ludus* love and scored low on commitment, intimacy, and passion. Those with anxiousambivalent attachment styles tended to have *mania* love styles and also scored low on commitment, intimacy, and passion. These data were commensurate with the theoretical predictions of love among people with different attachment styles.

Once individuals reach adulthood, their attachment styles may impact the quality of their love relationships. Sprecher and Fehr (2010) found that adults with secure attachment styles tended to have more compassionate love for their partners. Individuals with avoidant attachment styles had negative associations with compassionate love and felt distressed regarding closeness and dependence to a significant other. No correlation

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was found between compassionate love and anxious attachment styles; however, this may be because those with anxious attachment styles were conflicted in reaction to another individual's emotional needs. These authors concluded that this produced a clash between a person's needs to be cared for and the need for compassion and caretaking of one's partner.

Taking into consideration the deficits experienced by individuals with the insecure anxious and avoidant attachment styles, such as having negative feelings about self or others, Sternberg's (1988) model provides a unique perspective for conceptualizing which components are lacking for people with insecure attachment styles, preventing them from forming consummate relationships that are high in commitment, intimacy, and passion. In fact, Madey and Rodgers (2009) found support for negative correlations between all three components of love with insecure attachment styles. The results also indicated that secure attachment style was a predictor for intimacy and commitment. Those with avoidant attachment styles lacked commitment and intimacy due to feelings of distress when feeling dependent or close to a significant other. People with anxious attachment styles may feel more comfortable with feelings of connectedness that come with the intimacy component, but suffer when it comes to commitment since type of love requires sacrificing one's own needs for those of one's partner. Individuals with anxious attachment styles may also struggle with commitment due to their focus on finding people to take care of them, rather than being responsive to the needs of a partner.

Individuals have a need to feel as valuable as their partners and that his or her partner feels the same equality of value in return (Derrick & Murray, 2007). These

authors examined individuals with anxious and avoidant attachment styles and provided a treatment that reduced the sense of inferiority they had within their consummate relationships. After treatment, participants were able to accept their partners' love and acceptance once feelings of inferiority were reduced. The participants were also able to find more value in their partners post-treatment. Providing this treatment may provide individuals with insecure attachment styles the opportunity to experience consummate relationships in a trusting, egalitarian manner that is more reflective of commensurate relationships among individuals with secure attachment.

How securely an individual attaches to another person may also have to do with how well the individual's needs are being met within that relationship. LaGuardia et al. (2000) examined whether or not attachment style varied within a person across all of his or her relationships. The researchers examined the relationship between secure attachment to six specific people in the participant's life and how well that person's needs were being met in each of the six relationships. The relationships consisted of the participant's four primary attachment figures: mother, father, romantic partner, best friend, and two additional attachment figures-roommate and another adult figure. The needs included how much support was provided by the specific attachment figure to the individual regarding one's autonomy, competence, and to what degree the individual felt he or she could relate to the attachment figure. It was found that overall well-being was positively correlated with secure attachment style toward a certain person (r = .65, n =152, p < .001). This indicated that individuals in supportive, loving, consummate relationships might have a more secure attachment to their specific partner. Individual differences were found among the six attachment figures (F(5, 555) = 21.59, p, <.001)

and in the four primary attachment figures (F(3, 390) = 24.22, p < .001). This indicated that individuals experienced various attachment figures differently, as the three components of love varied between relationships.

Brennan and Shaver (1995) analyzed more specific behaviors of relational interactions with regard to attachment style that directly impacted romantic relationships. The researchers developed scales on seven specific characteristics related to attachment: (a) frustration with partners, (b) proximity-seeking, (c) self-reliance, (d) ambivalence, (e) trust/confidence in others, (f) jealousy/fear of abandonment, and (g) anxious clinging to others. Significant differences in secure and insecure attachment styles were found. The correlations between each attachment style and characteristics are indicated in Table 3. Table 3

	Attachment Style		
Attachment Scale	Avoidant	Anxious	Secure
Frustration with partners	0.39	0.41	-0.42
Proximity-seeking	-0.52	0.13	0.28
Self-reliance	0.44	0.13	-0.48
Ambivalence	0.64	0.18	-0.34
Trust/confidence in others	-0.58	-0.20	0.57
Jealousy/fear of abandonment	0.05	0.53	-0.34
Anxious clinging to partners	0.16	0.57	-0.39

Characteristics of Attachment Style

Individuals with avoidant attachment styles endorsed items that were positively and significantly correlated with Frustration with Partners, Self-reliance, and Ambivalence; they had negative correlations with Proximity-Seeking and Trust/Confidence in Others. Those with anxious attachment styles endorsed items that were positively correlated with Frustration with Partners, Jealousy/Fear of Abandonment, and Anxious Clinging to Partners and negatively correlated with Trust/Confidence in Others. People with secure attachments had the highest positive correlations with items loading on the Proximity-Seeking and Trust/Confidence in Other scales and negatively correlated with Frustration with Partners, Self-reliance, Ambivalence, Jealousy/Fear of Abandonment, and Anxious Clinging to Partners. These data are commensurate with previous theoretical descriptions of characteristics present with varying attachment styles (Ainsworth & Wittig, 1969; Bowlby, 1969/1982). The characteristics of attachment styles align with components of love. For example, secure attachment styles exhibit trust of needs being met, a quality of intimacy, feeling a desire to be physically close to the attachment figure, a quality of passion, and desire to seek emotionally safety from the specific attachment figure, a quality of commitment.

According to Stephan and Bachman (1999), people in secure relationships prefer to engage in sexual activity within monogamous, committed relationships. Birnbaum (2010) conceptualized this relationship by examining the characteristics of people with secure attachment styles. He found that individuals with secure attachment styles tended to have more positive appraisals of self and others, which allowed for greater levels of intimacy and satisfaction of sexual interactions. The results indicated a positive relationship between sexual satisfaction and secure attachment in a monogamous relationship. As levels of sexual satisfaction and secure attachment between partners increased, the levels of passion, intimacy, and commitment also tended to increase.

The emphasis an individual places on each component of love tends to vary among attachment styles. Mikulincer and Erev (1991) measured attachment styles of each individual within a couple. The participants then completed a questionnaire regarding perceptions of actual and ideal aspects of a relationship. The results indicated that individuals with secure attachment styles placed a higher importance on the component of intimacy. Participants with avoidant attachment styles stressed intimacy and commitment as more important than did those with anxious-ambivalent attachment styles; however, both of these insecure attachment styles rated all three components lower than did participants with secure attachment.

Similar results were found in a study conducted by Pistole and Clark (1995). In their study, participants were measured on their attachment styles in relation to various aspects of consummate love. It was found that people with secure attachment styles reported a higher level satisfaction, fewer costs, and higher commitment in their relationships than did those with insecure attachment styles. Among the insecure styles of attachment, those with avoidant attachment styles reported less investments and those with anxious-ambivalent attachment styles had the most costs.

Many studies found that attachment styles had a direct relationship with commitment and intimacy, but less attention was given to attachment style and passion. This matter was addressed by considering sexual experiences of people with various attachment styles. Birnbaum, Reis, Mikulincer, Gillath, and Orpaz (2006) conducted a study in which individuals were asked about sexual ideation and behavior; they also completed an attachment style measure. The results indicated that anxious attachment augmented the effects of positive and negative sexual behavior on relationship exchanges, whereas avoidant attachment subdued the positive relational effect of sexual activity and the damaging interpersonal effects of negative sexual relations. Additionally, it was found that individuals with anxious attachment styles tended to be more ambivalent about sexual experiences while those with avoidant attachments had more apprehensive and aversive sexual behavior and cognitive processes. Having an anxious or avoidant attachment style might preemptively place a couple at a disadvantage for their relationship surviving. A related study found that individuals with insecure attachment styles had more difficulty with sexual communication with their partners and lower sexual satisfaction than did people with secure attachments (Davis et al., 2006).

With regard to maintaining all three components in a consummate relationship, passion may be the most relevant for a couple to make an effort in sustaining. According to Sternberg (1986), passion tends to fluctuate and is more fleeting than commitment or intimacy; thus, it may take more effort from a couple to keep this part of their relationship intact. Although sex does not fully encompass everything about the component of passion, it is an appropriate starting point in assessing passion until further empirical data are available.

#### Forgiveness

Most relationships encounter periods in which trust is ruptured and in need of repair. Forgiveness is the psychological phenomenon that allows this repair and restores the relationship to the condition it was prior to the offense occurring. But, how or why is forgiveness actually achieved? Research indicates that interventions focused on promoting forgiveness yielded higher levels of forgiveness than no interventions at all (Cavell, 2003; Deshea, 2003; Enright & Coyle, 1998; McCullough, 2000; Worthington, 2001). A meta-analysis of 27 studies on forgiveness focused on group interventions (Wade, Worthington, & Meyer, 2005) designed to help people forgive. Analyses of the outcome data reported on the level of decreased unforgiveness or increased forgiveness. This meta-analysis indicated that forgiveness interventions had a positive impact on therapy. Treatment groups had significantly more improvement in levels of forgiveness (average effect size = 0.56) than no treatment (average effect size = 0.10) and placebo treatment groups (average effect size = 0.26). Several theories and interventions elucidated how the process of forgiveness progressed including theory based in evolution theory and models of process forgiveness and decisional forgiveness (Worthington, 2006).

## **Evolutionary Lens**

Forgiveness is often revered as a virtue, moral value, or even divine action that speaks to the admirable character of a person who is willing to forgive. However, when considering the question of why individuals forgive, it is sensible to also consider why individuals do not forgive. On the opposite end of the spectrum from forgiveness is resentment. In defense of forgiveness, Murphy (2005) posits that forgiveness may be hastily provided, which results in the wrongful compromise of one's own values. By withholding forgiveness and harboring resentment, Murphy argues that one maintains self-respect, self-defense, and the larger scale preservation of social and moral standards. Furthermore, refusing to forgive is not a spiteful act, but is a just act that brings attention to the fact that a wrong has been committed and should not be so easily glazed over. This is not to say that one who commits an offense is a bad person or deserves condemnation from society; instead, a person who refuses to forgive is upholding social morals.

Forgiveness has also been a topic in health psychology since it has been found to have an impact on a person's emotional and psychological well-being (Toussaint & Webb, 2005). The direct impact that unforgiveness has on mental health is negative emotions such as rumination, anger, resentment, sadness, anger, anxiety, depression, and fear. When forgiveness is permitted, positive emotions (e.g., elation, joy, relief, and happiness) may replace the negative emotions. This may lead to the indirect effects of increasing social support.

In examining the costs and benefits of forgiveness, De Waal and Pokorny (2005) considered relationships among nonhuman primates. These authors found that reconciliation is a major component of forgiveness. Reconciliation is defined as "a friendly reunion between two former opponents" (De Waal & Pokorny, 2005, p. 17). Reconciliation, being a behavioral action, may or may not accompany forgiveness, which is an internal process. Two people can reconcile without forgiveness, as is the case when calling a truce, but this does not fully repair the relationship. In the case of primates, De Waal and Pokorny found that several species of primates actually had more physical contact after an aggressive act than prior to one. Physical contact ranged from being in closer proximity to one another to more kissing, hugging, and rituals involving the aggressor grasping the hindquarters of the primate toward whom the aggression was aimed. These rituals represent the reconciliation that is hypothesized to repair social relationships and allow primates to live in tribes together after an offense has occurred to ensure the success of the group. As forgiveness is an internal process that cannot be as

readily measured in primates, reconciliation is the external behavior that is often positively correlated with forgiveness that can be measured by studying non-human behavior.

As social cooperation is given so much weight in decisions to reconcile and forgive, cultural components provide more evidence as to how and why forgiveness occurs. Forgiveness in some cultures is seen as a collective process in which the entire group repairs ruptures between people (Sandage & Williamson, 2005). Social forgiveness is a way to maintain boundaries between people through the use of power and control. If the balance of power is lopsided, abusive relationships begin to occur within the culture. Evolutionary aspects are relevant across various cultures and diverse cultures may value forgiveness differently. It is important to highlight both the costs and benefits of forgiveness as perceived by different cultures as forgiveness is a social process.

The way in which an appropriate balance is maintained may vary from culture to culture; some cultures tend to be more collectivistic, while others are individualistic (Sandage & Williamson, 2005). In individualistic societies, an offense may cause damage to an individual's self-esteem, reputation, and self-worth. Individualistic forgiveness also expands into self-forgiveness whereby the person who committed the offense is able to restore his or her own sense of well-being. Collectivistic cultures focus less on the individuals directly involved in the offense and direct more attention to how the offense has impacted the community. Forgiveness is less of an individual decision for one's own well-being, but is a duty to uphold the greater good of society. This process may involve not only the transgressor and the victim, but also third-parties from the community such as community leaders, clergy, and family members who may

incorporate rituals or traditions that provide a symbolic representation of forgiveness that communicates the restoration of harmony within the group to all members of the community.

Some differences are clear across cultures in how the decisions to forgive or not are conceptualized (Sandage & Williamson, 2005). Studies have found that cultures vary in the decision to forgive based on the degree of guilt-laden and reparative-laden language utilized when processing forgiveness, how the offense was perceived as either a violation of justice versus a violation of social norms, and the willingness to forgive based on the level of control the offender had in the situation. Other components that have an impact on a society's perception of forgiveness involve how the culture responds to an offense. While some cultures have appointed figures and governing bodies to carry out consequences to social violations, such as police and court systems, other societies have a closer communal structure of punishing offenses such as social exile.

There is also evidence of commonalities of forgiveness across cultures. Sandage and Williamson (2005) found that collectivistic and individualistic cultures take into account the intention of the offender's action and the sincerity of the offender's apology when deciding whether or not to forgive. An examination of moral development utilizing Kohlberg's theory (Broderick & Blewitt, 2006) has provided evidence that individuals exhibit similar traits when moving through these stages. Kohlberg posited three stages of moral development: *preconventional morality*—individuals make moral decisions based on the punishment and reward systems; *conventional morality*—people make decisions based on the opinions of others and social laws; and *postconventional morality*—people make choices based on universal principles of what is right and wrong (Broderick & Blewitt, 2006). Behavioral cues that may indicate an individual's level of moral development can be observed as less eye contact, using smiles to mask emotions, and increased blood pressure in lower levels of moral development when the individual relays details of the offense than those in the higher developmental stages (Sandage & Williamson, 2005).

Emotional developmental stages of children of all cultures may shed more light on how forgiveness plays a part in the lives of individuals (Denham et al., 2005). Once children become old enough to attend school, their social skills begin to sharpen and heighten and start the shift from egocentricity to understanding the importance of interpersonal relationships with peers. Children begin to feel more guilt, shame, embarrassment, remorse, and empathy. Upon entering middle school, a child's friends continue to grow in importance. At this stage, children are more likely to intentionally hurt others physically and emotionally. Children attempt to learn the balance between maintaining close relationships while distancing themselves from harmful ones. As this continues, close friendships in smaller groups or pairs form, leaving the child in a position to learn to repair a rupture within their close group of friends.

In examining how children forgive, Denham et al. (2005) utilized parents, teachers, and children to report on forgiveness with their family and social systems. Children in this study read about a transgression that included information on the emotional, motivational, and cognitive experiences of the characters in the story. The researchers found that children were more likely to forgive when the transgressor experienced remorse, felt guilty, or when the offense was an accident. Children were less likely to forgive when the transgression was intentional or the transgressor made excuses as to why he or she caused the offense. These data are congruent with how adults report their willingness to forgive.

# **Process Models**

Human beings are continuously engaged in relationships with one another that are governed by social norms. From time to time, these norms will be violated, causing emotional pain to others with whom the transgressor is close. Process models of forgiveness describe stages through which a victim goes when forgiving including cognitive, emotional, and behavioral actions taken (Strelan & Covic, 2006). These models describe how forgiveness occurs through stages and how each stage builds from a previous stage. Throughout these stages, there is generally an experience of the pain of the offense, negative consequences occur, an acknowledgement that the consequences are not benefiting the relationship, a decision to forgive, empathy is felt, and forgiveness can be provided as the individual progresses through the stages. Enright and the Human Development Study Group (1991) developed a process model of forgiveness that describes forgiveness as movement through stages; however, this model acknowledges that the process of forgiveness is similar to the process of grief since every individual will move through the stages differently. Forgiveness is not a linear process; some people may skip some steps, while others may revisit stages several times before reaching forgiveness. These stages include feeling hurt, angry, hateful, and resentful. The offender may feel shame or guilt or obsessively ruminate on the offending event. As victims move through the stages, they acknowledge they have been harmed in some way by the event; whereas the person who committed the transgression remains unaffected. The victim will move from feeling as though the world is unjust to realizing that the

current coping skills he or she is using are not working. At this point, the commitment to forgive becomes an intentional decision. Once the victim has reached this stage, he or she will be open to therapeutic interventions to change through forgiveness.

Hebl and Enright (1993) laid the foundation for this theory when working with older female adults. These researchers designed a group intervention program detailing eight sessions with structured content to enable clients to change. A sample of 204 women participated in weekly 1-hour treatment or control groups. Treatment groups followed a manualized intervention structure. All groups were facilitated by the same group leader. The treatment group participated in groups that focused on defining forgiveness in the first session, exploring anger in the second session, acknowledging hurt in the third, committing to forgiving in the fourth, developing empathy for the offender, reframing the event in the fifth, recognizing the need for one to receive forgiveness from others in the sixth, accepting pain on behalf of the offender in the seventh, and finally working to release negative emotions in the eighth. The control group met to discuss various topics unrelated to forgiveness and did not involve therapeutic interventions. Discussion topics included homelessness, morals of youth, nursing home care, influence of older adults on society, social impacts of drug abuse, attitudes about growing older, and family conflict. All participants completed the Psychological Profile of Forgiveness Scale pre- and post-treatment, which addressed the various stages of forgiveness described by the process model. The results indicated that the experimental group had a significantly increased levels of forgiveness (t = 1.75[critical value = 1.717], df = 22, p < .05) as compared to the control group. The results of this study resulted in a 17-step theory of forgiveness Hebl and Enright developed to

describe various stages people might go through to process forgiveness. More recent research has modified this theory into a 20-step theory (Enright & Fitzgibbons, 2000).

Baskin and Enright (2004) conducted a meta-analysis of nine studies employing process models of forgiveness and found that interventions utilizing this theory increased forgiveness (average effect size = 0.83) and psychological well-being (average effect size = 1.66) for individuals and positive forgiveness (average effect size = 1.66) and psychological well-being (average effect size = 1.42) in groups.

Other researchers have developed process models of forgiveness that describe individuals moving through stages in the process of forgiveness. Rusbult, Hannon, Stocker, and Finkel (2005) examined a series of studies on forgiveness and found three steps through which people move when forgiving that aid in understanding the psychological process of mending a hurt in a relationship: the way in which both the transgressor and the person against whom the transgression was committed react to the offense, the psychological transformation of forgiving, and the repair of the relationship.

Typical initial reactions a victim has to an offense are negative emotions of pain, anxiety, anger, sadness, and resentment (McCullough, 2008). Accompanied by these negative emotions are negative cognitions of confusion over trying to make sense or meaning of the offense, ruminating on the transgression, and blaming the transgressor. These lead the victim to withhold forgiveness, hold a grudge against the transgressor, avoid the transgressor, and demand retribution for the transgression. The negative emotions, thoughts, and behaviors tend to be more intense when the victim is more hostile, has less empathy, less patience for the transgression, high self-control, and has an external locus of control. The reaction also tends to be stronger immediately following the event and then lessens in strength over time.

Those who have committed the offense feel guilt or shame, remorse, and sadness surrounding violating the trust of a significant other, neglecting his or her partner, or violating a social or interpersonal norm (McCullough, 2008; Rusbult et al., 2005; Worthington, 2006). Negative thoughts experienced by the perpetrator circulate around the urge to confess the transgression, obsessive thinking about the victim, and a pressing desire to apologize and make amends.

Interactions between the victim and perpetrator after the offense occurs can make the forgiving process more difficult. Data indicate that victims tend to feel the offense is more severe than does the transgressor (Rusbult et al., 2005); however, some variables may moderate this relationship; e.g., personal dispositions, the type of transgression, and the relationship between the transgressor and the victim. If the victim takes action on the negative thoughts and feelings he or she is experiencing such as seeking revenge, blaming the perpetrator, or exaggerating the damage the offense had to the relationship to a greater degree than what the transgressor believes is reasonable, the transgressor will, in turn, become defensive, withhold an apology, and will be less motivated to make repair attempts to the relationship.

Once the forgiveness process begins, several components can contribute to whether or not the relationship will be repaired, the extent to which it will be repaired, and the time it will take to be repaired (Malcolm & Greenberg, 2000; McCullough, Pargament & Thorenson, 2000). The restraint the victim feels is defined as the immediate feelings he or she experiences immediately following the offense that provide an impulse to seek revenge. The time following the restraint is referred to as forbearance, which involves making meaning of the offense. The larger scale of forgiveness over an indefinite amount of time is extended forgiveness, which is dependent upon the degree of commitment and empathy the victim has toward the perpetrator. The restraint is directly related to the severity of the offense, the forbearance period is dependent on the restraint, and the extended forgiveness is dependent on the forbearance.

Actions that may be taken by the perpetrator to ask for forgiveness involve several components as well. Research has found that a transgressor is more likely to ask for forgiveness if he or she perceives the state of the relationship as high in trust and commitment prior to when the offense was committed (Rusbult et al., 2005). Because the strength of the relationship before the transgression happened may lead the transgressor to communicate his or her thoughts and feelings around the event to the victim, which increases the likelihood the victim will feel empathy. This leads both individuals to replace negative emotions with positive feelings. Once the victim begins to feel empathy, forgiveness is more likely when the transgressor returns empathy for the victim by validating his or her feelings of betrayal and provides a genuine apology, rather than making excuses as to why the offense occurred. Finally, the perpetrator accepts responsibility for the offense, expresses desire to change behavior to prevent future transgressions, and expresses commitment to making amends for what has already occurred.

Once an apology has been made, some issues may go into whether or not the relationship is repaired or the degree it can be restored to the condition it was prior to the offense (McCullough, 2008; Rusbult et al., 2005). Data indicate that a male partner's

desire to seek vengeance is negatively associated with relational repair, whereas a female partner's forgiveness is positively associated with conflict-resolution. The repair is also more likely if the dyad begins taking action to increase prosocial behaviors after forgiveness has occurred; e.g., willingness to sacrifice and cooperate with one another. The greater degree to which partners commit to positive future actions, the more likely they will be to reconcile and repair the relationship.

Worthington and other researchers have focused on the emotional aspect of the process model to develop a theory of emotion-focused forgiveness (Worthington, 2000; Worthington, Berry, & Parrott, 2001; Worthington & Wade, 1999). When people experience an injustice, they tend to feel a threat of stress and harbor feelings of resentment. Worthington (2003) described the injustice gap as the space between the way in which a person would like to correct the sense of injustice felt following a transgression and how the individual currently feels about the event. Worthington (2001) developed the REACH model of forgiveness interventions that included the individual against whom the offense was committed recalling (R) the pain of the event, developing empathy (E) for the transgressor, giving a gift of forgiveness altruistically (A) to the transgressor, committing (C) to forgiveness, and holding (H) on to the commitment to forgive.

## **Decision Models**

Many theories of forgiveness posit that forgiveness occurs through a progression of cognitive actions based on the human desire for justice to be served when an offense occurs. Decision-oriented forgiveness states that forgiveness is a matter of the victim willfully releasing the offender from negative feelings (DiBlasio, 1998). It also involves a decision to no longer seek retribution for the transgression. Baskin and Enright (2004) described the decision-based model as not resolving negative feelings but the choice of the forgiver to not allow the transgression to dominate the relationship. While forgiveness is an emotion-laden experience, it is guided by cognition. Studies of offenses such as incest (Freedman & Enright, 1996), men whose partners had aborted a child (Coyle & Enright, 1997), and interpersonal relationship injuries where the victim wanted to forgive, but had previously been unable to do so (McCullough, Worthington, & Rachal, 1997) have found that the victim was flooded with feelings of anger, resentment, and sadness; at the same time, he or she was pulled in the other direction of love and connectedness to the perpetrator. The decision to forgive is the victim's choice to focus on the love, rather than the resentment in the relationship. This does not mean the transgression is forgotten and that all pain falls by the wayside; rather, it is an empowered choice by the victim to change the disruption in the relationship.

DiBlasio (1998) described the cognitive process of facilitating forgiveness within families by walking the family members through their interactions and guiding their cognitions. Interventions include empowering the individuals to take control of their emotions and being aware of what others in the system may be feeling, being open to understanding the various viewpoints of the transgression of others, and contracting the family members to commit to forgiveness. From this point, the event is discussed, family members are allowed to state their perspectives of what occurred, and they are able to ask questions of one another about the event. Family members, both perpetrators and victims, share their feelings of hurt and then the family is led to commit to a plan to prevent future transgressions. The person or people in the position to forgive are warned that once forgiveness is granted, vengeance and retribution-seeking is not allowed. The perpetrator then asks for forgiveness in a formal request that may include physical contact such as sitting next to the victim or holding the victim's hand. Finally, a symbolic ceremony of forgiveness is conducted to represent to all family members that forgiveness has occurred; e.g., burying a tangible symbol of the transgression in the ground.

DiBlasio (1998) acknowledged that although the decision to forgive is a cognitive process, it does not follow that hurt emotions will be repaired as a result of deciding to forgive. Baskin and Enright's (2004) meta-analysis confirmed that decision-focused interventions alone do not yield significant results in decision-promoting forgiveness (average effect size = -0.04) or well-being (average effect size = 0.16).

# **Measures of Forgiveness**

McCullough et al. (1998) designed the Transgression-Related Interpersonal Motivation inventory (TRIM) to assess a person's motivation to avoid a person who has harmed him or her and the level or revenge motivation the person feels toward the offender. Participants were 187 volunteers recruited through an undergraduate psychology course, 38 men and 147 women. The overall mean age was 20 years old (median = 19, SD = 4.9). The internal consistency reliability on this measure was r = .90on revenge and ranged between r's of .86-.94 on avoidance (Wade, Worthington, & Haake, 2009). It had demonstrated high construct related validity as measured by the scores on the Avoidance and Revenge subscales being reflective of individuals' intentions to seek revenge or not (McCullough et al., 1998). This study also found that the avoidance and revenge subscales were moderately correlated (r = .50). The Enright Forgiveness Inventory (EFI) (Subkovial, Enright, & Wu, 1992) was created to measure the presence of positive emotions, thoughts, and behaviors as well as the absence of negative emotions, thoughts, and behaviors across a total of 60 items on a 5-point Likert-style scale. Participants were recruited from an undergraduate psychology class. Two hundred thirty-nine participants consisted of 108 men and 131 women with a mean age of 19. Internal consistency reliabilities for all six areas were found to have r's in the high .90s (Subkovial et al., 1995) and interscale correlations range from r = .80 to .87. The EFI is based on a process model of forgiveness.

The Interpersonal Relationship Resolution Scale (IRRS) designed by Hargrave and Sells (1997) assesses areas of pain and forgiveness regarding transgressions from family members (McCullough, Hoyt, & Rachal, 2000). Three hundred eighteen people participated in this study with an age range of 18 to 64 (M = 35, SD = 11.9). Internal consistency reliability on these scales is .79 for the pain scale and .80 for the forgiveness scale (Beckenbach, Schmidt, & Reardon, 2009). A study of the validity of the IRRS (Hargrove & Sells, 1997) found evidence for concurrent validity with the Personal Authority in the Family System Questionnaire, the Relational Ethics Scale, the Fundamental Interpersonal Relations Orientation-Behavior Scale, and the Burns Depression Checklist with *r*'s ranging from .82 to .96 and adequate predictive validity (F (8, 89) = 13.16, p < .01, (p = .000). The reliabilities for the measures of forgiveness are reflected in Table 4.

## Table 4

Measures	# of Items	Type of Assessment	Reliability Coefficient	Validity
Transgression-Related Interpersonal Motivation Inventory (McCullough et al., 1998)	12	5-point Likert- type	Internal Consistency 0.90 - Revenge 0.86-0.94 – Avoidance	Construct validity .50
Enright Forgiveness Inventory (Subkovial, Enright, & Wu, 1992)	60	5-point Likert- type	Internal Consistency High 0.90s	Interscale correlations .8087
Interpersonal Relationship Resolution Scale (Hargrove & Sells, 1997)	44	Yes/No	0.79 - Pain scale 0.80 - Forgiveness	Concurrent validity .8296

# Reliability and Validity of Measures of Forgiveness

# Love and Forgiveness

Love may provide a motivating force to grant forgiveness after a transgression has occurred as the willingness to forgive in close relationships has been found to be positively related with relationship satisfaction (Allemand et al., 2007). Finkel et al. (2002) considered the commitment component of love when exploring the relationship between love and forgiveness. They found that commitment promoted forgiveness because people have a greater interest in the long-term consequences as opposed to the immediate pain withholding forgiveness may cause. The authors also proposed that the potential damage to the interdependence one has with his or her partner would be lost by withholding forgiveness. In their study, the researchers had participants complete commitment questionnaires. The participants then completed a survey probing for forgiveness behaviors and positive emotions after transgressions were recalled from the participant's past with his or her partner as well as imagined transgressions. It was found that those with higher levels of commitment were more willing to forgive.

McCullough et al. (1998) surveyed individuals who had recently experienced an emotional rupture with someone to whom they were close. Some examples included "My boyfriend and I broke up before we went to college. He said we would not date other people for a while, but now he is dating one of my best friends," "My father left my mother, sister, and me," and "One night my boyfriend was drinking a lot, and he said things that hurt my feelings. When I began crying, he hit me so I would shut up, and then he broke up with me" (McCullough et al., 1998, p. 1589). The transgression occurred in the previous 16 weeks. Relationship types ranged from romantic partners, same-sex friends, different-sex friends, relatives, and others such as co-workers, children, and employers. Participants completed measures considering the relational closeness with the partner before and after the offense. The levels of felt closeness were significantly higher before the offense (M = 4.7, SD = 1.86) than after the offense (M = 1.79, SD = 1.26), t(184) = .39, p < .001, d = 1.57. It was also found that the closer the relationship prior to offense, the more likely the transgressed was to accept the transgressor's apology, to have more empathy for the transgressor, and report a higher level of closeness after the offense than those who rated the relationship low in closeness prior to the offense.

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#### **Forgiveness and Attachment Style**

Individuals who do not receive appropriate support and care in childhood develop internal working models grounded in the belief that they cannot rely on others for support, comfort, or that they have been abandoned (Bowlby, 1973, 1980). These internal working models often lead to sadness, depression, and difficulty creating bonds to others (Ainsworth, 1989; Bowlby, 1969/1982). These relational patterns continue into adulthood, and insecure attachment styles tend to lead to poor relationship satisfaction (Mikulincer & Shaver, 2007). Individuals with insecure attachment perceive transgressions seriously and have more difficulty repairing the relationship after an offense occurs (McCullough et al., 1998). On the other hand, Ashy, Mercurio, and Malley-Morrison (2010) found that secure attachment was a significant predictor in willingness to forgive (r = .11, p = .009).

Forgiveness may be the key to bridging insecure attachment style and satisfaction with love relationships. Empirical research supports that deciding to forgive as well as emotional healing are effective methods to relational repair (Baskin & Enright, 2004; Enright & Fitzgibbons, 2000; Rusbult et al., 2005; Worthington, 2000; Worthington et al., 2001; Worthington & Wade, 1999). Forgiveness may be a protective factor in some situations, such as ongoing abuse, where it would not benefit the victim to forgive the transgressor regardless of attachment style. In such circumstances, individuals who withhold forgiveness may be benefiting themselves since the negative emotions that arise from the offense would motivate the individual to leave the relationship to maintain safety (Worthington, 2006). In order to explore how individuals with different attachment styles experience forgiveness, Lawler-Row et al. (2006) read a narrative of betrayal committed by a loved one—either a parent, friend, or romantic partner to participants. The participants were then asked to recall a time when they were betrayed by a loved one. Assessments were completed following the discussion including an attachment measure (Relationship Questionnaire) and a forgiveness measure (Transgression-Related Interpersonal Motivations Inventory). The results indicated that those with secure attachment styles were more forgiving than those with insecure styles (F(1, 104) = 9.59, p < .003).

Although many studies focused on forgiveness among individuals with insecure attachment styles, it was also found that forgiveness among people, in general, is beneficial, regardless of secure versus insecure attachment. Berry and Worthington (2001) found that individuals who had a greater level of forgiving traits also reported higher levels of love in their relationships when imagining a personal offense being committed by a significant other. As noted, individuals who have secure attachment styles also tend to have a greater ability to forgive. Conversely, individuals with insecure attachment styles perceived their partners as also having an insecure attachment style and viewed their partners as unforgiving, even in relationships that were in a stage with high commitment (Vuncannon, 2007).

Greenberg (2002) described how insecurely attached individuals will experience more intense negative emotions, such as fear and anxiety, later in life when attempting to resolve conflicts with significant others. This may lead one or more members of the couple to feel depressed and distant from the other. Woldarsky-Meneses and Greenberg (2010) designed a method of forgiveness-focused treatment to address problems couples

experienced due to insecure attachment in one or more of the members. This treatment consisted of eight couples in which the woman in each couple had been betrayed by her male partner within the past two years. Participants completed pre- and post-treatment assessments including the Enright Forgiveness Scale, the Unfinished Business Scale, and a single item question asking the participant to rate her level of felt forgiveness on a scale of 1 to 5 (1 = not at all, 5 = completely). The therapy sessions were videotaped and viewed by two judges who rated the couples' progression through stages of forgiveness that spanned feeling either hurt or betrayed, expressing emotions to one another, having empathy for each other, the transgressor offering an apology for the offense, and forgiveness being offered. The inter-rater reliability was high (Cohen's Kappa = 0.84). A task analysis was utilized to compare the four couples who reached forgiveness to the other four couples who did not. The researchers concluded that additional research in forgiveness-related interventions for individuals with emotional injuries would help benefit clients with insecure attachment histories. Although people with insecure attachment styles are less likely to develop commensurate love relationships, forgivenessfocused interventions may help those individuals develop healthy interpersonal relationships (Brennan & Shaver, 1995; Sprecher & Fehr, 2010).

#### Summary of Attachment Style, Forgiveness, and Love

The research that has been conducted thus far has indicated that individuals with insecure attachment styles tend to have more difficulty connecting emotionally with others. This may impair romantic relationships when individuals are fearful of being abandoned or not having their emotional needs met, feel as though they cannot trust their partners, and do not feel attractive to their partners. People who view themselves, their partners, and their relationships in this manner may consequently experience low levels commitment, intimacy, and passion due to negative emotions associated with these perspectives. The emotions that may arise from such difficulties in relationships include doubt, fear, anger, sadness, and resentment. Forgiveness may be the emotional resolution between attachment style and relations, as it works to lessen these negative emotions and replace them with feelings of safety, security, trust, and appreciation. To date, research examining the interaction of these three variables is not present in the literature. Additional research supporting forgiveness as a mediating variable between attachment style and adult love relationships would provide valuable data that could enrich the field of couples' therapy by supporting forgiveness as an intervention method. The following chapter will describe the process and methodology of the current study's exploration of forgiveness as a mediating variable between attachment style and love.

# **CHAPTER III**

# **METHODS**

The current study considered the role of forgiveness as a mediating variable between attachment style and adult love relationships. Previous research has indicated low to medium effect sizes between each of these variables, but the interaction between the three variables had not been examined until the present study (Northart & Wright, 2013). This chapter will discuss the recruitment of participants through community organizations, educational institutions, and social networking. The instruments selected in this study were consistent with definitions discussed in the previous chapters and in alignment with research supporting the theory. The research questions investigated included examination of forgiveness as a mediator for both anxious and avoidant attachment styles and each of the components of love, commitment, intimacy, and passion. This chapter will also discuss in detail the procedure of the study as well as the analysis of the data that were conducted. The recruitment and inclusion limitations of participants, description of instruments, the procedure that was followed, and the analysis of the data will be presented in detail.

# **Participants**

Arnett (2000) reported that emerging adulthood tends to appear in individuals between the ages of 18 and 25. Individuals included in this sample were at least 25 years of age; the age of 25 was chosen because it is the age at which one transitions from adolescence into adulthood based on Arnett's model. This was also consistent with other age cutoffs used in research that examined love relationships among adults (McCarthy, 1999; Sprecher & Hendrick, 2004). All participants must currently be in a committed relationship that has been ongoing for a minimum of six months.

Participants completed a demographic form to obtain information regarding their age (specific number in years), gender (male, female, or transgendered), race/ethnicity (Caucasian, Latino/Hispanic, African American, Asian American, Pacific Islander, Indian American, American Indian, or multiracial/multiethnic), current relationship status (casually dating, exclusively dating, living together, engaged, or married), current relationship length (specific number in years and months), and relationship type (heterosexual versus same sex), where the participant heard about the survey, and how important faith is to him or her on a 7-point Likert-type scale (1 = not important at all, 4 = moderately important, 7 = very important). Length of relationship was based on the current relationship upon which the participant was basing his or her answers. Identifiable information was separated from the surveys to protect participant confidentiality.

#### Instruments

The instruments utilized in the current study were consistent with supported theory found in the literature. The three surveys administered took participants an average of 25 to 45 minutes to complete. The brevity of the instruments aided in controlling for testing effects such as participant fatigue. The three surveys were also counter-balanced and randomly administered in different orders among different participants to control for order effects.

# **Triangular Love Scale**

Participants completed a 45-item version of the Triangular Love Scale (TLS). This measure was developed by Sternberg (1986) to assess the three components of love with 15 questions per subscale: *commitment, intimacy,* and *passion*. The TLS asked participants to rate a specific person on a Likert-type scale ranging from 1 (*not at all*) to 9 (*extremely*) on questions concerning various aspects of their relationships. Examples of items included: "I am able to count on \_\_\_\_\_\_ in times of need," "Just seeing

\_\_\_\_\_\_excites me," and "Because of my commitment to \_\_\_\_\_\_\_, I would not let other people come between us." Higher scores reflected a higher degree of the respective component of love experienced by the participant. Sternberg (1986) assigned specific cutoff scores for each subscale classifying a person's level of felt love among each of the components as significantly below average, somewhat below average, average, somewhat above average, and significantly above average scored on each subscale, respectively (*commitment* = 0-85, 86-96, 97-108, 109-120, and 121-131; *intimacy* = 0-93, 94-102, 103-111, 112-120, and 121-19; *passion* = 0-73, 74-85, 86-98, 99-110, and 111-123).

Evidence for construct validity of the Triangular Love Scale (TLS) was provided by Sternberg (1997). Several correlational analyses were run between the three subscales and importance ratings. In order to assess the construct validity of this measure, Sternberg examined the correction item-total correlations, which determined the degree to which an item contributed to the total subscale score, as well as the internalconsistency reliability. The item-total correlations indicated that all except three items rated above r = .30, which was the recommended minimum level for significance. Items that did not meet this minimum standard of r = .30 were excluded from the final revision of the instrument. Internal-consistency reliabilities for items on the intimacy subscale were all at least r = .90, r = .80 for passion, and r = .80 for commitment, with the exception of one item that was r = .79. Importance ratings referred to statements on the TLS that the participant endorsed as being traits that were highly valued in a relationship. Participants endorsed the importance of each item as it pertained to their relationships on a 9-point Likert-type scale (1 = not at all, 9 = extremely). The importance ratings of the relationship were positively correlated with intimacy (r = 0.66), passion (r = 0.77), and commitment (r = 0.92). Correlations were also positive between feelings and actions for intimacy (r = 0.96), passion (r = 0.97), and commitment (r = 0.97).

Evidence for convergent validity was demonstrated by correlating the TLS with Rubin's (1970) Liking and Loving scales (Sternberg, 1997) among adults 18 years and older. With this population, Liking was positively correlated with intimacy (0.68), passion (0.66), and commitment (0.61). Loving was positively correlated with intimacy (0.74), passion (0.79), and commitment (0.65). Overall, the TLS had significantly higher correlations on relationship satisfaction than did the Rubin Liking Scale. The relationship satisfaction questionnaire consisted of eight items on a 9-point Likert-style (1 = not at all, 9 = extremely) questionnaire asking participants to rate their relationship on items describing how happy, close, rewarding, important, good, intimate, passionate, and committed the participant felt with his or her romantic partner (Sternberg, 1997). The Rubin Liking scale had a correlation of 0.36 with the relationship satisfaction scale, and

the Rubin Loving scale had a correlation of 0.59; whereas the TLS subscales correlated relationship satisfaction with intimacy (0.86), passion (0.77), and commitment (0.75).

Acker and Davis (1992) found that commitment was the factor of love that had the highest correlation with relationship satisfaction when compared to the intimacy and passion among adults ages 18 to 68 (M = 383, SD = 9.8). Relationship satisfaction was measured by the same questionnaire utilized in the Sternberg (1997) study described above that had participants rate their satisfaction on how a 9-point Likert-style (1 = not at all, 9 = extremely) questionnaire asking participants to rate their relationship on how happy, close, rewarding, important, good, intimate, passionate, and committed they feel in their relationships. A hierarchical multiple regression found mean beta coefficients of .42 on commitment, .28 on intimacy, and .17 on passion. In this study, the researchers also found that commitment had the highest predictive validity of a relationship surviving, whereas passion tended to have the lowest predictive validity over time in women.

# Experiences in Close Relationships —Revised

Attachment style will be measured with the Experiences in Close Relationships-Revised Scale (Fraley, Waller, & Brennan, 2000). The original Experiences in Close Relationships (ECR) scale was developed by Brennan et al. (1998). It was a 36-item scale to measure individuals' attachment to their romantic partners and was adapted to assess attachment to a specific partner.

The revised version (ECR-R) also consists of 36 items: 18 load on the anxious attachment scale, while the other 18 items load on the avoidant attachment scale. The revision was necessary to ensure that the two dimensions were equally sensitive to

measuring their respective constructs. The original and revised scales are highly correlated (approximately .95) because the revised version contains many of the same items from the original (Mikulincer & Shaver, 2007).

The ECR-R assesses attachment on a dichotomous continuum, with anxious on one end and avoidant on the other, and uses a Likert-type scale that asks participants to respond on a 5-point scale (1 = *disagree strongly*, 5 = agree strongly). Items that load on the avoidant scale include "I feel comfortable sharing my private thoughts and feelings with my partner," "It's not difficult for me to get close to my partner," and "My partner really understands my needs." Items loading on the anxious scale include "I often worry that my partner will not want to stay with me," "I often wish my partner's feelings for me were as strong as my feelings are for him or her," and "My partner only seems to notice me when I'm angry." The two dimensions of attachment are used on a continuum; higher scores on the anxiety and avoidant subscales indicate an insecure attachment, while low scores on these subscales indicate a secure attachment style. Levels on each subscale are measured by mean scores on the two subscales.

The internal consistency reliability coefficient for the ECR-R ranged from r = .93 to .95 on both scales in a sample of 1085 (682 women, 403 men) adult undergraduate students with ages ranging from 16 to 50 (Fraley et al., 2000). An investigation of the validity and reliability of this measure found the internal consistency reliability to be  $\alpha = 0.86$  for anxiety,  $\alpha = 0.81$  for avoidant, and  $\alpha = 0.87$  overall among college students 18 years and older (Lu, Huo, & Gao, 2006). Test-retest reliability over a 3-week interval in this study was found to have *r*'s of 0.82 for anxiety, 0.61 for avoidant, and 0.75 overall.

A factor analysis found that 21.28% of the variance was accounted for by the anxiety subscale, and 11.20% by the avoidant scale.

#### **Enright Forgiveness Inventory**

The Enright Forgiveness Inventory (EFI) (Enright & Rique, 2000/2004) defines forgiveness as the decrease of negative emotions and increasing of positive emotions (Subkovial et al., 1995; Worthington, 2005). This instrument first primes participants by asking several questions regarding how hurt they were by the offense, how long ago the offense occurred, and to briefly describe the event. The measure itself consists of 60 items that are divided into positive and negative experiences. These items are broken down even further into six subscales: positive affect (PA), negative affect (NA), positive behavior (PB), negative behavior (NB), positive cognition (PC), and negative cognition (NC). The items are rated on a 6-point Likert-type scale (1 = strongly disagree to 6 =*strongly agree*). Examples of items include: PA = I've got warm feelings towards him/her, NA = I don't feel loved by him/her, PB = To show him/her friendship, NB = To speak ill of him/her, PC = I think he/she is respectful, and NC = I think he/she is horrible (Oranthinkal, Vansteenwegen, Enright, & Stroobants, 2007). Higher scores indicate a greater willingness to forgive as indicated by forgiving affect, behaviors, and cognitions. Total scores range from 60, indicating a low degree of forgiveness, to 360, which indicates a high degree of forgiveness. The final item on the instrument asks participants to rank the degree to which he or she has forgiven the person who committed the offense on a 5-point Likert-type scale (1 = not at all, 3 = in progress, 5 = complete forgiveness). This score is added to the final score, yielding a final possible score of 360. Subscale scores range from 20 to 120, indicating a presence of positive affect, behaviors, and

cognitions or a high absence of negative affect, behaviors, and cognitions (Enright & Rique, 2004). The current study utilized the total score on the EFI. The EFI also includes an additional five items (Items 61-65) that are pseudo-forgiveness items that indicate denial or condoning of actions. Endorsement of these items indicates that the individual is justifying the transgression he or she has suffered. Scores of 20 and higher on these additional items suggest that the individual is endorsing something other than forgiveness (Enright & Rique, 2004). In the current study, data from all instruments were eliminated from inclusion for participants with scores of 20 or higher in this section. The questionnaire has a final item at the end asking respondents to rate on a 5-point Likert-style scale the degree to which they believe they have forgiven the offending party (1 = not at all, 3 = in progress, 5 = complete forgiveness). This item contributed to the final total score on the EFI.

Test-retest reliability over four weeks with college students ranged from r = 0.67 to 0.91 for the total cognition scale, with r = 0.86 as the stability coefficient for the total EFI scores (Enright & Rique, 2000). Internal consistencies found r's to be in the high .90s (McCullough, 1995; Subkovial et al., 1995). Concurrent validity on the single-item forgiveness scores was found to have positive correlations for affect (r = 0.46), behavior (r = 0.36), cognition (r = 0.40), and total forgiveness (r = 0.46) (Doran, Kalayjian, Toussaint, & DeMucci, 2012).

Administration of the EFI instructs users to avoid using any form of the word "forgive" when administering the instrument, as this primes participants to change their answers to be portrayed in a more positive light (Enright & Rique, 2000/2004). Instead, users are instructed to refer to the instruments as a measure of "attitude." The word

attitude was utilized in both the informed consent and in the directions for completing the EFI.

## Procedure

Prior to data collection, an application for approval to conduct this study from the university Internal Review Board was submitted and approved (see Appendix A). Community organizations and places of worship in the Rocky Mountain region were contacted to inquire about interest of their members participating in the study (see Appendix B). Such organizations were selected in an attempt to contact adults in committed relationships, opposed to more common recruitment procedures for soliciting participation in psychological research, such as undergraduate students. In an effort to gain participation from adults over the age of 25, community organizations were thought to be a more suitable to fit the inclusion criteria for this study. Organizations that expressed interest were visited. Participation in the study implied consent (see Appendices B and C). Paper-and-pencil versions of the instruments were completed at that time (see Appendices D, E, and F). The informed consent listed the potential risks and benefits of participation and asked participants to proceed to the questionnaire if they agreed to participate or to return the survey packet to the researcher if they did not agree to participate. Incentives for participation included entrance into a raffle to win one of four \$25 Visa gift cards. Participants interested in being considered for the raffle completed a separate entry form, with the understanding that their confidentiality could not be guaranteed, but that there was no way to match the data from their questionnaires to those who were identified by winning the raffle.

Adult participants were solicited through community programs and local places of worship. Additional participants were recruited through the graduate school listserv at a Rocky Mountain region university. Finally, snowball sampling through online social networking was utilized. Data collected online was done via email contact and through online survey software (Qualtrics). After the data collection was completed, the information was removed from the Qualtrics site and stored digitally on the university computer of the research chair of this study, protected by rights management software. Identifiable information was separated from the surveys to protect participant confidentiality. To prevent the same participant from completing the survey more than one time, Internet provider numbers (IPNs) were collected upon completion of the surveys. If more than one survey was completed through the same IPN, the researcher intended to discard all data except for the data from the first survey from this IPN; however, this was not necessary. Further, participants were recruited via snowball sampling through Internet networking. Analyses comparing online versus paper-andpencil surveys were intended to be conducted to examine if significant differences between these methodologies; however, all participants completed the surveys online (e.g., Fouladi, McCarthy, & Moller, 2002; Meyerson & Tyron, 2003).

Reminder emails were sent through listservs to individuals contacted via email in order to increase the response rate; reminder emails have been shown to increase response rates in online surveys by 35% (Shih & Fan, 2008). Those agreeing to participate were directed to the survey; those who did not agree to participate received a message thanking them for their time. Participants who completed surveys were offered the incentive to be enrolled in a raffle for one of four \$25 Visa gift cards. To protect confidentiality, online participants were provided a link to a separate website to enter their email addresses to be enrolled in the raffle. This was done to ensure separation of the survey data from the participants' identifiable information.

One final exclusion criterion involves Items 61 through 65 on the EFI. These items serve as a validity screening for forgiveness. A combined score of 20 or higher on these five items indicate the participant is not reporting experiences of forgiveness, but is rather making rationalizations to excuse the offense. As a result, all survey data collected from participants scoring 20 or higher were excluded from the study.

#### Analyses

The statistical analyses were dictated by the research questions designed to examine relationships between attachment style, forgiveness, and love. The research questions are provided below. The preliminary analyses are described, as well as the primary research question with its corresponding statistical analyses.

#### **Research Questions**

- Q1 Does forgiveness mediate the relationship between anxious attachment and commitment in adult love relationships?
- Q2 Does forgiveness mediate the relationship between anxious attachment and intimacy in adult love relationships?
- Q3 Does forgiveness mediate the relationship between anxious attachment and passion, in adult love relationships?
- Q4 Does forgiveness mediate the relationship between avoidant attachment and commitment in adult love relationships?
- Q5 Does forgiveness mediate the relationship between avoidant attachment and intimacy in adult love relationships?
- Q6 Does forgiveness mediate the relationship between avoidant attachment and passion in adult love relationships?

# **Statistical Treatment**

In the present study, attachment style and forgiveness were the predictor or independent variables. Attachment style was assessed by the ECR-R, and forgiveness was assessed by the EFI. Adult love relationships were conceptualized as the outcome variable separately, as measured by subscales of commitment, intimacy, and passion of the TLS.

In order to obtain a medium effect size, Green (1991) recommends a minimum effect size of  $R^2 = .13$ . This formula was utilized in order to determine power, which was set at .8 with an alpha level .05. According to this guideline, at least 85 participants were necessary to obtain sufficient power to address the research questions (L = 6.4 + 1.65m -.05 $m^2$ , where L is an approximation of  $\lambda$  —the amount of variance in the DV that is accounted for by the IV— m equals the number of IVs (3),  $f^2$  equals  $R^2/(1-R^2)$ , and N equals the number of participants needed, which is calculated by  $N \ge L/f^2$ ). The current study attempted to recruit a larger-sample due to the amount of power that may be impacted by the number of statistical tests conducted.

All data were analyzed using Osborne and Waters' (2002) methods for testing assumptions as related to multiple regression procedures. Multiple regression assumes that variables are normally distributed. Therefore, the skewedness kurtosis indicators of histograms were assessed in order to identify outliers (parameters of +/- 3) that may have contributed to a higher chance of committing Type I and II errors. Identified outliers were removed from data calculation in order to determine to what degree they impacted the overall effect size. Outliers were identified by utilizing the least median squares model as described by Rousseeuw and van Zomeren (1990) that is computed by s =

1.4826  $(1 + 5/n - p - 1) \sqrt{M_r}$ , where  $M_r$  is the median of  $r_1^2, ..., r_n^2$ , p is the number of predictors, and n was the number of participants.

Another assumption of multiple regression is that if the relationship between independent and dependent variables are not linear, that could increase the risk of Type II error for the independent variables and Type I error for the dependent variable. The current study detected nonlinear relationships by utilizing residual plots indicating any nonlinearity. Homoscedasticity is also assumed. Homoscedasticity states that there is the same degree of error variance across the distribution of scores. Residual plots were also employed to identify homoscedasticity (Osborne & Waters, 2002).

# Hypotheses based on Research Questions

Based on the review of literature, the research questions were formulated to examine whether or not forgiveness mediates anxious and avoidant attachment styles and love conceptualized across three components of love: commitment, intimacy, and passion.

H1 Forgiveness, as measured by the EFI mediates the effect of anxious attachment, as measured by the ECR-R on commitment, as measured by the TLS.

The procedures developed by Baron and Kenny (1986) were utilized in order to assess the potential mediating relationship of forgiveness between attachment style and love for each of the six hypotheses and research questions. The equations utilized in this model include: *Y* that represents the dependent variable; *X* that represents the independent variable; *M* that represents the mediating variable;  $B_0$ ,  $B_1$ , and  $B_2$  that represent the regression coefficients; and *e* that represents error. According to this model, mediation occurs when: 1. The independent variable attachment style (avoidant or anxious) accounts for significant variance in the dependent variable love (commitment, intimacy, or passion). This is done by calculating  $Y = B_0 + B_1X + e$ . This step indicates that there is an effect that may be mediated.

2. The independent variable (attachment style) accounts for significant variance in the mediator variable (forgiveness). This step involves treating the mediator as if it were an outcome variable. This is calculated by  $M = B_0 + B_1X + e$ .

3. The mediator variable (forgiveness) accounts for significant variance in the dependent variable (love) while controlling for the independent variable (attachment style). This is calculated by  $Y = B_0 + B_1M + e$ . By controlling for the independent variable, the effect of the mediator on the outcome variable was established.

4. The relationship of the independent variable (attachment style) with the dependent variable (love) decreases significantly when controlled for the mediator variable (forgiveness) that is calculated by  $Y = B_0 + B_1X + B_2M + e$ .

The effect of X on Y when controlling for M should be zero in order to establish a complete mediation. The effects in both Steps 3 and 4 are estimated in the same regression equation. A Sobel's Z test was conducted to calculate the significance of the regression coefficients. A visual depiction is provided below to illustrate the four steps, where c indicates the indirect effect and c' indicates the direct effect.

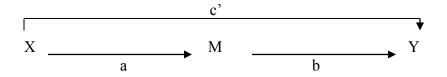


Figure 4. Regression model.

Table 5

Baron Kenny Model of Regression

Step	Analysis		Visual Depiction		
1	Conduct a regression analysis with		С		
	X predicting Y to test for path c alone, $Y = B_0 + B_1X + e$	X		↓ Y	
2	Conduct a regression analysis with		a		
2	X predicting M for path $a, M =$	Х	► M		
	$B_0 + B_1X + e$ Conduct a regression analysis with		b		
3	M predicting $Y$ to test the	М	→ Y		
	significance of path <i>b</i> alone, $Y =$				
	$B_0 + B_1M + e$ Conduct a multiple regression		c'		
4	analysis with X and M		C	+	
	predicting Y, $Y = B_0 + B_1 X +$	Х	М —	→ Y	
	$B_2M + e$			b	

In order to address the first two steps of the Baron Kenny model, two separate bivariate linear regressions were conducted for avoidant and anxious attachment to assess the relationship between attachment style and love as well as attachment style and forgiveness. Beta and *p*-values were reported. For Steps 3 and 4, a multiple regression was conducted with attachment style as a predictor for both forgiveness and love that established forgiveness as a mediating variable.

- H2 Forgiveness, as measured by the EFI mediates the effect of anxious attachment, as measured by the ECR-R on intimacy, as measured by the TLS.
- H3 Forgiveness, as measured by the EFI mediates the effect of anxious attachment, as measured by the ECR-R on passion, as measured by the TLS.
- H4 Forgiveness, as measured by the EFI mediates the effect of avoidant attachment, as measured by the ECR-R on commitment, as measured by the TLS.
- H5 Forgiveness, as measured by the EFI mediates the effect of avoidant attachment, as measured by the ECR-R on intimacy, as measured by the TLS.
- H6 Forgiveness, as measured by the EFI mediates the effect of avoidant attachment, as measured by the ECR-R on passion, as measured by the TLS.

Research Hypotheses 2 through 6 were analyzed utilizing the Baron Kenny model

described to analyze Research Question 1. Each hypothesis assessed forgiveness as a

mediating variable between an attachment style and a component of a love by

considering each possible relationship individually.

A Bonferroni correction factor was conducted with models that yielded the p <

.0083 level of significance (i.e., .05/6 (3 IVs plus 3DVs) = .0083) (Huck, 2012).

Although the Bonferroni correction may increase the chances of a Type II error, it was

implemented in this study in order to address power that may be lost in running the three

bivarate regressions and three multiple regressions.

### Summary

The methodologies of the current study were presented in this chapter.

Descriptions of the data collection processes and the measures utilized were described.

## **CHAPTER IV**

### RESULTS

This chapter outlines the findings of the current study. Included in the outline are demographic information, a description of how missing data were addressed, reliability and validity estimates for each measure, and analysis of data that addresses the research hypotheses.

#### Sample

The total number of surveys that were initiated by potential participants was 122. Fourteen individuals completed the survey, but met the exclusion criteria on the Enright Forgiveness Inventory, and these data were not included in the final analyses. An additional 18 more participants began the survey, but completed 90% or fewer items, and these surveys were also deleted from the analyses. Therefore, a total of 90 participants were included in the final analyses, and 32 were omitted.

Of the 90 participants, two completed the three instruments of the survey, but did not complete the demographic information. Data on the EFI, TLS, and ECR-R from these participants were included in the data analysis, but the demographics from these participants are missing in the reported results. The demographics for the sample are listed in Tables 6 and 7.

# Table 6

Demographic	п	Percentage	
Sex			
Female	66	73.3	
Male	22	24.4	
Race/Ethnicity			
White/Caucasian	80	88.8	
Latino/Hispanic	6	6.6	
Asian American	2	2.2	
Multiracial/Multiethnic	2	2.2	
African American	0	0.0	
American Indian	0	0.0	
Indian American	0	0.0	
Pacific Islander	0	0.0	
Relationship Type			
Heterosexual	82	91.1	
Same-Sex	6	6.6	

Demographics for Sex, Race/Ethnicity, and Relationship Type of Sample\*

\*Two participants did not report demographic information.

# Table 7

Demographic	Range	М	SD	n	Percentage
Age	25-66	46	12.3	88	97.77
Relationship length	6 months - 45 years	12.46 years	11.68 years	88	97.77
Importance of religion/spirituality 1 (not at all important) 2 3 4(moderately important) 5 6 7 (very important)	1-7	4.63	2.28	15 6 9 9 7 7 31	16.6 6.6 10 10 7.7 7.7 34.4

Demographics for Age, Relationship Length, and Importance of Religion/Spirituality of Sample\*

\*Two participants did not report demographic information.

Previous research with the EFI, TLS, and ECR-R have found that there are no significant differences among participants' responses on these instruments based on sex, race and ethnicity, and relationship type (Enright & Rique, 2000/2004; Lu, Huo, & Gao, 2006; Sternberg, 1988). One-tailed *t*-tests were utilized to analyze sex on each of these instruments, and ANOVAs were utilized to analyze race and ethnicity, age, spirituality and relationship type on the data in the current study. These analyses did not find any significant differences based on these demographic variables and how participants responded to the instruments. Most relationships in this study were long-term. Only four participants had been in their relationships for less than 1 year, and seven participants had been in their relationships for S years or less. A high correlation

was found between the age of participants and the length of their relationship (Pearson's r = 0.77). Sixty-five participants chose to participate in the raffle to win one of four \$25 Visa gift cards.

## **Missing Data**

Any survey that was less than 90% complete was excluded from the data analyses. Of the 141 total items on all three surveys, any participants who had 29 or more items missing were omitted from data analyses. None of the included participants approached this threshold. One participant had omitted three items on the EFI, and this was the most skipped items on any single instrument (5% missing). Another participant had a total of seven skipped items across the three surveys (EFI, TLS, and ECR-R), and that was the largest number of omitted items for any one participant (4.7% missing data). For missing data, mean substitution was utilized for surveys with missing data. According to Howell (2007), although this method of handling missing data does not add any new information to the analyses, it does little to alter the correlation coefficient and does not impact the regression coefficient. Seventeen surveys (18.8%) were subjected to mean substitution analysis. The number of missing items on those surveys ranged from one to seven.

#### **Reliability Analysis of Instruments**

Reliability analyses were conducted on the ECR-R on each subscale of anxiety and avoidance. Each subscale contained 18 items. With the present sample, the anxiety subscale was found to have adequate internal consistency reliability (Cronbach's  $\alpha$ ) of .83. The Cronbach's  $\alpha$  for the avoidant subscale was even higher at .93. These data are comparable to internal consistency reliability estimates reported by Fraley et al., (2000) who found  $\alpha = 0.86$  for the anxiety subscale and  $\alpha = 0.81$  for avoidant subscale.

The three subscales on the TLS were also analyzed for internal consistency reliability with this sample. Each subscale contained 15 items and had the following Cronbach's  $\alpha$  values: Intimacy = .96, Passion = .96, and Commitment = .96. These estimates are higher than those obtained on the measures from the normative sample as reported by Sternberg (1997). He reported the following internal consistency reliability estimates on that sample: Intimacy = .90, Passion = .80, and Commitment = .80.

The items on the EFI were also analyzed for internal consistency reliability. This 60-item questionnaire had a Cronbach's  $\alpha = .97$  with this sample. This value is commensurate with studies by Subkovial et al. (1995) who reported internal consistency estimates to be in the high .90s with their samples. Reliability of these measures in both the past studies and in the current are summarized in Table 8.

# Table 8

# Reliabilities of Instruments in Current and Past Studies

Instrument	n	Internal Reliability
Experiences in Close Relationships—Revised (ECR-		
R) (Fraley et al., 2000)	1085	
Anxious		.9395
Avoidant		.9395
Experiences in Close Relationships- Revised (ECR-R)		
(current study)	90	
Anxious		.83
Avoidant		.93
Triangular Love Scale (TLS) (Sternberg, 1997)	84	
Intimacy		.90
Passion		.80
Commitment		.80
Triangular Love Scale (TLS) (current study)	90	
Intimacy		.96
Passion		.96
Commitment		.96
Enright Forgiveness Inventory (EFI) (Subkovial, Enright, & Wu, 1992)	239	High .90s
Enright Forgiveness Inventory (EFI) (current study)	90	.97

# **Descriptive Statistics**

Tables 9 and 10 report the means and standard deviations. In addition, they

display the correlation analyses of all variables.

# Table 9

Means, Standard Deviations, Ranges, Skewness, and Kurtosis for Study Variables

Variables	n	М	SD	Range	Skewness	Kurtosis
ECR-R—Anxiety	90	2.67	.82	1.33-5.06	.74	.19
ECR-R—Avoidance	90	2.23	.98	1.00-5.50	.84	.42
TLS—Intimacy	90	118.28	19.08	57.00-135.00	-1.64	2.29
TLS—Passion	90	102.21	26.35	19.00-134.00	-1.36	1.58
TLS—Commitment Forgiveness Score	90	120.31	22.41	36.00-135.00	-2.21	4.39
EFI—Total	90	330.01	37.18	195.00-359.00	-1.78	2.53

# Table 10

Pearson's r Correlations for Study Variables (n = 90)

Variable	1	2	3	4	5	6
1. Anxiety						
2. Avoidance	.385*	_				
3. Intimacy	023	138	_			
4. Passion	039	067	.813*	_		
5. Commitment	091	105	.878*	.844*		
6. Forgiveness	037	106	.795*	.667*	.688*	

\* Correlation is significant at the 0.01 level (2-tailed)

As shown in Table 9, the analyses for the ECR-R did not yield significant results on the anxiety and avoidance scales. These data indicate that the sample was skewed toward individuals endorsing a secure attachment style. On the TLS, all components of love were negatively skewed, suggesting that participants endorsed high levels of intimacy, passion, and commitment in their current relationships. The mean scores for intimacy and passion fell within the average range, and commitment fell within the somewhat above average range, per the norms for the TLS. Commitment was the most leptokurtic of the three components. A lepokurtic curve indicates that the distribution of scores for commitment were more concentrated around the mean score than being normally distributed across the range of possible scores. Kurtosis is the degree to which the distribution of scores form a more peaked or flat distribution curve. The results of the EFI were also negatively skewed, and the data showed that participants reported higher levels of forgiveness when compared to norms reported from previous studies. Such studies include Subkovial et al. (1995), M = 256.55, SD = 69.43, Sarinopoulous (1996), M = 261.00, SD = 69.49, and Sarinopoulos (2000), M = 253.19, SD = 76.02.

The correlations in Table 9 indicate high colinearity between the factors of love (intimacy and passion = .813; intimacy and commitment = .878; passion and commitment = .844). High correlations were also found in the original normative data on this instrument (intimacy and passion = .71; intimacy and commitment = .81; passion and commitment = .68) among people with romantic feelings toward each other (Sternberg, 1997). The high colinearity between the factors is explained by the triangular love theory. According to the theory of love, individuals with higher satisfaction in their relationship do score highly on all of these items. This explains the success of long-term relationships. High colinearity is evidence that the participants in this study had an enjoyable experience with their partners among all three factors of love. This may be due to the fact that so many people in the current study had relationships that had lasted more than two years.

#### **Statistical Analysis of Research Questions**

The current study addressed the following research questions: "Does forgiveness mediate the relationship between anxious attachment and commitment in adult love relationships?" (Q1); "Does forgiveness mediate the relationship between anxious attachment and intimacy in adult love relationships?" (Q2); "Does forgiveness mediate the relationship between anxious attachment and passion, in adult love relationships?" (Q3); "Does forgiveness mediate the relationship between avoidant attachment and commitment in adult love relationships?" (Q4); "Does forgiveness mediate the relationship between avoidant attachment and commitment in adult love relationships?" (Q4); "Does forgiveness mediate the relationship between avoidant attachment and intimacy in adult love relationships?" (Q5); and "Does forgiveness mediate the relationship between avoidant attachment and passion in adult love relationships?" (Q6).

The 90 participants who met inclusion criteria of being 25 years or older and being in a committed relationship for six months or longer completed the ECR-R, TLS, and EFI instruments. The data collected from these measure were analyzed using the Baron Kenny (1986) regression model of mediation in order to examine the potential mediating value of forgiveness between anxious or avoidant attachment and the factors of love: intimacy, passion, and commitment. For all statistical tests, a Bonferroni adjustment was made by dividing .05 by the number of tests conducted (Glass & Hopkins, 1996). The current study conducted a total of 17 regression analyses, as there were two independent variables (anxious and avoidant attachment), one mediating variable (forgiveness), and three dependent variable constructs (intimacy, passion, and commitment), and four steps for each of the six research questions. A significance level of .003 was used to test for the regression analyses.

The Baron Kenny model of regression is a four-step process to determine mediation (see Table 5). In Step 1, a regression analysis was conducted to examine if the independent variable X (anxious or avoidant attachment) predicted the dependent variable Y (intimacy, passion, or commitment). Step 2 ran a regression analysis for the independent variable X to see if it (anxious or avoidant attachment) predicted the mediating variable M (forgiveness). Step 3 analyzed the effect of the mediating variable M on the dependent variable Y. Finally, Step 4 was a multiple regression that examined the effect of the independent variable X on the dependent variable Y when controlling for mediating variable M. Significance was determined by a regression coefficient as calculated by a Sobel's Z test.

### **Statistical Analysis of Hypothesis 1**

Hypothesis 1 was formulated to address Research Question 1: "Does forgiveness mediate the relationship between anxious attachment and commitment in adult love relationships?"

H1 Forgiveness, as measured by the EFI mediates the effect of anxious attachment, as measured by the ECR-R on commitment, as measured by the TLS.

The Baron Kenny (1986) model was utilized to examine this hypothesis by treating anxious attachment as the independent variable, X, forgiveness as the mediating variable, M, and commitment as the dependent variable, Y. The results of these analyses are indicated in Table 11.

### Table 11

Variables	$r^2$	Adj. r <sup>2</sup>	В	SE B	В	t	р
Anxious (Constant) Commitment	.008	003	-2.496	2.918	091	856	.395
Anxious (Constant) Forgiveness	.001	010	-1.705	4.857	037	351	.726
Forgiveness (Constant) Commitment	.474	.468	.415	.047	.688	8.902	.000
Anxious	.478	.466	-1.792	2.130	065	841	.403
(Constant) Forgiveness (Constant) Commitment			.413	.047	.686	8.849	.000
	Anxious (Constant) Commitment Anxious (Constant) Forgiveness (Constant) Commitment Anxious (Constant) Forgiveness (Constant) Forgiveness (Constant)	Anxious .008 (Constant) Commitment .001 (Constant) Forgiveness .474 (Constant) Commitment .478 (Constant) Forgiveness .478 (Constant) Forgiveness .478	Anxious .008003 (Constant) Commitment .001010 (Constant) Forgiveness .474 .468 (Constant) Commitment .478 .466 (Constant) Forgiveness .478 .466	Anxious (Constant) Commitment.008 .003003 .2.496Anxious (Constant) Forgiveness.001 .010-1.705Forgiveness.001 .010-1.705Forgiveness.474.468 .415Forgiveness.474.468 .415Anxious (Constant) Commitment.478 .466.416 .413Anxious (Constant) Forgiveness.413 .413	Anxious       .008      003       -2.496       2.918         (Constant)       Commitment       .001      010       -1.705       4.857         Anxious       .001      010       -1.705       4.857         (Constant)       Forgiveness       .474       .468       .415       .047         Forgiveness       .474       .468       .415       .047         (Constant)       Commitment       .478       .466       -1.792       2.130         (Constant)       Forgiveness       .413       .047	Anxious       .008      003       -2.496       2.918      091         (Constant)       Commitment       .001      010       -1.705       4.857      037         Anxious       .001      010       -1.705       4.857      037         (Constant)       Forgiveness       .474       .468       .415       .047       .688         Forgiveness       .474       .468       .415       .047       .688         (Constant)       Commitment       .478       .466       -1.792       2.130      065         (Constant)       Forgiveness       .413       .047       .686       .686	Anxious       .008      003       -2.496       2.918      091      856         (Constant)       Commitment       .001      010       -1.705       4.857      037      351         Anxious       .001      010       -1.705       4.857      037      351         (Constant)       Forgiveness       .474       .468       .415       .047       .688       8.902         (Constant)       Commitment       .478       .466       -1.792       2.130      065      841         (Constant)       Forgiveness       .413       .047       .686       8.849

Baron Kenny Model of Regression with Anxious Attachment as the Independent Variable, Forgiveness as the Mediating Variable, and Commitment as the Dependent Variable

Step 1 of the regression analysis, which looked at anxious attachment predicting commitment, did not yield significant results and did not confirm that anxious attachment style predicted the degree of commitment in romantic relationships. Although no significant results were found, the following three steps were conducted in order to examine any further relationships among the variables. Step 2, which examined the effect of anxious attachment on the forgiveness, also did not yield significant results, as anxious attachment did not predict a path to forgiveness. Step 3 did find a significant relationship between forgiveness and commitment, indicating that forgiveness predicted the level of commitment in romantic relationships. As a result of Step 3 finding significant results, Step 4 also shows an overall significant relationship between anxious attachment when forgiveness was controlled. Step 4 of the regression

model indicates that the overall model indicated that it is forgiveness alone, and not anxious attachment, that predicted commitment. Forgiveness could not be confirmed as a mediating variable between anxious attachment and commitment, because no significant relationship was found.

#### **Statistical Analysis of Hypothesis 2**

Hypothesis 2 addressed Research Question 2: "Does forgiveness mediate the relationship between anxious attachment and intimacy in adult love relationships?"

H2 Forgiveness, as measured by the EFI mediates the effect of anxious attachment, as measured by the ECR-R on intimacy, as measured by the TLS.

The Baron Kenny (1986) model was utilized to examine this hypothesis by treating anxious attachment as the independent variable, X, forgiveness as the mediating variable, M, and intimacy as the dependent variable, Y. The results of these analyses are indicated in Table 12.

#### Table 12

H2 Step	Variables	$r^2$	Adj. r <sup>2</sup>	В	SE B	β	t	р
Step 1	Anxious (Constant) Intimacy	.001	011	545	2.493	023	219	.827
Step 2	Anxious (Constant) Forgiveness	.001	010	-1.705	4.857	037	351	.726
Step 3	Forgiveness (Constant) Intimacy	.633	.628	.408	.033	.795	12.309	.000
Step 4	Anxious (Constant)	.633	.624	.151	1.521	.006	.099	.921
	(Constant) Forgiveness (Constant) Intimacy			.408	.033	.796	12.235	.000

Baron Kenny Model of Regression with Anxious Attachment as the Independent Variable, Forgiveness as the Mediating Variable, and Intimacy as the Dependent Variable

Step 1 of this regression analysis did not yield a significant relationship between anxious attachment and intimacy. This suggested that anxious attachment style did not predict the degree of intimacy in romantic relationships. The three subsequent steps were conducted in order to examine any further relationships among the variables. Step 2 also did not yield significant results, as anxious attachment did not predict a path to forgiveness. Step 3 did find significant results, indicating that forgiveness predicted the level of intimacy in romantic relationships. As a result of Step 3 finding a significant relationship, Step 4 was also statistically significant, suggesting that forgiveness alone, and not anxious attachment, was a predictor of intimacy levels. Forgiveness cannot be confirmed as a mediating variable between anxious attachment and intimacy in this study because Steps 1 and 2 did not find significant relationships.

# **Statistical Analysis of Hypothesis 3**

Hypothesis 3 was formulated to address research question 3: "Does forgiveness mediate the relationship between anxious attachment and passion in adult love relationships?"

H3 Forgiveness, as measured by the EFI mediates the effect of anxious attachment, as measured by the ECR-R on passion, as measured by the TLS.

The Baron Kenny (1986) model was utilized to examine this hypothesis by

treating anxious attachment as the independent variable, X, forgiveness as the mediating variable, M, and passion as the dependent variable, Y. The results of these analyses are indicated in Table 13.

Table 13

Baron Kenny Model of Regression with Anxious Attachment as the Independent Variable, Forgiveness as the Mediating Variable, and Passion as the Dependent Variable

H3 Step	Variables	r <sup>2</sup>	Adj. r²	В	SE B	β	t	р
Step 1	Anxious (Constant) Passion	.002	-0.10	-1.259	3.442	039	366	.715
Step 2	Anxious (Constant) Forgiveness	.001	010	-1.705	4.857	037	351	.726
Step 3	Forgiveness (Constant) Passion	.445	.439	.473	.056	.667	8.399	.000
Step 4	Anxious	.445	.432	454	2.582	014	176	.861
	(Constant) Forgiveness (Constant) Passion			.472	.057	.667	8.341	.000

Step 1 of this regression analysis did not suggest a significant relationship, as anxious attachment style did not predict the degree of passion in romantic relationships. The remaining three steps of the model were conducted in order to examine if there were any further relationships among the variables. Step 2 also did not yield significant results, as anxious attachment did not predict a path to forgiveness. Step 3 did find significant results, indicating that forgiveness predicted the level of passion in romantic relationships. As a result, Step 4 also showed a statistically significant relationship: suggesting that forgiveness alone, and not anxious attachment, was significantly related to passion. Forgiveness could not be confirmed as a mediating variable between anxious attachment and passion in this study as Steps 1 and 2 did not have significant relationships.

#### **Statistical Analysis of Hypothesis 4**

Hypothesis 4 was formulated to address research question 4: "Does forgiveness mediate the relationship between avoidant attachment and commitment in adult love relationships?"

H4 Forgiveness, as measured by the EFI mediates the effect of avoidant attachment, as measured by the ECR-R on commitment, as measured by the TLS.

The Baron Kenny (1986) model was utilized to examine this hypothesis by treating avoidant attachment as the independent variable, X, forgiveness as the mediating variable, M, and commitment as the dependent variable, Y. The results of these analyses are indicated in Table 14.

#### Table 14

H4 Step	Variables	r <sup>2</sup>	Adj. r <sup>2</sup>	В	SE B	β	t	р
Step 1	Avoidant (Constant) Commitment	.011	.000	-2.401	2.436	105	986	.327
Step 2	Avoidant (Constant) Forgiveness	.011	.000	-4.052	4.041	106	-1.003	.319
Step 3	Forgiveness (Constant) Commitment	.474	.468	.415	.047	.688	8.902	.000
Step 4	Avoidant (Constant) Forgiveness (Constant) Commitment	.475	.463	728 .413	1.795 .047	032 .685	406 8.766	.686 .000

Baron Kenny Model of Regression with Avoidant Attachment as the Independent Variable, Forgiveness as the Mediating Variable, and Commitment as the Dependent Variable

Step 1 of the regression analysis did not yield significant results and did not support the hypothesis that avoidant attachment style predicted the degree of commitment in romantic relationships. Once again, the next three steps of the model were conducted in order to examine any further relationships among the variables. Step 2 also did not yield significant results, as avoidant attachment did not predict a path to forgiveness. Step 3 did find a statistically significant relationship, suggesting that forgiveness predicted the level of commitment in romantic relationships. As a result, Step 4 showed a statistically significant relationship, although it was forgiveness alone, and not avoidant attachment that predicted commitment in relationships. Forgiveness could not be confirmed as a mediating variable between avoidant attachment and commitment. Although the final two steps of the model indicated significant relationships, the first two steps did not. Therefore, the overall model does not indicate a mediating effect because there were no significant relationships in Steps 1 and 2.

# **Statistical Analysis of Hypothesis 5**

Hypothesis 5 addressed the research question "Does forgiveness mediate the

relationship between avoidant attachment and intimacy in adult love relationships?"

H5 Forgiveness, as measured by the EFI mediates the effect of avoidant attachment, as measured by the ECR-R on intimacy, as measured by the TLS.

The Baron Kenny (1986) model was utilized to examine this hypothesis as well

by treating avoidant attachment as the independent variable, X, forgiveness as the mediating variable, M, and intimacy as the dependent variable, Y. The results of these analyses are indicated in Table 15.

#### Table 15

Baron Kenny Model of Regression with Avoidant Attachment as the Independent Variable, Forgiveness as the Mediating Variable, and Intimacy as the Dependent Variable

H5 Step	Variables	r <sup>2</sup>	Adj. r <sup>2</sup>	В	SE B	β	t	Р
Step 1	Avoidant (Constant) Intimacy	.019	.008	-2.700	2.065	138	-1.308	.194
Step 2	Avoidant (Constant) Forgiveness	.011	.000	-4.052	4.041	106	-1.003	.319
Step 3	Forgiveness (Constant) Intimacy	.633	.628	.408	.033	.795	12.309	.000
Step 4	Avoidant (Constant) Forgiveness (Constant) Intimacy	.635	.627	-1.059 .405	1.273 .033	054 .790	831 12.129	.408 .000

Step 1 of the regression analysis that examined the relationship between avoidant attachment and intimacy did not yield significant results. These data did not confirm the hypothesis that avoidant attachment style predicted the degree of intimacy in romantic relationships. The remaining three steps were conducted in order to examine any further relationships among the variables. Step 2 also did not yield significant results, as avoidant attachment did not predict a path to forgiveness. Step 3 did find significant results, indicating that forgiveness predicted the level of intimacy in romantic relationships. As a result of Step 3 finding significant results, Step 4 shows an overall significant relationship. However, it is forgiveness alone, and not avoidant attachment that indicated a prediction of intimacy. Forgiveness cannot be confirmed as a mediating

variable between avoidant attachment and intimacy in this study, because Steps 1 and 2 did not indicate significant relationships.

# **Statistical Analysis of Hypothesis 6**

Hypothesis 6 was formulated to address the research question "Does forgiveness mediate the relationship between avoidant attachment and passion in adult love relationships?"

H6 Forgiveness, as measured by the EFI mediates the effect of avoidant attachment, as measured by the ECR-R on passion, as measured by the TLS.

The Baron Kenny (1986) model was utilized to examine this hypothesis by

treating avoidant attachment as the independent variable, X, forgiveness as the mediating

variable, M, and passion as the dependent variable, Y. The results of these analyses are

indicated in Table 16.

Table 16

H6 Step	Variables	$r^2$	Adj. r²	В	SE B	β	t	р
Step 1	Avoidant (Constant) Passion	.004	007	-1.801	2.873	067	627	.532
Step 2	Avoidant (Constant) Forgiveness	.011	.000	-4.052	4.041	106	-1.003	.319
Step 3	Forgiveness (Constant) Passion	.445	.439	.473	.056	.667	8.399	.000
Step 4	Avoidant (Constant) Forgiveness (Constant) Passion	.445	.432	.116 .473	2.170 .057	.004 .668	.053 8.310	.958 .000

Baron Kenny Model of Regression with Avoidant Attachment as the Independent Variable, Forgiveness as the Mediating Variable, and Passion as the Dependent Variable

Step 1 of the regression analysis did not yield significant results and did not support Hypothesis 6 that posited that avoidant attachment style would predict the degree of passion in romantic relationships. Although no significant results were found, the following three steps were conducted in order to examine any further relationships among the variables. Step 2 also did not yield significant results, as avoidant attachment did not predict a path to forgiveness. Step 3 did find significant results, indicating that forgiveness predicted the level of passion in romantic relationships. The significant relationship between forgiveness and passion that was found in Step 3 accounted for the significant relationship found in Step 4. The significance in Step 4 is due only to the relationship between forgiveness and passion; avoidant attachment was not indicated as a predictor of passion. Once again, forgiveness cannot be supported as a mediating variable between avoidant attachment and passion in this study. Although Steps 3 and 4 indicated positive results, Steps 1 and 2 did not, and forgiveness was not indicated as a mediating variable between avoidant attachment style and passion.

The results of the current study did not indicate a significant relationship between attachment style and love. There may be several reasons for this result. First, norms on the ECR-R have been established based on data compiled from over 17,000 participants who have taken this measure online (Fraley, Waller, & Brennan, 2000). Relative to the normative sample, participants in the current study tended to endorse low levels of anxious and avoidant attachments (i.e., they were securely attached) as reported on the ECR-R. This sample rated themselves more securely attached than the general population. As few individuals reported elevated scores (i.e., insecure attachment style), a significant relationship between insecurely attached individuals and their experiences with love could not be established with this sample. This may explain why the current study was unable to replicate prior research that reported negative correlations between all three components of love with insecure attachment styles (Madey & Rodgers, 2009). The results of the online norms as well as the data of the current study are listed in Table 17.

Table 17

		Anxious		Avo	idant
Study	Ν	М	SD	М	SD
Fraley et al., 2000	17,000+	3.56	1.12	2.92	1.19
Current study	90	2.67	1.12	2.23	0.97

Norms on ECR-R in Past and Current Study

Due to a low number of reported insecure attachment styles, a median split was performed on attachment style in order to determine whether or not individuals with less secure attachment scored lower on forgiveness than did individuals with secure attachment. Two median splits were considered by analyzing scores on the anxious and avoidant subscales on the ECR-R to the forgiveness scores on the EFI. The median splits were calculated by locating the median score for each subscale. Each score that was above the median score were categorized as "high," and scores below the median are categorized as "low." The mean and standard deviation for each of these analyses are listed in Tables 18 and 19.

#### Table 18

	Range of Forgiveness Scores	<i>M</i> of Forgiveness Scores	SD of Forgiveness Scores	Range of Anxious Scores	<i>M</i> of Anxious Scores	SD of Anxious Scores
High Anxious (n = 45)	218-359	329.78	35.65	2.56-5.06	3.32	0.62
Low Anxious (n = 45)	195-359	330.36	39.06	1.33-2.56	2.02	.032

Range, Mean, and Standard Deviation for Median Split of Forgiveness and Anxious Scores for Low and High Anxious Attachment Styles

# Table 19

Range, Mean, and Standard Deviation for Median Split of Forgiveness and Avoidant Scores for Low and High Avoidant Attachment Styles

	Range of Forgiveness Scores	<i>M</i> of Forgiveness Scores	SD of Forgiveness Scores	Range of Avoidant Scores	<i>M</i> of Avoidant Scores	SD of Avoidant Scores	n
High Avoidant	195-359	326.24	41.76	2.56-5.50	3.01	.075	45
Low Avoidant	218-359	333.89	31.98	1.00-2.56	1.45	0.33	45

The median split technique indicated that the differences in forgiveness scores between high anxiety attachment and low anxiety attachment were negligible. There was also no significant difference in the forgiveness scores between high avoidant attachment and low avoidant attachment after the median split was conducted. This further exemplifies that the small degree of variance reported among the participants in this study may have resulted in the inability to detect a significant mediation effect of forgiveness between attachment style and forgiveness.

### **Summary of Results**

The data indicate a significant difference in scores beginning at Step 3 of the Baron Kenny model in all six hypotheses where forgiveness was introduced. There was no significant difference at Step 1 when a simple regression was conducted between the independent and dependent variable, or at Step 2 when a simple regression was run between the independent variable and the mediating variable. Step 4 of the model indicated a significant relationship, but only due to the relationship of the mediating variable (forgiveness) and the dependent variables (commitment, intimacy, and passion).

None of the hypotheses posited in the current study were supported by the data. There are a variety of potential reasons that may have contributed to this outcome. The following chapter explores the variables that may have impacted the results of this study to better understand these findings. Potential future directions in attachment, love, and forgiveness research are also discussed.

#### **CHAPTER V**

#### DISCUSSION

Understanding love and success in relationships is a topic that has been pondered by social scientists for decades. While it is a common generalization that 50% of marriages end in divorce (American Psychological Association, 2014), the reality is that the divorce rate in the United States is more complex than simply citing a percentage (Kennedy & Ruggles, 2010). In fact, divorce rates are staying stable among some age demographics and are increasing among others. Additionally, young adults' perception of commitment and marriage has altered, and they tend to delay marriage and committed relationships compared to past generations (Rauer et al., 2013). As such, not only are more committed relationships ending, but new committed relationships are developing at a slower pace. Psychologists have proposed differing reasons for this shift in American culture such as young adults want to develop a career before entering a committed relationship (Rauer et al., 2013), they view their parents' divorce as a reason to avoid marriage (Weigel, 2007), or there is a lack of commitment due to fear of missing out on potential other mates (Miller, 1997). However, there are still questions regarding how counseling psychologists can implement specific interventions to repair emotional injuries and increase the success of relationships that are in danger of failing.

The purpose of the current study was to examine the impact of forgiveness on a committed love relationship. Specifically, the purpose was to examine the potential mediating effect of forgiveness between attachment style and romantic love among couples in committed relationships. It is hoped that the results of this study will not only inform future research in this area, but also facilitate the development of clinical interventions involving forgiveness in couples counseling.

### **Discussion of Results**

The current study considered forgiveness as a mediating variable between attachment style and adult love relationships. Although the relationship between attachment and romantic love and attachment and forgiveness has been established in the literature (Northart & Wright, 2012), a thorough analysis of the interaction between all three had yet to be studied.

Attachment style was conceptualized on a continuum with anxious attachment on one end and avoidant on the other. This conceptualization of attachment style was based on Bowlby's (1969/1982) concept that attachment is made up of emotional, cognitive, and behavioral interactions that lead to patterns of how people develop interpersonal bonds. The current study utilized the Experiences in Close Relationships—Revised (ECR-R) in order to measure attachment style (Brennan et al., 1998).

The construct of love was operationalized by using Sternberg's (1986) theory of triangular love, which defines consummate love as the complete experience of love made up of high levels of intimacy, passion, and commitment. This study analyzed love by examining the separate contributions of each of these components. Intimacy was defined as a feeling of connectedness to one's partner, passion was defined as romantic and

sexual attraction toward one's partner, and commitment was defined as one's willingness to make personal sacrifices for the betterment of the relationship, including a willingness to sacrifice attempts to pursue romantic relationships with other potential mates outside of the monogamous relationship (Sternberg, 1986). These components were measured using Sternberg's (1997) Triangular Love Scale (TLS).

The third and final variable, forgiveness, was conceptualized based on Worthington's (2005) description of forgiveness as the transition of negative emotions, thoughts, and behaviors to positive emotions, thoughts, and behaviors that a victim experiences following an offensive event. The Enright Forgiveness Inventory (EFI) was used to measure forgiveness (Subkovial, Enright, & Wu, 1992).

A regression is a statistical method for predicting or explaining some phenomenon or effect of an independent variable on a given dependent variable (Osborne & Waters, 2002). The Baron Kenny mediation model of regression (1986) is a four-step process that analyzes the regression between the independent variable and dependent variable, the independent variable and the mediating variable, the mediating variable and the dependent variable, and finally the effect c' of the mediating variable between the independent variable and the dependent variable. This model was utilized to address all six research questions in the current study. As there were two independent variables (anxious and avoidant attachment), one mediating variable (forgiveness), and three dependent variable constructs (intimacy, passion, and commitment), there were four steps for each of the six research questions. For each research question, there were no statistically significant relationships found in regressions c (regression analysis with attachment style predicting love) or a (regression analysis with attachment style predicting forgiveness), but significant relationships were found in regressions b (regression analysis with forgiving predicting love) and c (regression analysis with attachment style and forgiveness predicting love) in all regression models.

It was found that forgiveness had a positive relationship with the three components of love, respectively. The overall regression model found that forgiveness had a predictive effect on love, but there was no significant relationship between attachment style and forgiveness. Therefore, forgiveness did not mediate the relationship between attachment style and love. The reason for this may be due to the majority of the sample having little variance in attachment styles, and few indicated having an insecure (either anxious or avoidant) attachment style. As a result, the sample being studied seemed to be predominantly securely attached (as indicated by low scores on the insecure attachment measures); therefore, the status of one's attachment style did not seem to be sensitive enough to impact the mediating or dependent variables.

### **Attachment and Love**

The homogeneity of reported secure attachment style within this sample may be a factor that can account for the lack of significant relationships between attachment style and love as well attachment style and forgiveness. Individuals with insecure attachment styles tend to encounter more negative experiences with love and have more short-term relationships than those who are securely attached (Main, Kaplan, & Cassidy, 1985). It is possible that the exclusion criterion of requiring participants to be in a committed relationship for a minimum of six months may have led to individuals with more insecure attachment styles being ineligible for this study. Similarly, Stephan and Bachman (1999) reported that people in secure relationships preferred to engage in sexual activity within

monogamous, committed relationships. Those with insecure attachment styles may have obtained their needs for passion and intimacy outside of a committed relationship and, therefore, did not qualify for the six-month committed relationship criterion. A U.S. Census report indicated that most divorces occur within the first five years of marriage (United States Census Bureau, 2011). The majority of participants in the current study (72%) had been in their relationships for five or more years, and only four participants had been in their relationship for less than a year (4.4%).

#### **Attachment and Forgiveness**

The review of literature informed the hypothesis that insecure attachment style would negatively correlate with forgiveness. As with attachment style and love, attachment style and forgiveness did not yield significant relationships. This may also be attributed to the lack of insecurely attached participants in this sample. As the literature has shown, people with insecure attachment styles have more difficulty forgiving (Lawler-Row et al., 2006). Differences between the study conducted by Lawler-Row et al. (2006) and the current study may be due to the utilization of different measures of forgiveness. Lawler-Row et al. utilized the Acts of Forgiveness scale (AF) (Drinnon & Jones, 1999), Forgiving Personality Inventory (FP) (Drinnon, Jones, & Lawler-Row, 2000), that the Transgression-Related Interpersonal Motivations Inventory (TRIM) (McCullough et al., 1998), whereas the current study utilized the Enright Forgiveness Inventory (EFI) (Enright & Rique, 2000/2004). The ways in which these instruments may define forgiveness may also account for why the current study did not find similar results as the Lawler-Row et al. study; the Lawler-Row et al. study conceptualized

forgiveness as a trait variable, whereas Enright and Rique conceptualized forgiveness as a state variable.

Regarding the three components of love, commitment has been shown to account for the most variance within relationship satisfaction, followed by intimacy and passion accounting for the least variance (Acker & Davis, 1992). Since the current study excluded individuals who had been in a relationship for less than six months, this may have also excluded individuals who tended to have less commitment in their relationships, in general. Other studies have found that individuals with insecure attachment styles are less likely to develop consummate love relationships (Brennan & Shaver, 1995; Sprecher & Fehr, 2010), meaning that commitment as well as passion and intimacy are experienced at lower levels by people who are insecurely attached. These data suggest that it is not only the love component of commitment with which insecurely attached individuals struggle, but they also struggle with intimacy and passion. The exclusion criteria for the current study only addressed commitment (participants were required to be in a relationship for six or more months), but it did not have any exclusion criteria directly related to passion or intimacy. Had the survey used exclusionary criteria directly related to passion or commitment, it may have further reduced the likelihood of recruiting participants with insecure attachment styles.

The topic of the study may also have prompted individuals to respond in a manner that was more positive. The instruments were counter-balanced and randomly administered in different orders among different participants to control for order effects. This may have led to participants being primed to respond in a manner that was not consistent with the sample from which the normative data on the instruments were pulled.

## **Forgiveness and Love**

Forgiveness was found to have significant relationships with all three components of love. Prior research (Finkel et al., 2002) found that people are more likely to forgive when they feel more intimately close to that person in both romantic and platonic relationships (McCullough et al., 1998). Additionally, physiological evidence has been provided to support that both relationship satisfaction and forgiveness are higher among individuals with greater satisfaction with their relationships (Berry & Worthington, 2001). This was evidenced by lower levels of cortisol in the saliva of people who are happy with their partners when compared to higher levels of cortisol in the saliva of people reporting less happiness with their partners after recalling offense being committed by an intimately close significant other. Consistent with past research, this study found that individuals with higher intimacy ratings toward their partners had higher forgiveness toward their partners.

Forgiveness has been shown to be a valuable relational tool for couples. The results in the current study indicated a positive impact of forgiveness across the sample, although not all participants reported the same level of forgiveness. The positive effect of forgiveness in relationships is commensurate with a previous study that found forgiveness benefitted relationship satisfaction among both securely and insecurely attached people (Berry & Worthington, 2001). Although the majority of the sample in the current study had secure attachment styles, they all seem to have benefitted from being forgiving to their partners.

#### Sample

One final finding of this study was the high internal consistency reliability that was found among the instruments. Previous research conducted with the ECR-R, TLS, and EFI are largely utilized with populations much younger than the current sample (Brennan et al., 1998; Enright & Rique, 2000/2004; Sternberg, 1998). Past research with these measures tended to have a lower cut-off age for inclusion at age 18 and older, whereas the current study had a cut-off age of 25 and had a higher overall mean age of participants (M = 46, SD = 12.6). As such, the current study was able to provide data on these instruments among a somewhat older population.

The current study had six closely related research hypotheses that were all measured using the same method, and all yielded very similar results. There were no significant relationships between attachment style and love or attachment style and forgiveness. This may be largely due to the fact that there were relatively few individuals in the current study that reported an anxious or avoidant attachment style that may lend data to informing a negative relationship between avoidant and anxious attachment styles with both love and forgiveness.

The homogeneity of responses may have also been the case that participants responded in a socially desirable manner. This may be true across all three instruments, in which individuals indicated high levels of love, forgiveness, and lower levels of anxious and avoidant attachment. As all participants in the study were required to currently be in a committed relationship, they may have focused on providing answers that highlighted the positive pieces of their relationship. Additionally, individuals recruited from university listservs may have been familiar with one or more instruments and answered in a manner that was more socially desirable to ensure that their results indicated that they had a secure attachment style, a high level of forgiveness toward his or her partner, and high levels of intimacy, commitment, and attachment. The high correlation found between age and relationship length (r = 0.77) also indicates that the people in the current study reported high levels of commitment to their relationships the older they were.

Forgiveness produced significant relationships between all three components of love, which is consistent with previous research (Allemand et al., 2007; Finkel et al., 2002; McCullough et al., 1998). The significant effect of forgiveness on the three components of love in the third step of the mediation regression models (regression analysis with forgiveness predicting love) seems to be indicative of an overall effect of forgiveness mediating attachment style and love in fourth steps of each model. However, there was actual no mediating effect found since there was no significant relationship between attachment style and love. However, the results of this study confirmed previous findings indicating that a higher degree of forgiveness predicts greater levels of felt commitment, intimacy, and passion in love relationships.

### **Implications for Counseling Psychology**

Although the overall model of establishing the mediating quality of forgiveness between attachment style and love was not established, the current study has provided helpful data for informing the interventions counseling psychologists use in treating clients. The positive effect forgiveness had across the sample indicates that forgivenessfocused interventions may be powerful in couples and individual counseling. One example of a forgiveness-focused intervention includes the work of Woldarsky-Meneses and Greenberg (2010). These authors utilized emotion-focused therapy (EFT) with couples as a foundational theory and tracked the progression of verbal and nonverbal cues provided by female victims of sexual infidelity toward their male partner offenders. The path that led to forgiveness began with the victims expressing hurt feelings as well as blame towards their partners. At the same time, when the offenders were able to accept responsibility for their offenses and experienced remorse and shame, both partners were able to express their needs and also developed empathy for one another's perspective. This led to the offenders apologizing in a meaningful ways and also allowing victims to change their views of the situation and of their partners. Victims were, in turn, able to accept responsibility for what relational factors were present prior to the offense occurring that may have contributed to their partners' infidelity. Finally, forgiveness occurred, and the couple was able to move past the offense.

The path of forgiveness that has been articulated by Woldarsky-Meneses and Greenberg (2010) provides a foundational framework for forgiveness in a therapeutic setting. The current study provides evidence that individuals with higher levels of forgiveness report higher intimacy, commitment, and passion in their romantic relationships. Future research on forgiveness in romantic relationships and development of forgiveness-focused therapeutic interventions may benefit the field of counseling psychology.

#### Limitations of the Study

The most prominent limitation of this study was the homogeneity of the sample's attachment style, as few participants scored high for avoidant or anxious attachment styles. McCarthy (1999) provides data that are beneficial to consider because this study

examined the effect of high anxious and avoidant attachment styles had on love, and this was an aspect that the current study was lacking. McCarthy administered the adult attachment questionnaire (Hazar & Shaver, 1987) to participants and interviewed them about their relationships using questions pulled from sections of the Adult Personality Functioning Assessment (APFA) (Hill et al., 1989). His results indicated that individuals with high anxious or avoidant attachment styles had lower ratings of their interpersonal relationships overall. The present study had few participants with high anxious or avoidant attachment styles and did not have the commensurate data to yield similar results as McCarthy. If the current study had more participants with high anxious or avoidant attachment styles, it may have been possible to establish significant relationships between attachment style and love as well as attachment style and forgiveness.

Previous research can shed light on why there was such a low return rate of completed surveys of participants reporting insecure attachment. First, there is a higher occurrence of securely attached people in the United States than there is of insecurely attached people. According to Hazan and Shaver (1987), 60% of the population has secure attachment, while anxious attachment accounts for 20% and avoidant attachment accounts for the other 20%.

There are also limitations anytime a study works with insecurely attached individuals, as they are reportedly less likely to participate in research due to lack of trusting the researcher (Ainsworth et al., 1978). Similarly, those with insecure attachment styles may not be as accessible by means through which the current study recruited participants, such as through graduate student listservs. Studies have indicated that insecure attachment styles may result in lower self-efficacy, higher academic anxiety, and lower academic performance (JenaAbadi & Ahani, 2014; Omivale, 2009), which may lead to less graduate school engagement.

Beyond the sample demographics, other areas of the study may have inhibited completion of the surveys. It has been found that self-report measures may not be the best method to assess a psychological construct as participants are forced to adhere to one of several close-ended questions with pre-determined responses (Hill & Lambert, 2004). Online assessment has also been shown to yield less accurate results, as participants are more likely to misunderstand instructions without any means of asking the researcher about it, participants tend to give less attention to online surveys and are more likely to drop out of the study due to the lack of human contact (Dillman, Smyth, & Christian, 2009). Dillman et al. (2009) indicated that online surveys may be less likely to come to the attention of potential participants, as email correspondence or online social media may often over-looked. In the current study, precautions were taken to avoid some of these potential complications to data collection. As much as possible, participants were contacted in-person and were offered the option to complete the survey by paper and pencil. Participants taking the online version of the survey were provided with the researchers contact information so that they could ask clarifying questions that may have come up while the questionnaire. One hundred percent of participants chose to complete the questionnaire online, regardless of whether or not they were contacted in-person or through social media. Finally, the majority of the respondents were solicited through social media outlets, indicating that this was an effective method to recruit participants.

Participants who do not have access to the Internet are much less likely to have had the opportunity to become aware of the study. Using the Internet and computers may have restricted those of a lower socioeconomic status who do not have the means to complete the survey online.

Finally, the length of the survey may have discouraged completion of a data set, which may have led to participants prematurely dropping out of the study. Eighteen participants began the survey, but did not complete it. This may be due to the extensive number of questions, as the survey consisted of 141 items.

#### **Future Research**

While the current study did not confirm the research hypotheses, the data do suggest potential avenues for future research. The extensive literature reviews conducted for this study supported the current hypotheses, but the mediation model was not supported, possibly due to restriction of range for insecure attachment style. Future research may seek to recruit participants from samples more likely to have anxious or avoidant attachment styles to further assess these hypotheses. This may be addressed by recruiting participants from a clinical population, such as couples seeking couples counseling or clients who report early childhood abuse or neglect.

In addition to recruiting from different populations, recruitment in future studies may benefit from removing the requirement of participants being in a current relationship that has lasted at least six months. Instead, participants may be asked to reflect on a past relationship and report the length of that relationship. This may allow for participants who have not had a relationship last six or more months to report on their experiences in relationships. This may open up the possibility for individuals with low commitment and those with highly anxious or avoidant attachment styles to discuss their relational and forgiveness patterns. However, it also does introduce limitations that result from use of retrospective data, including selective memory recall.

The data on forgiveness benefiting love relationships found in the current research is commensurate with past studies. What has been found is that the type of offense committed in a relationship is not as significant to the outcome of forgiveness, as is the quality and closeness of the relationship prior to the offense being committed. As such, factors contributing to the rebuilding of the relationship, such as forgiveness, may play a key role in the reparation of the relationship following an offense (Berry & Worthington, 2001). This may indicate more experimental exploration of specific treatments and techniques to implement forgiveness in therapeutic sessions. The model of forgiveness described by Woldarsky-Meneses and Greenberg (2010) illustrated how forgiveness occurs. However, manualized and empirically supported treatments that utilize forgiveness as an intervention is a gap that remains to be filled in the literature. The current study provides additional support of the positive therapeutic impact of forgiveness, and the Woldarsky-Menses and Greenberg study provides a solid framework that may serve as a foundation for creating and investing forgiveness in couples counseling.

When developing forgiveness-focused interventions, researchers may benefit from exploring gender differences within forgiveness. The current study did not limit the type of offenses that were in need of being forgiven. However, research has indicated that men and women quantify various interpersonal offenses differently. For example, men tend to find sexual infidelity as more hurtful than emotional infidelity, whereas women feel the opposite (Kruger et al., 2013). Similarly, the way that men and women communicate their desire to resolve a conflict may differ as well. Men prefer to tap into the fight-or-flight behaviors as a means to cope with a problem (Taylor et al., 2000), whereas women attend to address the relational rupture before attending to the offense that caused the rupture (Elkins, Phillips, & Konopaske, 2002). Gender differences in perceived level of betrayal or hurt from a specific offense and typical behaviors to cope with the offense may better inform researchers on how to build specific forgiveness techniques.

In addition to utilizing forgiveness as an intervention in counseling, it may also benefit the literature to develop a more universally accepted definition of forgiveness. Differences in operational definitions of forgiveness include the state definition posited by Lawler-Row et al. (2006) and the stated definition presented by Enright and Enrique (2000/2004). These differences in theory of forgiveness make more specific research more difficult. This may lead to inaccurate data being reported in meta-analyses on forgiveness, which may reduce the strength of future research on forgiveness.

Future researchers may want to take other cultural factors into consideration when defining constructs and recruiting participants. In the current study, participants who were not currently in a committed relationship that had lasted at least six months were excluded. However the term "committed relationship" was not defined. With recent trends in coupling, it is not always clear what a committed relationship is. Many couples are choosing to cohabitate without entering marriage. Others meet through online dating websites and may not meet in person for several months in the relationship, or may never meet face to face at all. Modern terms for certain behaviors also muddy the definition of commitment. Young people may use slang words such as "talking," "hanging out," "hooking up," "dating," or making the relationship "Facebook official" (Tong, 2014). Such terms may be thrown around in social dialogue, but have not yet developed firm definitions of what behaviors and emotional commitment are expected when couples describes their relationships by these terms. Future research may focus on developing operation definitions for these terms, and utilizing the terms to help develop a more universal definition of commitment when exploring love relationships.

The term commitment may also be problematic for understanding people who do not engage in monogamous relationships. A definition of commitment that is inclusive for individual who identify as polymorphic or in other ways that are not considered monogamous. Future researchers may want to construct a definition of commitment that is more inclusive across populations who may not identify within the constraints of binary classifications of relationships.

#### Conclusion

In summary, the current study examined the potential mediating quality of forgiveness between attachment style and adult love relationships. One of the major limitations of the current study was the heterogeneity of reported attachment styles. The results were unable to support the posited hypotheses that intended to determine mediation. However, this may be due to the fact that there were too few participants reporting insecure attachment styles in order to establish whether or not forgiveness could mediate insecure attachment and love. However, the results supporting a positive relationship between forgiveness and love were commensurate with findings reported in the literature review. Although this study was unable to produce results indicating a mediation between attachment style and love, it does highlight the importance of the presence of forgiveness in satisfying love relationships. The findings that support of the importance of forgiveness are especially pertinent to counseling psychologists working with couples. Future research may continue to examine the role that forgiveness plays among individuals with insecure attachment styles in their love relationships. It would also benefit the field of couples counseling for future research to better develop interventions that utilize forgiveness into the therapeutic process.

#### REFERENCES

- Acker, M., & Davis, M. H. (1992). Intimacy, passion, and commitment in adult romantic relationships: A test of the triangular theory of love. *Journal of Social and Personal Relationships*, 9, 21-50.
- Ainsworth, M. D. S. (1989). Attachment beyond infancy. *American Psychologist, 44*, 709-716.
- 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.
- Ainsworth, M. D. S., & Wittig, B. A. (1969). Attachment and exploratory behavior of one-year olds in a strange situation. In B. M. Foss (Ed.), *Determinants of infant behavior* (Vol. 4, pp. 111-136). London: Methuen.
- Allemand, M., Amberg, I., Zimprich, D., & Fincham, F. D. (2007). The role of trait forgiveness and relationship satisfaction in episodic forgiveness. *Journal of Social* and Clinical Psychology, 26, 199-217.
- Allen, J. P. (2008). The attachment system in adolescence. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (pp. 419-435). New York: The Guilford Press.
- American Psychological Association. (2014). *Marriage and divorce*. Retrieved from http://www.apa.org/topics/divorce

- Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 54, 317-326.
- Ashy, M., Mercurio, A. E., & Malley-Morrison, K. (2010). Apology, forgiveness, and reconciliation: An ecological world view framework. *Individual Differences Research*, 8, 17-26.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173-1182.
- Bartholomew, K. (1990). Avoidance of intimacy: An attachment perspective. *Journal of Social and Personal Relationships*, *7*, 147-178.
- Bartholomew, K., & Horowitz, L. M. (1991). Attachment styles among young adults: A test of a four-category model. *Journal of Personality and Social Psychology*, 61, 226-244.
- Baskin, T. W., & Enright, R. D. (2004). Intervention studies on forgiveness: A metaanalysis. *Journal of Counseling Psychology*, 45, 251-257.
- Beckenbach, J., Schmidt, E., & Reardon, R. (2009). The interpersonal relationship resolution scale: A reliability and validity study. *The Family Journal: Counseling and Therapy for Couples and Families, 17*, 335-341.
- Berry, K., Wearden, A., Barrowclough, C., Oakland, L., & Bradley, J. (2012). An investigation of adult attachment and the nature of relationships with voices. *British Journal of Clinical Psychology*, *51*(3), 280-291. doi:10.1111/j.2044-8260.2011.02027.x

- Berry, J. W., & Worthington, E. L., Jr. (2001). Forgiveness, relationship quality, stress while imagining relationship events, and physical and mental health. *Journal of Counseling Psychology*, 48, 447-455.
- Berscheid, E. (2006). Searching for the meaning of "love." In R. J. Sternberg & K. Wies (Eds.), *The new psychology of love* (pp. 171-183). New Haven, CT: Yale University Press.
- Birnbaum, G. E. (2010). Bound to interact: The divergent goals and complex interplay of attachment and sex within romantic relationships. *Journal of Social and Personal Relationships*, 27(2), 245-252.
- Birnbaum, G. E., Reis, H. T., Mikulincer, M., Gillath, O. & Orpaz, A. (2006). When sex is more than just sex: Attachment orientations, sexual experience, and relationship quality. *Journal of Personality and Social Psychology*, *91*, 929-943.
- Bowlby, J. (1956). The growth of independence in the young child. *Royal Society of Health Journal*, *76*, 587-591.
- Bowlby, J. (1973). *Attachment and loss: Vol. 2. Separation: Anxiety and anger*. New York: Basic Books.
- Bowlby, J. (1979). The making and breaking of affectional bonds. London: Tavistock.
- Bowlby, J. (1980). *Attachment and loss: Vol. 3. Sadness and depression*. New York: Basic Books.
- Bowlby, J. (1982). Attachment and loss: Vol. 1. Attachment. New York: Basic Books. (Original work published 1969)

- Brennan, K. A., Clark, C. L., & Shaver, P. R. (1998). Self-report measurement of adult attachment: An integrative overview. In J. A. Simpson & W. S. Rhodes (Eds.), *Attachment theory and close relationships* (pp. 46-76). New York: Guilford Press.
- Brennan, K. A., & Shaver, P. R. (1995). Dimensions of adult attachment, affect regulation, and romantic relationship functioning. *Personality and Social Psychology Bulletin*, 21(3), 267-283.
- Brennan, K. A., & Shaver, P. R. (1998). Attachment styles and personality disorders: Their connections to each other and to parental divorce, affect regulation, and romantic relationship functioning. *Personality and Social Psychology Bulletin*, 21, 835-878.
- Broderick, P. C., & Blewitt, P. (2006). *The life span: Human development for helping professionals*. Upper Saddle River, NJ: Pearson Education, Inc.
- Brown, R. P. (2003). Measuring individual differences in the tendency to forgive:
   Construct validity and links with depression. *Personality and Social Psychology Bulletin, 29*, 1-13.
- Brumbauch, C. C., & Fraley, R. C. (2006). Transference and attachment: How do attachment patterns get carried forward from one relationship to the next? *Personality and Social Psychology Bulletin, 32*, 552-560.

Burnett, J. L., Taylor, K. W., Worthington, E. L., Jr., & Forsyth, D. R. (2006).
 Attachment and trait forgiveness: The mediating role of angry rumination.
 *Personality and Invidual Differences, 42*, 1585-1596.

- Candelori, C., & Ciocca, A. (1998). Attachment and eating disorders. In P. Bria, A.
  Ciocca, & S. de Risio (Eds.), *Psychotherapeutic issues in eating disorders: Models methods, and results* (pp. 139-153). Rome: Societa Editrice Universo.
- 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* (pp. 1-22).
   New York: Guilford Press.
- Cavell, M. (2003). Freedom and forgivness. *International Journal of Psycho-Analysis*, 84, 515-531.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.
- Collins, N. L. (1996). Working models of attachment: Implications for explanation, emotion, and behavior. *Journal of Personality and Social Psychology*, *71*, 810-832.
- Collins, N. L., & Feeney, B. C. (2000). A safe haven: An attachment theory perspective on support seeking and care giving in intimate relationships. *Journal of Personality and Social Psychology*, 78(6) 1053-1073.
- Collins, N. L., & Reed, S. J. (1990). Adult attachment, working models, and relationship quality in dating couples. *Journal of Personality and Social Psychology*, 58, 644-663.
- Coyle, C. T., & Enright, R. D. (1997). Forgiveness intervention with post-abortion men. Journal of Consulting and Clinical Psychology, 65, 1042-1046.

- Crawford, T. N., Shaver, P. R., Cohen, P., Pilkonis, P. A., Gillath, O., & Kasen, O.
  (2006). Self-reported attachment, interpersonal aggression, and personality disorder in a prospective community sample of adolescents and adults. *Journal of Personality Disorders*, 20, 331-351.
- Davidson, F. (Producer), & Davidson, J. (Director). (2005). Mary Ainsworth: Attachment and the growth of love [Motion picture]. Santa Margarita, CA: Davidson Films, Inc.
- Davis, D., Shaver, P. R., Widaman, K. F., Vernon, M. L., Follette, W. C., & Beitz, K.
  (2006). "I can't get no satisfaction": Insecure attachment, inhibited sexual communication, and sexual dissatisfaction. *Personal Relationships*, *13*, 465–483.
- De Waal, F. B. M., & Pokorny, J. (2005). Primate conflict and its relation to human forgiveness. In E. J. Worthington, Jr. (Ed.), *Handbook of forgiveness* (pp. 17-32). New York: Routledge.
- Denham, S. A., Neal, K., Wilson, B. J., Pickering, S., & Boyatzis, C. J. (2005).
  Emotional development and forgiveness in children: Emerging evidence. In E. J.
  Worthington, Jr. (Ed.), *Handbook of forgiveness* (pp. 127-142). New York:
  Routledge.
- Derrick, J. L., & Murray, S. L. (2007). Enhancing relationship perceptions by reducing felt inferiority: The role of attachment style. *Personal Relationships*, *14*, 531-549.
- Deshea, L. (2003). A scenario-based scale of willingness to forgive. *Individual Differences Research, 1*, 201-217.
- Dewitte, M., & De Houwer, J. (2008). Proximity and distance goals in adult attachment. *European Journal of Personality*, 22(8), 675-694.

- DiBlasio, F. M. (1998). The use of decision-based forgiveness intervention within intergenerational family therapy. *Journal of Family Therapy*, *20*, 77-94.
- Diessner, R. Frost, N., & Smith, T. (2004). Describing the neoclassical psyche embedded in Sternberg's triangular theory of love. *Social Behavior and Personality*, 32(7), 683-690.
- Dillman, D. A., Smyth, J. D., & Christian, L. M. (2009). *Internet, mail, and mixed-mode surveys: The tailored design method.* Hoboken, NJ: John Wiley & Sons, Inc.
- Doran, J. M., Kalayjian, A., Toussaint, L., & DeMucci, J. (2012). The relationship between trauma and forgiveness in post-conflict Sierra Leone. *Psychological Trauma: Theory, Research, Practice, and Policy, 4*, 614-623.
- Elkins, T. J., Phillips, J. S., & Konopaske, R. (2002). Gender-related biases in evaluations of sex discrimination allegations: Is perceived threat the key? *Journal of Applied Psychology*, 87, 280-292.
- Ellis, A. (1950). Love and family relationships of American college girls. *American Journal of Sociology*, 55, 55-56.
- Enright, R. D., & Coyle, C. T. (1998). Researching the process model of forgiveness
  within psychological interventions. In E. L. Worthington Jr. (Ed.), *Dimensions of forgiveness: Psychological research and theological perspectives* (pp. 139-161).
  Philadelphia: Templeton Foundation Press.
- Enright, R. D., & Rique, J. (2000/2004). The Enright Forgiveness Inventory manual. Madison, WI: International Forgiveness Institute.

- Enright, R. D., & Fitzgibbons, R. P. (2000). *Helping clients forgive: An empirical guide* for resolving anger and restoring hope. Washington, DC: American
   Psychological Association.
- Enright, R. D., & the Human Development Study Group. (1991). The moral development of forgiveness. In W. Kurtines & J. Gerwirtz (Eds.), *Handbook of moral behavior and development* (Vol. 1, pp. 123-152). Hillsdale, NJ: Erlbaum.
- Feeney, J. A., & Noller, P. (1990). Attachment style as a predictor of adult romantic relationships. *Journal of Personality and Social Psychology*, 58(2). 281-291.
- Feeney, J. A., Noller, P., & Hanrahan, M. (1994). Assessing adult attachment. In M. B. Sperling & W. H. Berham (Eds.), *Attachment in adults: Clinical and developmental perspectives* (pp. 128-152). New York: Guilford Press.
- Finkel, E. J., Rushbult, C. E., Kumashiro, M., & Hannon, P. (2002). Dealing with betrayal in close relationships: Does commitment promote forgiveness? *Journal* of Personality and Social Psychology, 28, 956-974.
- Florian, V., Mikulincer, M., & Bucholtz, I. (1995). Effects of adult attachment style on the perception and search for social support. *Journal of Psychology: Interdisciplinary and Applied*, 129, 665-676.
- Fouladi, R. T., McCarthy, C. J., & Moller, N. P. (2002). Paper and pencil or online:Evaluating mode effects on measures of emotional functioning and attachment.Assessment, 9, 204-215.
- Fraley, R. C., Waller, N. G., & Brennan, K. A. (2000). An item response theory analysis of self-report measures of adult attachment. *Journal of Personality and Social Psychology*, 78, 350-365.

- Freedman, S. R., & Enright, R. D. (1996). Forgiveness as an intervention goal with incest survivors. *Journal of Consulting and Clinical Psychology*, 64, 983-992.
- Freud, S. (1952). Group psychology and the analysis of ego. In *The major works of Sigmund Freud* (pp. 664-696). Chicago: Encyclopedia Britannica.
- Glass, G. V., & Hopkins, K. D. (1996). *Statistical methods in education and psychology* (3<sup>rd</sup> ed.). Boston: Allyn &Bacon.
- Green, S. B. (1991). How many subjects does it take to do a regression analysis? *Multivariate Behavioral Research, 26*, 499-510.
- Greenberg, L. S. (2002). *Emotion-focused therapy: Coaching clients to work through their feelings*. Washington, DC: American Psychological Association.
- Griffin, D. W., & Bartholomew, K. (1994a). Models of the self and other: Fundamental dimensions underlying measures of adult attachment. *Journal of Social Psychology*, 67, 430-445.
- Griffin, D. W., & Bartholomew, K. (1994b). The metaphysics of measurement: The case of adult attachment. In K. Bartholomew & D. Perlman (Eds.), *Advances in personal relationships: Attachment processes in adulthood* (Vol. 5, pp. 17-52).
  London: Jessica Kingsley.
- Hargrave, T. D., & Sells, J. N. (1997). The development of a forgiveness scale. *Journal* of Marital and Family Therapy, 23(1), 41-62.
- Harlow, H. F. (1962). The development of affectional patterns in infant monkeys. In B.M. Foss (Ed.), *Development of infant behavior* (Vol. 1, pp. 75-88). New York: Wiley.

- Hatfield, E. (1988). Passionate and companionate love. In R. J. Sternberg & M. L. Barnes (Eds.), *The psychology of love* (pp. 191-217). New Haven, CT: Yale University Press.
- Hatfield, E., & Walster, G. W. (1981). *A new look at love*. Reading, MA: Addison-Wesley.
- Hazan, C., & Shaver, P. R. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology*, *52*, 511-524.
- Hendrick, C., & Hendrick, S. S. (1986). A theory and method of love. *Journal of Personality and Social Psychology*, *50*, 392-402.
- Hill, C. A., Blakemore, J. E. O., & Drumm, P. (1997). Mutual and unrequited love in adolescence and young adulthood. *Personal Relationships*, 40, 15-23.
- Hill, C. E., & Lambert, M. J. (2004). Methodological issues in studying psychotherapy process and outcomes. In M. J. Lambert (Ed.), *Bergin and Garfield's handbook of psychotherapy and behavioral change* (5<sup>th</sup> ed. pp. 84-135). New York: Wiley and Sons, Inc.
- Hill, J., Harrington, R., Fudge, H., Rutter, M., & Pickles, A. (1989). Adult Personality
   Functioning Assessment (APFA): An investigator-based standardized interview.
   British Journal of Psychiatry, 155, 24-35.
- Howell, D. C. (2007). The analysis of missing data. In W. Outhwaite & S. Turner (Eds.), *Handbook of science methodology* (pp. 208-224). London: Sage.
- Huck, S. W. (2012). *Reading statistics and research* (6<sup>th</sup> ed.). Boston, MA: Pearson Education.

- Hull, J. G., Young, R. D., & Ward, T. (1996). Applications of the self-awareness model of alcohol consumption: Predicting patterns of use and abuse. *Journal of Personality and Social Psychology*, 51, 790-796.
- JenaAbadi, H., & Ahani, M. A. (2014). Investigating the relationship between attachment styles, self-efficiency, and academic performance of high school students of Zahedan City. *International Journal of Economy, Management and Social Sciences*, 5, (260-264).
- Kachadourian, L. K., Fincham, F. D., & Davila, J. (2004). The tendency to forgive in dating and married couples: The role of attachment and relationship satisfaction. *Personal Relationships*, 11, 373-393.
- Kaestle. C., & Halpern, C. (2007). What's love got to do with it? Sexual behaviors of opposite-sex couples through emerging adulthood. *Perspective on Sexual and Reproductive Health, 39*(3), 134-140. doi:10.1363/3913407
- Karantzas, G. C., Feeney, J. A., & Wilkinson, R. (2010). Is less more? Confirmatory factor analysis of the Attachment Style Questionnaires. *Journal of Social and Personal Relationships*, 27, 749-780.
- Kendrick, D. T. (2006). A dynamic evolutionary view of love. In R. J. Sternberg & K.Wies (Eds.), *The new psychology of love* (pp. 35-64). New Haven, CT: YaleUniversity Press.
- Kennedy, S., & Ruggles, S. (2010). Breaking up is hard to count: The rise of divorces in the United States, 1980-2010. *Demography*, 51(2), 587-598.
- Kline, R. B. (2011). *Principles and practice of structural equation modeling* (3rd ed.). New York, NY: Guilford Press.

- Kobak, R., & Madsen, S. (2008). Disruptions in attachment bonds: Implications for theory, research, and clinical intervention. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (pp. 23-47). New York: Guilford Press.
- Koback, R., Rosenthal, N., & Serwik, A. (2005). The attachment hierarchy in middle childhood: Conceptual and methodological issues. In K. A. Kerns & R. A. Richardson (Eds.), *Attachment in middle childhood* (pp. 71-88). New York: Guilford Press.
- Krause, N., & Ellison, C. G. (2003). Forgiveness by God, forgiveness by others, and psychological well-being in late life. *Journal of the Scientific Study of Religion*, 42, 77-93.
- Kruger, D. J., Fisher, M. L., Edelstein, R. S., Chopik, W. J., Fitzgerald, C. J., & Strout, S. L. (2013). Was that cheating: Perceptions vary by sex, attachment anxiety, and behavior. *Evolutionary Psychology*, 11, 159-171.
- LaGuardia, J. G., Ryan, R. M., Couchman, C. E., & Deci, E. L. (2000). Within-person variation in security of attachment: A self-determination theory of perspective on attachment, need fulfillment, and well-being. *Journal of Personality and Social Psychology*, 79(3), 367-384.
- Lawler-Row, K. A., Piferi, R. L., Younger, J. W., & Jones, W. H. (2006). The role of adult attachment style in forgiveness following an interpersonal offense. *Journal* of Counseling and Development, 84, 493-502.

- Leckman, J. F., Hrdy, S. B., Keverne, E. B., & Carter, C. S. (2006). A behavioral model of attachment and bonding. In R. J. Sternberg & K. Wies (Eds.), *The new psychology of love* (pp. 116-145). New Haven, CT: Yale University Press.
- Lee, J. A. (1973). *Colours of love: An exploration of the ways of loving*. Toronto: New Press.
- Lee, J. A. (1988). Love-styles. In R. J. Sternberg & M. L. Barnes (Eds.), *The psychology of love* (pp. 38-67). New Haven, CT: Yale University Press.
- Lei, P.-W., & Wu, Q. (2007). Introduction to structural equation modeling: Issues and practical considerations. *Instructional Topics in Educational Measurement*, 26, 33-43.
- Leve, L. D., Scaramella, L. V., & Fagot, B. I. (2001). Infant temperament, pleasure in parenting, and marital happiness of adoptive families. *Infant Mental Health Journal, 22*, 545-558.
- Levinger, G. (1988). Can we picture "love"? In R. J. Sternberg & M. L. Barnes (Eds.), *The psychology of love* (pp. 139-158). New Haven, CT: Yale University Press.
- Levy, K. N., Blatt, S. J., & Shaver, P. R. (1998). Attachment styles and parental representations. *Journal of Personality and Social Psychology*, *74*, 407-419.
- Levy, K. N., & Davis, K. E. (1988). Lovestyles and attachment styles compared: Their relations to each other and to various relationship characteristics. *Journal of Social and Personal Relationships*, 5, 439-471.
- Levy, K. N., Ellison, W. D., Scott, L. N., & Bernecker, S. L. (2011). Attachment style. Journal of Clinical Psychology, 67(2), 193-201.

- Levy, K. N., & Kelly, K. M. (2010). Sex differences in jealousy: A contribution from attachment theory. *Psychological Science*, 21, 168-173.
- Lorenz, K. E. (1935). Der Kumpan in der Umwelt des Vogles (Trans. The companion in the bird's environment). *Journal of Ornithology*, *83*, 137-213, 289-413.
- Lu, Z., Huo, L., & Gao, W. (2006). Reliability and validity of Experiences in Close Relationships-Revised version. *Chinese Mental Health Journal*, 20, 716-719.
- Madey, S. F., & Rodgers, L. (2009). The effect of attachment and Sternberg's triangular theory of love on relationship satisfaction. *Individual Differences Research*, 7(2), 76-84.
- Main, M., Kaplan, N., & Cassidy, J. (1985). Security in infancy, childhood, and adulthood: A move to the level of representation. *Monographs of the Society for Research in Child Development*, 50(1-2), 66-106.
- Malcom, W., & Greenberg, L. (2000). Forgiveness as a change process of change in individual psychotherapy. In M. E. McCullough, K. I. Pargament, & C. E. Thoreson (Eds.), *Forgiveness* (pp. 179-202). New York: Guilford Press.
- McCarthy, G. (1999). Attachment style and adult love relationships and friendships: A study of a group of women at risk for experiencing relationship difficulties.
   *British Journal of Medical Psychology*, 72, 305-321.
- McCullough, M. E. (1995). Forgiveness as altruism: A social-psychological theory of forgiveness and tests of its validity. Unpublished doctoral dissertation, Virginia Commonwealth University, Richmond.
- McCullough, M. E. (2000). Forgiveness as human strength: Theory, measurement, and links to well-being. *Journal of Social and Clinical Psychology*, *19*, 43-55.

McCullough, M. E. (2008). Beyond revenge. San Francisco, CA: Jossey-Bass.

- McCullough, M. E., Fincham, F. D., & Tsang, J-A. (2003). Forgiveness, forebearance, and time: The temporal unfolding of transgression-related interpersonal motivations. *Journal of Personality and Social Psychology*, 84, 540-557.
- McCullough, M. E., Hoyt, W. T., & Rachal, K. C. (2000). What we know (and need to know) about assigning forgiveness constructs. In M. E. McCullough, K. I.
  Pargament, & C. E. Thoresen (Eds.), *Forgiveness: Theory, research, and practice* (pp. 65-90). New York: Guilford Press.
- McCullough, M. E., Pargament, K. I., & Thorenson, C. E. (2000). The psychology of forgiveness: History, conceptual issues, and overview. In *Forgiveness: Theory, research, and practice* (pp. 1-16). New York: Guilford Press.
- McCullough, M. E., Rachal, K. C., Sandage, S. J., Worthington, E. L., Jr., Brown, S. W., & Hight, T. L. (1998). Interpersonal forgiving in close relationships II:
  Theoretical elaboration and measurement. *Journal of Personality and Social Psychology*, 75, 1586-1603.
- McCullough, M. E., Worthington, E. L., Jr., & Rachal, K. C. (1997). Interpersonal forgiving in close relationships. *Journal of Personality and Social Psychology*, 73, 321-336.
- Meyerson, P., & Tyron, W. W. (2003). Validating Internet research: A test of psycholometric equivalence on Intern and in-person samples. *Behavior Research Methods, Instruments, & Computers, 35*, 614-620.

- Mikulincer, M., Birnbaum, G., Woddis, D., & Nachmias, O. (2000). Stress and accessibility of proximity-related thoughts: Exploring the normative and intraindividual components of attachment theory. *Journal of Personality and Social Psychology*, 78, 509-523.
- Mikulincer, M., & Erev, I. (1991). Attachment style and the structure of romantic love. *British Journal of Social Psychology*, *30*(4), 273-291.
- Mikulincer, M., & Shaver, P. R. (2007). *Attachment in adulthood: Structure, dynamics, and change*. New York: Guilford Press.
- Miller, H. L., & Siegel, P. S. (1971). *Loving: A psychological approach*. New York: Wiley.
- Miller, R. S. (1997). Inattentive and contented: Relationship commitment and attention to alternatives. *Journal of Personality and Social Psychology*, *73*(4), 758-766.
- Monteoliva, A., & Garcia-Martinez, J. M. A. (2005). Attachment style and its effect on the quality of romantic relationships in Spanish students. *The Journal of Social Psychology*, 145, 745-747.
- Muraco, J. A., & Currran, M. A. (2012). Associations between marital meaning and reasons to delay marriage for young adults in romantic relationships. *Marriage & Family Review*, 45, 227-247.
- Murphy, B. L. (2005). Forgiveness, self-respect, and the value of resentment. In E. J.Worthington, Jr. (Ed.) *Handbook of forgiveness* (pp. 33-40). New York:Routledge.

- Murstein, B. L. (1988). A taxonomy of love. In R. J. Sternberg, Jr. & M. L. Barnes (Eds.), *The psychology of love* (pp. 13-37). New Haven, CT: Yale University Press.
- Northart, D. L., & Wright, S. (2013). *Effect sizes between attachment style, love, and forgiveness: A meta-analysis*. Poster session presented at the 121st Annual.
  Convention of the American Psychological Association, Honolulu, HI.
- Nosko, A., Tieu, T.-T., Lawford, H., & Pratt, M. W. (2011). How do I love thee? Let me count the ways: Parenting during adolescence, attachment styles, and romantic narratives in emerging adulthood. *Developmental Psychology*, 47, 645-657.

Nygren, A. (1953). Agape and eros. Philadelphia: Westminster Books.

- Omivale, M. (2009). *The relationship between attachment and academic achievement*. Unpublished doctoral dissertation, Long Island University, Brooklyn Center, NY.
- Oranthinkal, J., Vansteenwegen, A., Enright, R. D., & Stroobants, R. (2007). Further validation of the Dutch version of the Enright Forgiveness Inventory. *Community Mental Health Journal, 43*, 109-128.
- Orbach, I. (1997). A taxonomy of factors related to suicidal behavior. *Clinical Psychology: Science and Practice, 4*, 208-224.
- Osborne, J., & Waters, E. (2002). Four assumptions of multiple regression that researchers should always test. *Practical Assessment, Research & Evaluation*, 8(2). Retrieved February 9, 2014 from http://PAREonline.net/getvn.asp?v=8&n=2
- Pistole, M., & Clark, E. M. (1995). Love relationships: Attachment style and the investment model. *Journal of Mental Health Counseling*, *17*(2), 199-210.

- Rauer, A. J., Pettit, G. S., Lansford, J. E., Bates, J. E., & Dodge, K. A. (2013). *Romantic relationship patterns in young adulthood and their developmental antecedents*.
  Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/23421803
- Robertson, J., & Bowlby, J. (1952). Responses of young children to separation from their mothers. *Courrier du Centre Inernational de l'Enfrance, 2*, 131-142.
- Rousseeuw, P. J., & van Zomeren, B. C. (1990). Unmasking multivariate outliers and leverage points. *Journal of the American Statistical Association*, *85*, 633-639.
- Rubin, C. E. (1970). Measurements of romantic love. *Journal of Personality and Social Psychology*, 16, 265-273.
- Rusbult, C. E., Hannon, P. A., Stocker, S. L., & Finkel, E. J. (2005). Forgiveness and relational repair. In E. J. Worthington, Jr. (Ed.), *Handbook of forgiveness* (pp. 185-205). New York: Routledge.
- Sarinopoulos, I. (2000). Interpersonal forgiveness and physical health. *The World of Forgiveness*, *3*, 16-19.
- Sarinopoulos, S. (1996). Forgiveness in adolescence and middle adulthood: Comparing the Enright Forgiveness Inventory with the Wade Forgiveness Scale. Unpublished Master's thesis. University of Wisconsin-Madison.
- Sandage, S. J., & Williamson, I. (2005). Forgiveness in cultural context. In E. L. Worthington, Jr. (Ed.), *Handbook of forgiveness* (pp. 41-56). New York: Brunner-Routledge
- Schindler, I., & Tomasik, M. J. (2010). Life choices well made: How selective control strategies relate to career and partner decision processes. *Motivation and Emotion*, 34(2), 168-183

- Shaver, P., Hazan, C., & Bradshaw, D. (1988). Love as attachment: The integration of three behavioral systems. In R. J. Sternberg & M. L. Barnes (Eds.), *The psychology of love* (pp. 68-99). New Haven, CT: Yale University Press.
- Shih, T., & Fan, X. (2008). Comparing response rates from web and mail surveys: A meta-analysis. *Field Methods*, 20, 249-271. doi:10.1177/1525822X08317085
- Sibley, C. G., Fisher, R., & Liu, J. H. (2005) Reliability and validity of the Revised Experiences in Close Relationships (ECR-R) self-report measure of adult romantic attachment. *Personality and Social Psychology Bulletin, 31*, 24–35.
- Sibley, C. G., & Liu, J. H. (2004). Short-term temporal stability and factor structure of the revised experiences in close relationships (ECR-R) measure of adult attachment. *Personality and Individual Differences*, *36*, 969-975. doi:10.1016/S0191-8869(03)00165
- Simpson, J. A., & Campbell, L. (2005). Methods of evolutionary sciences. In D. M. Buss (Ed.), *Handbook of evolutionary psychology* (pp. 119-144). Hoboken, NJ: John Wiley & Sons.
- Simpson, J. A., Rholes, S. W., Orina, M., & Grich, J. (2002). Working models of attachment, support giving, and support seeking in a stressful situation. *Personality and Social Psycholgy Bulletin, 28*, 598-608.
- Simpson, J. A., Rholes, W. S., & Phillips, D. (1996). Conflict in close relationships: An attachment perspective. *Journal of Personality and Social Psychology Bulletin*, 71, 598-608.

- Sprecher, S., & Fehr, B. (2010). Dispositional attachment and relationship-specific attachment as predictors of compassionate love for a partner. *Journal of Social* and Personal Relationships, 28(4), 558-574.
- Sprecher, S., & Hendrick, S. S. (2004). Self-disclosure in intimate relationships: Associations with individual and relationship characteristics over time. *Journal of Social and Clinical Psychology*, 23, 857-877.

SPSS Inc. (2012). PASW Statistics 21.0. Chicago: Author.

- Stephan, C. W., & Bachman, G. F. (1999). What's sex got to do with it? Attachment, love schemas, and sexuality. *Personal Relationships*, 6, 111–123.
- Sternberg, R. J. (1986). A triangular theory of love. *Psychological Review*, *93*(2), 119-135.
- Sternberg, R. J. (1988). Triangulating love. In R. J. Sternberg & M. L. Barnes (Eds.), *The psychology of love* (pp. 119-138). New Haven, CT: Yale University Press.
- Sternberg, R. J. (1997). Construct validation of a triangular love scale. *European Journal* of Social Psychology, 27(3), 313-335.
- Sternberg, R. J., & Grajek, S. (1984). The nature of love. *Journal of Personality and Social Psychology*, *41*, 312-329.
- Strelan, P., & Covic, T. (2006). A review of forgiveness process models and a coping framework to guide future research. *Journal of Social and Clinical Psychology*, 25(10), 1059-1085.
- Subkovial, M. J., Enright, R. D., & Wu, C. (1992, October). Current developments related to measuring forgiveness. Paper presented at the annual meeting of the Midwestern Educational Research Association, Chicago, IL.

- Subkovial, M. J., Enright, R. D., Wu, C., Gassin, E. A., Freedman, S., Olson, L. M., & Sarinopoulos, I. (1995). Measuring interpersonal forgiveness in late adolescence and middle adulthood. *Journal of Adolescence*, 18, 641-655.
- Taylor, S. E., Klein, L. C., Lewis, B. P., Gruenewald, T. L., Gurung, R. A. R., & Updegraff, J. A. (2000). Biobehavioral resposes to stress in females: Tend-andbefriend, not fight-or-flight. *Psychological Review*, 107, 411-429.
- Tong, H. M. (2014). *Chick flicks lie: Sugar-free accounts of a positive pessimist.* Bloomington, IN: Author House, LLC
- Toussaint, L., & Webb, J. R. (2005). Theoretical and empirical connections between forgiveness, mental health, and well-being. In E. J. Worthington, Jr. (Ed.), *Handbook of forgiveness* (pp. 349-362). New York: Routledge.
- United States Census Bureau (2011). *Number, timing, and duration of marriages and divorces: 2009*. Retrieved from http://www.census.gov/prod/2011pubs/p70-125.pdf
- Vuncannon, J. R. (2007). The perceptions of attachment style and forgiveness in romantic couples. *Dissertation Abstracts International Section B: The Sciences and Engineering*, 67(12-B), 7432.
- Wade, N. G., Worthington, E. L., Jr., & Haake, S. (2009). Comparison of explicit forgiveness interventions with alternative treatment: A randomized clinical trial. *Journal of Counseling & Development*, 87, 143-151.
- Wade, N. G., Worthington, E. L., Jr., & Meyer, J. (2005). But do they work? A meta-analysis of group interventions to promote forgiveness. In E. J. Worthington, Jr. (Ed.), *Handbook of forgiveness* (pp. 423-439). New York: Routledge.

- Webb, M., Call, S., Chickering, S. A., Colburn, T. A., & Heisler, D. (2006). Dispositional forgiveness and adult attachment styles. *The Journal of Social Psychology*, *146*(4), 509-512.
- Weigel, D. J. (2007). Parental divorce and the types of commitment-related messages that people gain from their families of origin. *Journal Divorce & Remarriage*, 47(1-2). 15-32.
- Weis, K. (2006). Introduction. In R. J. Sternberg & K. Wies (Eds.), *The new psychology of love* (pp. 1-11). New Haven, CT: Yale University Press.
- Wilson, J. B., Gardner, B. C., Brosi, M. W., Topham, G. L., & Bugsby, D. M. (2013).
  Dydadic adult attachment style and aggression within romantic relationships. *Journal of Couple & Relationship Therapy*, *12*, 186-205.
- Wojciszke, B. (2002). From the first sight to the last drop: A six-stage model of the dynamics of love. *Polish Psychological Bulletin*, *33*(1), 15-25.
- Woldarsky Meneses, C., & Greenberg, L. S. (2010). The construction of a model of the process of couples' forgiveness in emotion-focused therapy for couples. *Journal* of Marital and Family Therapy, 37, 491-502.
- World Health Organization, Expert Committee on Mental Health. (1951). *Report on the second session, 1951*. Geneva: Author.
- Worthington, E. L., Jr. (2000). Is there a place for forgiveness in the justice system? *Fordham Urban Law Journal, 27,* 1721–1734.
- Worthington, E. L., Jr. (2001). *Five steps to forgiveness: The art and science of forgiving*. New York: Crown Publishers.

- Worthington, E. L., Jr. (2003). Forgiving and reconciling: Bridges to wholeness and hope. Downers Grove, IL: InterVarsity Press.
- Worthington, E. L., Jr. (2005). The initial question about the art and science of forgiving.In E. L. Worthington (Ed.), *Handbook of forgiveness* (pp. 1-13). New York:Routledge.

Worthington, E. L., Jr. (2006). Forgiveness and reconciliation. New York: Routledge.

- Worthington, E. L., Jr., Berry, J. W., & Parrott, L. III. (2001). Unforgiveness, forgiveness, religion, and health. In T. G. Plante, & A. Sherman (Eds.), *Faith and health: Psychological perspectives* (pp. 107–138). New York: Guilford.
- Worthington, E. L., Jr., & Wade, N. G. (1999). The social psychology of unforgiveness and forgiveness and implications for clinical practice. *Journal of Social and Clinical Psychology*, 18, 385-418.
- Yarnoz Yaben, S. (2009). Forgiveness, attachment, and divorce. *Journal of Divorce & Remarriage*, 50, 282-294.
- Zeifman, D., & Hazan, C. (2008). Pair bonds as attachments. In J. Cassidy & P. R. Shaver (Eds.), Handbook of attachment: Theory, research, and clinical applications (pp. 436-455). New York: Guilford Press.

### APPENDIX A

### INSITITUTIONAL REVIEW BOARD (IRB) APPROVAL LETTER

# NORTHERN COLORADO

Institutional Review Board

DATE:	March 21, 2014
TO: FROM:	Dayna Northart, MA University of Northern Colorado (UNCO) IRB
PROJECT TITLE:	[582946-1] Forgiveness as a mediating variable between attachment style and adult love relationships
SUBMISSION TYPE:	New Project
ACTION: DECISION DATE:	APPROVAL/VERIFICATION OF EXEMPT STATUS March 19, 2014

Thank you for your submission of New Project materials for this project. The University of Northern Colorado (UNCO) IRB approves this project and verifies its status as EXEMPT according to federal IRB regulations.

We will retain a copy of this correspondence within our records for a duration of 4 years.

If you have any questions, please contact Sherry May at 970-351-1910 or <u>Sherry.May@unco.edu</u>. Please include your project title and reference number in all correspondence with this committee.

### APPENDIX B

### PAPER-AND-PENCIL INFORMED CONSENT LETTER

## UNIVERSITY of NORTHERN COLORADO

### CONSENT FORM FOR HUMAN PARTICIPANTS IN RESEARCH

Researcher: Dayna Northart, M.A., Counseling Psychology Department nort6602@bears.unco.edu. Researcher Advisor: Brian Johnson, Ph.D., Counseling Psychology Department Brian.Johnson@unco.edu

I am a doctoral student in UNC's Counseling Psychology program. I am interested in researching people's attitudes long-term relationships. This survey is designed to explore how adults experience romantic relationships. It is the hope of the researcher that the results of this study will help form new interventions in couples counseling.

In order to qualify for this study, you must be at least 25 years old, and you must currently be in a committed relationship that has lasted at least six months. This survey takes most people about 25 to 45 minutes to complete, and includes questions about your experiences in your current or most recent romantic relationships. By completing this survey, you are giving your consent to participate.

Participants' names will not show up in any report of this researcher and your name will not show up anywhere on the survey, and therefore your answers will remain anonymous.

The only foreseeable risk to you in completing this survey may be uneasiness you feel from thinking about various experiences you have had in your romantic relationship. Upon completion of this survey, you may be entered in a random drawing to win one of four \$25 Visa gift cards. If you would like to be entered in the drawing, please complete the attached form with your email contact information. Your email information will be kept separate from your survey data. As you will be disclosing identifying information by participating in the drawing, you will not remain anonymous. However, all identifiable information will be kept confidential, and will be stored in a locked room in a locked file cabinet in the office the research advisor in McKee Hall on the University of Northern Colorado campus.

Your participation will benefit the field of counseling by providing information about how people experience romantic relationships, and how counselors can develop interventions to help people that seek couples counseling services.

Please feel free to email me if you have any questions or concerns about this research. Thank you for sharing your thoughts. Dayna Northart, M. A. Graduate Student at UNC Nort6602@bears.unco.edu

Participation is voluntary. You may decide not to participate in this study and if you begin participation you may still decide to stop and withdraw at any time. Your decision will be respected and will not result in loss of benefits to which you are otherwise entitled. Having read the above and having had an opportunity to ask any questions please complete the questionnaire if you would like to participate in this research. By completing the questionnaire, you will give us permission for your participation. You may keep this form for future reference. If you have any concerns about your selection or treatment as a research participant, please contact the Office of Sponsored Programs, Kepner Hall, University of Northern Colorado Greeley, CO 80639; 970-351-1907.

APPENDIX C

### ELECTRONIC INFORMED CONSENT LETTER

# UNIVERSITY of NORTHERN COLORADO

### **CONSENT FORM FOR HUMAN PARTICIPANTS IN RESEARCH**

Researcher: Dayna Northart, M.A., Counseling Psychology Department nort6602@bears.unco.edu. Researcher Advisor: Brian Johnson, Ph.D., Counseling Psychology Department Brian.Johnson@unco.edu

I am a doctoral student in UNC's Counseling Psychology program. I am interested in researching people's attitudes long-term relationships. This survey is designed to explore how adults experience romantic relationships. It is the hope of the researcher that the results of this study will help form new interventions in couples counseling.

In order to qualify for this study, you must be at least 25 years old, and you must currently be in a committed relationship that has lasted at least six months. This survey takes most people about 25 to 45 minutes to complete, and includes questions about your experiences in your current or most recent romantic relationships. By completing this survey, you are giving your consent to participate.

When surveys are completed and sent electronically, it is not possible to guarantee a secure transfer of the information, so the confidentially of people choosing to participate cannot be guaranteed. However, the participants' names will not show up in any report of this researcher and your name will not show up anywhere on the survey, and therefore your answers will remain anonymous. The only foreseeable risk to you in completing this survey may be uneasiness you feel from thinking about various experiences you have had in your romantic relationship. Upon completion of this survey, you will have the opportunity to be entered in a random drawing to win one of four \$25 Visa gift cards by clinking on a link that will send you to a page that is separate from your completed survey. You will be sent to a page that will ask you to enter your email address, which will be the way in which the researchers will contact you, should you win the drawing.

Your participation will benefit the field of counseling by providing information about how people experience romantic relationships, and how counselors can develop interventions to help people that seek couples counseling services.

Please feel free to email me if you have any questions or concerns about this research. Thank you for sharing your thoughts. Dayna Northart, M. A. Graduate Student at UNC Nort6602@bears.unco.edu

Participation is voluntary. You may decide not to participate in this study and if you begin participation you may still decide to stop and withdraw at any time. Your decision will be respected and will not result in loss of benefits to which you are otherwise entitled. Having read the above and having had an opportunity to ask any questions please complete the questionnaire if you would like to participate in this research. By completing the questionnaire, you will give us permission for your participation. You may keep this form for future reference. If you have any concerns about your selection or treatment as a research participant, please contact the Office of Sponsored Programs, Kepner Hall, University of Northern Colorado Greeley, CO 80639; 970-351-1907.

### APPENDIX D

### PERMISSION TO USE THE EXPERIENCES IN CLOSE RELATIONSHIPS SCALE-REVISED

EXPERIENCES IN CLOSE RELATIONSHIPS SCALE—REVISED

### Permission to use the Experiences in Close Relationships Scale-Revised

Dayna Northart <u>Dayna.northart@gmail.com</u> 10/6/13

To rcfraley@uiuc.edu

Hello Dr. Fraley,

I am a doctoral student, and I am interested in utilizing the Experiences in Close Relationships-Revised in my dissertation. The topic of my study is forgiveness as a mediating variable between attachment style and adult love relationships. Please let me know how to obtain permission to use this instrument.

R. Chris Fraley <u>rcfraley@gmail.com</u>

10/6/13

To me

Please feel free to use it. Hope your dissertation goes well.

 $\sim$  Chris

R. Chris Fraley
University of Illinois at Urbana-Champaign
Department of Psychology
603 East Daniel Street
Champaign, IL 61820
Internet: <u>http://www.psych.uiuc.edu/~rcfraley/</u>

### Experiences in Close Relationships Scale - Revised (Brennan et al., 1998)

The statements below concern how you feel in emotionally intimate relationships. We are interested in how you *generally* experience relationships, not just in what is happening in a current relationship. Respond to each statement by to indicate how much you agree or disagree with the statement.

1	2	3	4	5	6	7
Disagree Strongly	Disagree	Disagree Slightly	Neutral/ Mixed	Agree Slightly	Agree	Agree Strongly

- 1. I'm afraid that I will lose my partner's love.
- 2. I often worry that my partner will not want to stay with me.
- 3. I often worry that my partner doesn't really love me.
- 4. I worry that romantic partners won't care about me as much as I care about them.
- 5. I often wish that my partner's feelings for me were as strong as my feelings for him Or her.
- 6. I worry a lot about my relationships.
- 7. When my partner is out of sight, I worry that he or she might become interested in someone else.
- 8. When I show my feelings for romantic partners, I'm afraid they will not feel the same about me.
- 9. I rarely worry about my partner leaving me.
- 10. My romantic partner makes me doubt myself.
- 11. I do not often worry about being abandoned.
- 12. I find that my partner(s) don't want to get as close as I would like.
- 13. Sometimes romantic partners change their feelings about me for no apparent reason.
- 14. My desire to be very close sometimes scares people away.
- 15. I'm afraid that once a romantic partner gets to know me, he or she won't like who I really am.
- 16. It makes me mad that I don't get the affection and support I need from my partner.
- 17. I worry that I won't measure up to other people.
- 18. My partner only seems to notice me when I'm angry.
- 19. I prefer not to show a partner how I feel deep down.
- 20. I feel comfortable sharing my private thoughts and feelings with my partner.
- 21. I find it difficult to allow myself to depend on romantic partners.
- 22. I am very comfortable being close to romantic partners.
- 23. I don't feel comfortable opening up to romantic partners.
- 24. I prefer not to be too close to romantic partners.
- 25. I get uncomfortable when a romantic partner wants to be very close.
- 26. I find it relatively easy to get close to my partner.
- 27. It's not difficult for me to get close to my partner.
- 28. I usually discuss my problems and concerns with my partner.
- 29. It helps to turn to my romantic partner in times of need.
- 30. I tell my partner just about everything.
- 31. I talk things over with my partner.

- 32. I am nervous when partners get too close to me.
  33. I feel comfortable depending on romantic partners.
  34. I find it easy to depend on romantic partners.
  35. It's easy for me to be affectionate with my partner.
  36. My partner really understands me and my needs.

### APPENDIX E

### PERMISSION TO USE THE TRIANGULAR LOVE SCALE

### TRIANGULAR LOVE SCALE

#### Permission to use the Triangular Love Scale

Dayna Northart <u>Dayna.northart@gmail.com</u> 10/6/13 Hello,

I am a doctoral student, and I am interested in utilizing the Sternberg Triangular Love Scale in my dissertation. The topic of my study is forgiveness as a mediating variable between attachment style and adult love relationships. Please let me know how to obtain permission to use this instrument.

Thank you,

Dayna Northart, M. A. Doctoral Student Counseling Psychology University of Northern Colorado

Plikerd, Scott <u>Scott.plikerd@mheducation.com</u>

10/10/13

To me

Please use the following form to apply for permission.

http://www.mhhe.com/catalogs/cust\_serv/republication.mhtml

Your school would be your publisher.

Scott W. Plikerd | Manager Permissions Department McGraw-Hill Education 2 Penn Plaza | 10<sup>th</sup> Floor | New York NY 10121 Office: <u>212-904-2614</u> | Fax: <u>212-904-6285</u> <u>scott.plikerd@mheducation.com</u> -- please note my email address has changed Read each of the following statements, filling in the blank spaces with the name of one person you love or care for deeply. Rate your agreement with each statement according to the following scale, and enter the appropriate number between 1 and 9.

1	2	3	4	5	6	7	8	9
Not at all				Moderately	,		E	xtremely

1. I am actively supportive of \_\_\_\_\_'s well-being.

- 2. I have a warm relationship with \_\_\_\_\_.
- 3. I am able to count on \_\_\_\_\_ in times of need.
- 4. \_\_\_\_\_ is able to count on me in times of need.
- 5. I am willing to share myself and my possessions with \_\_\_\_\_.
- 6. I receive considerable emotional support from \_\_\_\_\_.
- 7. I give considerable emotional support to \_\_\_\_\_.
- 8. I communicate well with \_
- 9. I value \_\_\_\_\_ greatly in my life.
- 10. I feel close to \_\_\_\_\_
- 11. I have a comfortable relationship with \_\_\_\_\_.
- 12. I feel that I really understand \_\_\_\_\_.
- 13. I feel that \_\_\_\_\_ really understands me.
- 14. I feel that I can really trust \_\_\_\_\_.
- 15. I share deeply personal information about myself with \_\_\_\_\_.
- 16. Just seeing \_\_\_\_\_ excites me.
- 17. I find myself thinking about \_\_\_\_\_\_ frequently during the day.
- 18. My relationship with \_\_\_\_\_ is very romantic.
- 19. I find \_\_\_\_\_\_ to be very personally attractive.
- 20. I idealize \_\_\_\_\_.
- 21. I cannot imagine another person making me as happy as \_\_\_\_\_ does.
- 22. I would rather be with \_\_\_\_\_ than with anyone else.
- 23. There is nothing more important to me than my relationship with \_\_\_\_\_.
- 24. I especially like physical contact with \_\_\_\_\_.
- 25. There is something almost "magical" about my relationship with \_\_\_\_\_.
- 26. I adore
- 27. I cannot imagine life without \_\_\_\_\_.
- 28. My relationship with \_\_\_\_\_ is passionate.
- 29. When I see romantic movies or read romantic books I think of \_\_\_\_\_.
- 30. I fantasize about \_\_\_\_\_.
- 31. I know that I care about
- 32. I am committed to maintaining my relationship with \_\_\_\_\_.
- 33. Because of my commitment to \_\_\_\_\_, I would not let other people come between us.
- 34. I have confidence in the stability of my relationship with \_\_\_\_\_.
- 35. I could not let anything get in the way of my commitment to \_\_\_\_\_.
- 36. I expect my love for \_\_\_\_\_ to last for the rest of my life.
- 37. I will always have a strong responsibility for \_\_\_\_\_.

- 38. I view my commitment to \_\_\_\_\_ as a solid one.39. I cannot imagine ending my relationship with \_\_\_\_\_.
- 40. I am certain of my love for \_\_\_\_\_.
  41. I view my relationship with \_\_\_\_\_ as permanent.
- 42. I view my relationship with \_\_\_\_\_ as a good decision.

- 43. I feel a sense of responsibility toward \_\_\_\_\_.
  44. I plan to continue in my relationship with \_\_\_\_\_.
  45. Even when \_\_\_\_\_ is hard to deal with, I remain committed to our relationship.

# APPENDIX F

# PERMISSION TO USE THE ENRIGHT FORGIVENESS INVENTORY

ENRIGHT FORGIVENESS INVENTORY

### Permission to use the Enright Forgiveness Inventory

# Re: MGWeb: Comment from Dayna Northart (Order Question)

MindGardenInfo@mindgarden.com To me 10/7/13

Hello Dayna,

Thank you for contacting Mind Garden.

Your best course will be to order the EFI in PDF format so that you can reproduce some in paper format and transfer the rest to the Qualtrics platform. http://www.mindgarden.com/products/efins.htm#data

After purchase, you will also need to complete the Online Use Agreement at this link: http://www.mindgarden.com/how.htm#instrumentweb

Best,

Katherine Mind Garden, Inc.

On Sun, Oct 6, 2013 at 12:50 PM, <<u>dayna.northart@gmail.com</u>> wrote: Message-Id: <<u>20131006183936.A73876A00F1@web016.mivamerchant.net</u>> Date: Sun, 6 Oct 2013 14:39:36 -0400 (EDT)

Name: Dayna Northart Email address: <u>dayna.northart@gmail.com</u> Phone number: <u>720-229-8960</u> Company/Institution: University of Northern Colorado Country: United States Order/Invoice number: Purchase Order number: Topic of comment: Order Question

Comment:

I am a doctoral student, and I would like to use the EFI in my dissertation along with a few other measures. I may be doing both paper and pencil and electronic administrations, and I'm looking for about 200 participants. For electronic administration, I would like to administer this instrument in the same software with my other instruments (Qualtrics). What is the best way going about ordering and administering this?

MindGarden, Inc. invite@mindgarden.com

11/3/13

To me

Dear Dayna Northart,

Welcome to Transform, a web-based document storage system by Mind Garden, Inc. (<u>www.mindgarden.com</u>).

Your order for EFIN-S may be found on your Participant page after you log in.

You will need to establish your identity (login) in Transform (if you havent already done so). For this process, your User ID will be your email address; you will set your own password. To begin the login process, click on the following link:

http://transform.mindgarden.com/login/254515/249247

You may need to copy and paste this URL into your web browser if clicking on the URL does not work.

Once you get to your page, you can see your order added to the Documents page.

To return to Transform at any time, simply enter your e-mail address and the password you created to log back in. <u>http://transform.mindgarden.com/login/254515/249247</u>

Your email address is: <u>dayna.northart@gmail.com</u>

As always, we are available weekdays (US) to answer any questions you may have. Reach us by email by going to the "Contact" link on our website <u>http://www.mindgarden.com/contact.htm</u>, or call us at <u>650-322-6300</u> (US Pacific).

Sincerely,

The Mind Garden Team

# Enright Forgiveness Inventory (Enright & Rique, 2000)

## Attitude Scale

We are sometimes unfairly hurt by people, whether in family, friendship, school, work, or other situations. We ask you now to think of a the most recent experience of *your romantic partner* hurting you **unfairly** and **deeply**. For a few moments, visualize in your mind the events of that interaction. Try to see the person and try to experience what happened.

# 1. How deeply were you hurt when the incident occurred?

No hurt	A little hurt	Some hurt	Much hurt	A great deal	of hurt
2. How lo	ng ago was the o	ffense?			
da	ys ago	months ago	week	s ago	_ years ago

# 3. Please briefly describe what happened when this person hurt you:

Now please answer a series of questions about your current attitude toward this person. We do not want your rating of past attitudes, but your ratings of attitudes **right now**. All responses are confidential, so please answer honestly. Thank you

1	2	3	4	5	6
Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree

This set of items deals with your current **feeling** or **emotions** right now toward the person. Try to assess your actual feeling for the person on each item. For each item please check the appropriate number matching your level of agreement that **best** describes your current feeling. Please do not skip any item. Thank you

I feel \_\_\_\_\_\_ toward him/her. (Place each word in the blank when answering each item).

I feel...

- 1. Warm
- 2. Negative
- 3. Kindness
- 4. Happy
- 5. Hostile
- 6. Positive
- 7. Tender
- 8. Unloving
- 9. Repulsed
- 10. Resentment
- 11. Goodwill
- 12. Angry
- 13. Cold
- 14. Dislike
- 15. Caring
- 16. Bitter
- 17. Good
- 18. Affection
- 19. Friendly
- 20. Disgust

1	2	3	4	5	6
Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree

This set of items deals with your current **behavior** right now toward the person. Consider For each item please check the appropriate number matching yow your **do act** or **would act** toward the person in answering the questions. For each item, please check the number that **best** describes your current behavior. Please do not skip any item. Thank you

Regarding this person, I do or would \_\_\_\_\_\_. (Place each word in the blank when answering each item).

### I do or would...

- 21. show friendship
- 22. avoid
- 23. ignore
- 24. neglect
- 25. help
- 26. put him/her down
- 27. treat gently
- 28. be considerate
- 29. speak ill of him/her
- 30. reach out to him/her
- 31. not attend to him/her
- 32. lend him/her a hand
- 33. not speak to him/her
- 34. act negatively
- 35. establish good relations with him/her
- 36. stay away
- 37. do a favor
- 38. aid him/her when in trouble
- 39. be biting when talking with him/her
- 40. attend his/her party

1	2	3	4	5	6
Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree

This set of items deals with your current **think** about the person. Think about the kinds of thoughts that occupy your **mind** right **now** regarding this particular person. For each item please check the appropriate number matching your level of agreement that **best** describes your current thinking. Please do not skip any item. Thank you

I think he or she is \_\_\_\_\_\_ toward him/her. (Place each word in the blank when answering each item).

### I think he or she is...

- 41. wretched
- 42. evil
- 43. horrible
- 44. of good quality
- 45. worthy of respect
- 46. dreadful
- 47. loving
- 48. worthless
- 49. immoral
- 50. a good person
- 51. nice
- 52. corrupt
- 53. a bad person

Regarding this person I

- 54. wish him or her well
- 55. disapprove of him/her
- 56. think favorably of him/her
- 57. hope he/she does well in life
- 58. condemn the person
- 59. hope he/she succeeds
- 60. hope he/she finds happiness

1	2	3	4	5	6
Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree

In thinking through the person and event you just rated, please consider the following final questions.

- 61. There was probably no problem now that I think about it.
- 62. I was never bothered by what happened.
- 63. The person was not wrong in what he or she did to me.
- 64. My feelings were never hurt.
- 65. What the person did was fair.

We have one final question.

To what extent have you forgiven the person you rated on this Attitude Scale?

1	2	3	4	5
Not at all		In progress		Complete forgiveness

APPENDIX G

DEMOGRAPHIC QUESTIONNAIRE

### **Demographic Questionnaire**

Please respond to the following items that align with your identity. Age in years: Gender: Length of current relationship: Relationship type: Heterosexual Same-sex Race/ethnicity: Caucasian/White Latino/Hispanic African American Asian American Pacific Islander Indian American American Indian Multiracial/Multiethnic Where did you hear about this study? Church/religious/spiritual organization Community organization University Listserv Online social network Word of mouth

How important is your faith to you?

1	2	3	4	5	6	7
Not important at all			Moderately important			Very Important

APPENDIX H

DEBRIEFING AND REFERRALS LIST

Dear participant,

Thank you for your participation in this study. The results of this study will contribute to the research supporting new interventions in therapy that will benefit people seeking couples counseling. If you have experienced emotional distress during the process of completing this survey, you may contact any of the following referral sources for additional counseling services.

Psychological Services Clinic University of Northern Colorado McKee Hall Room 247 Greeley, CO 80639 Phone: (970) 351-1645

North Range Behavioral Health 1300 North 17th Avenue Greeley, CO 80631 (970) 347-2120

Psychological Services Center University of Colorado, Denver 1200 Larimer Street North Classroom Building Suite 3002 Denver, CO 80217-3364 Phone: (303) 556-5289

You may also contact Dayna Northart, the primary researcher on this study, with any additional questions at nort6602@bears.unco.edu.

APPENDIX I

RANDOM DRAWING PARTICIPATION FORM

My completing this form, you agree to be entered into a random drawing for a \$25 Visa gift card for your participation in this study. Please enter the email address through which you would like to be contacted if you win the drawing.

Email:

APPENDIX J

# MANUSCRIPT FOR PUBLICATION

Forgiveness as a Mediating Variable between Attachment Style and Love

Dayna Northart

University of Northern Colorado

#### Abstract

The field of couples counseling continuously strives to better understand relationships and strive endeavors to further develop appropriate interventions to enriching the romantic relationships of couples seeking therapy. The current study investigated the role of forgiveness might play in enhancing romantic relationships of people with various attachment styles. A sample of 90 adults aged 25 years and older in committed relationships participated. A mediation analysis was conducted to examine if forgiveness might account for higher levels of love in committed relationships. A mediation effect of forgiveness between attachment style and love was not found; however, this may have been due to the fact that the sample under-represented the population of individuals with insecure attachment styles. Additionally, a significant effect was found between forgiveness and love, which may indicate the value of forgiveness in romantic relationships. Discussions of the results as well as a consideration of potential future directions are explored.

Keywords: attachment style, forgiveness, love, couples counseling

#### Style and Love

Attachment theory describes the patterns of forming relationships people have when creating bonds with others and maintaining interpersonal relationships (Bowlby, 1982). These patterns are learned in early childhood and continue into adulthood. This concept is closely related to love as it presents hypotheses for how and why people love one another (Shaver, Hazan, & Bradshaw, 1988). Love has long been a topic among poets and scholars (Ellis, 1950; Freud, 1952; Kendrick, 2006; Murstein, 1988; Nygren, 1953). In addition to attachment and love, forgiveness is a third variable that may be important in relational bonds (Worthington, 2006). Just as attachment styles form in early childhood, patterns of forgiveness learned in childhood develop into adulthood (Denham, Neal, Wilson, Pickering, & Boyatzis, 2005). As such, caregivers help children to develop skills of emotional healing when relational injuries occur (Strelen & Covic, 2006).

A substantial amount of research has been conducted in studying the relationship between attachment style and adult romantic, consummate love relationships (i.e., Derrick & Murray, 2007; Feeney & Noller, 1990; LaGuardia, Ryan, Couchman, & Deci, 2000; Levy & Davis, 1988; Madey & Rodgers, 2009; Sprecher & Fehr, 2010). There has also been considerable research on forgiveness and consummate love relationships (Allemand, Amberg, Zimprich, & Fincham, 2007; Finkel, Rushbult, Kumashiro, & Hannon, 2002; Kachadourian, Fincham, & Davila, 2004; McCullough et al., 1998; Vuncannon, 2007) as well as attachment style and forgiveness (Kachadourian et al., 2004). The research has revealed common emotional threads among these three constructs. Further research is needed to better understand these abstract concepts, how they impact individuals, and how clinicians may incorporate knowledge of their respective interactions into interventions.

#### **Attachment Style**

Attachment styles were originally proposed by John Bowlby (1969/1982) as a way to understand how a person relates to the self and others. Attachment also brings to light patterns of relationships individuals have with their caregivers from infancy throughout their lifespans (Bowlby, 1969/1982). Based on the observations of these mother-child interactions, the authors defined three styles of attachment: secure, anxious/ambivalent, and avoidant.

A major study that contributed to attachment theory is an experiment known as the Strange Situation conducted by Mary Ainsworth and Barbara Wittig in 1969. In this experiment, children interacted with a stranger as their mothers would leave and re-enter the room. Children with what came to be called anxious/ambivalent attachment styles tended to explore the toys and the play area less at the beginning of the experiment. These children had reactions such as getting angry at the mother, not allowing her to soothe them, and exhibiting behaviors such as kicking or arching their backs when their mother picked them up to comfort them. Children with what came to be called avoidant attachment styles were less upset when their mothers left, were slow to run to her, or were non-responsive when she reentered (Davidson & Davidson, 2005). Ainsworth and Wittig (1969) found that securely attached child explored the environment more and had a higher degree of pleasure in play when the mother was present. Later studies found that the sense of safety found in childhood is sought after in a romantic partner in adulthood (Mikulincer & Shaver, 2007).

Studies have found evidence supporting those adults with specific attachment styles react to threats in the environment in similar ways. When faced with a threat, securely attached adults tend to focus on the attachment figure and symbols of figures that provide comfort (Mikulincer, Birnbaum, Woodis, & Nachmias, 2000), are more likely to seek out social support from loved ones, and reciprocate support to their partners (Florian, Mikulincer, & Bucholtz, 1995). Those with anxious attachment styles tend to seek out attention from their partners, while those with avoidant attachment detach and isolate from their partners (Dewitte & De Houwer, 2008). Individuals with avoidant attachment styles have been shown to have ineffective care-seeking behaviors. Those with anxious attachment styles have not provided sufficient support to partners by not attending to their partners' emotional and physical needs (Collins & Feeney, 2000).

#### Love

People may love their grandmothers, their pets, their siblings, their romantic partners, their favorite television show, and practically anything else; however, the emotional meaning behind each of these connections is not the same. The scientific study of love has produced a variety of theories to explain how and why people love (Ellis, 1950; Freud, 1952; Kendrick, 2006; Leckman, Hrdy, Keverne, & Carter, 2006; Miller & Siegel, 1971; Murstein, 1988; Nygren, 1953).

Lee (1988) provided a description of three primary styles and three secondary styles of love in order to better understand the experiences people have in loving relationships. The first primary style is *Eros*, or erotic love, that includes ideas of love at first sight. *Storge* is a style of love that occurs in close friendships Lee described as "love without fever or folly" (p. 43). *Ludus* is the third style, and its name comes from the Latin word meaning "play" or "game" (Lee, 1988). The person with this style of love is not particular about the mate he or she obtains but is rather interested in exploring the options of potential others. This style may be seen as playing games or playing the field. Lee went on to describe secondary love styles are a combination of two of the primary love styles that elaborate on the foundation of his theory. This provided the initial groundwork in the scientific exploration of love.

Sternberg (1988) described his triangular theory of love as akin to Lee's (1988) theory. Sternberg's theory took the idea of different love styles and drew out three different components that contributed to each: *commitment, intimacy, and passion*. One of the main defining aspects of commitment is willingness to sacrifice potential other mates once a relationship begins; it has found that attention to potential other mates was the greatest predictor of relationship failure (Miller, 1997). The word intimate comes from the Latin work *intimus*, meaning "inner most" (Hatfield, 1988). It has been defined as the emotional and behavioral interdependence of people in a relationship that can be considered the friendship piece of love (Levinger, 1988). As dyads grow in intimacy, each person is willing to reveal personal thoughts and feelings to one another as well as the desire to be physically close to each other (Hatfield, 1988). Passion is an intense psychological and physiological urge to be close to another person (Levinger, 1988). In romantic relationships, it is sexual attraction; it is also the zealousness that a religious person may feel toward God or a parent may feel about wanting to always be close to his

or her child. It may also manifest as obsessive, possessive, jealous, or an impulse to be in control of one's significant other (Hatfield, 1988).

#### Forgiveness

Forgiveness has been defined by Worthington and Wade (1999) as "victim's internal choice (either unconscious or deliberate) to relinquish unforgiveness and to seek reconciliation with the offender if safe, prudent, and possible to do so," (p. 386). Other definitions include the process of replacing negative thoughts, emotions, and behaviors with positive thoughts and emotions (Enright & Fitzgibbons, 2000) or a re-direction of one's motivations (McCullough, Fincham, & Tsang, 2003). Along with many other descriptions of forgiveness, these definitions carry a common idea that forgiveness is a relinquishing of negative affect and a presence of positive affect in its place, and it is as an intentional process. Worthington (2005) articulates these two aspects of forgiveness as emotional process forgiveness and decisional forgiveness.

#### **Process Models**

Process models of forgiveness describe stages through which a victim goes when forgiving including cognitive, emotional, and behavioral actions taken (Strelan & Covic, 2006). These models describe how forgiveness occurs through stages and how each stage builds from a previous stage. Throughout these stages, there is generally an experience of the pain of the offense, negative consequences, acknowledgement that the consequences are not benefiting the relationship, a decision to forgive, empathy is felt, and forgiveness can be provided. Enright and the Human Development Study Group (1991) developed a process model of forgiveness that describes forgiveness as movement through stages; however, this model acknowledges that every individual will move through the stages differently. Baskin and Enright (2004) conducted a meta-analysis of nine studies employing process models. They found that interventions using this theory increased forgiveness (average effect size = 0.83), psychological well-being (average effect size = 1.66), and positive forgiveness (average effect size = 1.66) and psychological well-being (average effect size = 1.42).

Some research has focused on the emotional aspect of the process model to develop a theory of emotion-focused forgiveness (Worthington, 2000; Worthington, Berry, & Parrott, 2001; Worthington & Wade, 1999). When people experience an injustice, they tend to feel a threat of stress and harbor feelings of resentment. Worthington (2003) described the injustice gap as the space between the way in which a person would like to correct the sense of injustice felt following a transgression and how the individual currently feels about the event. Worthington (2001) developed the REACH intervention model of forgiveness that included the individual against whom the offense was committed recalling (R) the pain of the event, developing empathy (E) for the transgressor, giving a gift of forgiveness altruistically (A) to the transgressor, committing (C) to forgiveness, and holding (H) on to the commitment to forgive.

#### **Decision Models**

Many theories of forgiveness posit that forgiveness occurs through a progression of cognitive actions based on the human desire for justice to be served when an offense occurs. Decision-oriented forgiveness states that forgiveness is a matter of the victim willfully releasing the offender from negative feelings (DiBlasio, 1998). Baskin and Enright (2004) described the decision-based model as not resolving negative feelings but the choice of the forgiver to not allow the transgression to dominate the relationship. While forgiveness is an emotion-laden experience, it is guided by cognition. Studies of offenses such as incest (Freedman & Enright, 1996), men whose partners had aborted a child (Coyle & Enright, 1997), and interpersonal relationship injuries where the victim wanted to forgive but had previously been unable to do so (McCullough, Worthington, & Rachal, 1997) have found that the victim was flooded with feelings of anger, resentment, and sadness; at the same time, he or she was pulled in the other direction of love and connectedness to the transgressor. The decision to forgive is the victim's choice to focus on the love rather than the resentment in the relationship. This does not mean the transgression is forgotten and that all pain falls by the wayside; it is an empowered choice by the victim to change the disruption in the relationship.

#### Attachment, Love, and Forgiveness

The research that has been conducted thus far has indicated that individuals with insecure attachment styles tend to have more difficulty connecting emotionally with others. This may impair romantic relationships when individuals fear of being abandoned, do not having their emotional needs met, do not trust their partners, and do not feel attractive to their partners. People who view their relationships in this manner may consequently experience low levels commitment, intimacy, and passion. The emotions that may arise from such difficulties in relationships include doubt, fear, anger, sadness, and resentment. Forgiveness may be the emotional resolution between attachment style and relations, as it works to lessen these negative emotions and replace them with feelings of safety, security, trust, and appreciation. To date, research examining the interaction of these variables is missing in the literature.

#### Methods

In the current study *attachment style* refers to the pattern of relating to others and involves emotional, cognitive, and behavioral aspects of forming interpersonal bonds (Bowlby, 1969/1982). Various styles of attachment will be defined on a two dimensional continuum of anxious to avoidant attachment that encompasses insecure and secure attachment. *Consummate love* indicates high ratings of commitment, intimacy, and passion in a romantic love relationship as defined by Sternberg as "…complete love…from the full combination of the three components" (Sternberg, 1986, p. 124). *Forgiveness* is defined as the shift from negative emotions, thoughts, and behaviors to positive emotions following the occurrence of an offense (Worthington, 2005). *Love* is defined with Sternberg's (1986) triangular theory of love that includes: *commitment*, an intentional cognitive decision to make personal sacrifices for a partner, *intimacy*, an emotional sense of connectedness and bonding to a partner, and *passion*, sexual and physical attraction toward a partner including romantic feelings (Sternberg, 1986).

### **Participants**

Participants in this study were adults, 25 years or older who were in a committed relationship that has been ongoing for a minimum of six months. Demographic information obtained included age, gender, race/ethnicity, current relationship status, and relationship type, where the participant heard about the survey, and how important faith is to him or her on a 7-point Likert-type scale (1= *not important at all*, 4= *moderately important*, 7= *very important*). Identifiable information was separated from the surveys to protect participant anonymity.

#### Instruments

The instruments utilized in the current study were consistent with supported theory found in the literature. The three surveys administered took participants an average of 25 to 45 minutes to complete. The surveys were also counter-balanced and randomly administered among different participants to control for order effects.

**Triangular Love Scale**. Participants completed a 45-item version of the Triangular Love Scale (TLS). TLS was developed by Sternberg (1986) to assess the three components of love with 15 questions per subscale: *commitment*, *intimacy*, and *passion*. The TLS asked participants to rate a specific person on a Likert-type scale ranging from 1 (*not at all*) to 9 (*extremely*) on questions concerning various aspects of their relationships.

Evidence for construct validity of the Triangular Love Scale (TLS) was provided by Sternberg (1997). The item-total correlations from Sternberg's sample indicated that all except three items rated above r = .30, which was the recommended minimum level for significance. Internal-consistency reliabilities for items on the intimacy subscale were reported to be at least r = .90, r = .80 for passion, and r = .80 for commitment. Participants endorsed the importance of each item as it pertained to their relationships on a nine-point Likert-type scale (1 = not at all, 9 = extremely). Importance ratings of the relationship were positively correlated with intimacy (r = 0.66), passion (r = 0.77), and commitment (r = 0.92). Correlations were also positive between feelings and actions for intimacy (r = 0.96), passion (r = 0.97), and commitment (r = 0.97). Internal consistency in the current sample were r = .96 for intimacy, r = .96 for passion, and r = .96 for commitment. **Experiences in Close Relationships--Revised.** Attachment style was measured with the Experiences in Close Relationships-Revised Scale (Fraley, Waller, & Brennan, 2000). The original Experiences in Close Relationships (ECR) scale was developed by Brennan et al. (1998). It was a 36-item scale to measure individuals' attachment to their romantic partners, and was adapted to assess attachment to a specific partner. The revised version (ECR-R) also consists of 36 items: 18 load on the anxious attachment scale while the other 18 items load on the avoidant attachment scale. The revision ensured that the two dimensions were equally sensitive to measuring their respective constructs. The original and revised scales are highly correlated (approximately .95) because the revised version contains many of the same items from the original (Mikulincer & Shaver, 2007).

The ECR-R assesses attachment on a dichotomous continuum with anxious on one end and avoidant on the other, and uses a Likert-type scale that asks participants to respond on a five-point scale (1 = *Disagree strongly*, 5 = *Agree strongly*). Higher scores on the anxiety and avoidant subscales indicate an insecure attachment, while low scores on these subscales indicate a secure attachment style. The internal consistency reliability coefficient for the ECR-R in a previous study ranged from r = .93 to .95 on both scales in a sample of 1085 (682 women, 403 men) adult undergraduate students with ages ranging from 16 to 50 (Fraley et al., 2000). An investigation of the validity and reliability of this measure found the internal consistency reliability to be  $\alpha = 0.86$  for anxiety,  $\alpha = 0.81$  for avoidant, and  $\alpha = 0.87$  overall among college students 18 years and older (Lu, Huo, & Gao, 2006). Test-retest reliability over a three-week interval in this study was found to have *r*'s of 0.82 for anxiety, 0.61 for avoidant, and 0.75 overall. A factor analysis found that 21.28% of the variance was accounted for by the anxiety subscale and 11.20% by the avoidant scale. The current study found internal consistency reliability coefficients to be r = .83 on the anxious subscale and r = .93 on the avoidant subscale.

**Enright Forgiveness Inventory.** The Enright Forgiveness Inventory (EFI; Enright & Rique, 2000/2004) defines forgiveness as the decrease of negative emotions and increasing of positive emotions (Subkovial et al., 1995; Worthington, 2005). This instrument first primes participants by asking several questions about a specific offfense. The measure itself consists of 60 items that are divided into positive and negative experiences. Total scores range from 60, indicating a low degree of forgiveness to 360, which indicates a high degree of forgiveness. The final item on the instrument asks participants to rank the degree to which he or she has forgiven the person who committed the offense on a 5-point Likert-type scale (1= *not at all*, 3= *in progress*, 5= *complete forgiveness*). This score is added to the total score. The EFI also includes an additional five items (items 61-65) that are pseudo-forgiveness items that indicate denial or condoning of actions. Scores of 20 and higher on these additional items suggest that the individual is endorsing something other than forgiveness (Enright & Rique, 2004). Surveys from participants with scores of 20 or higher in this section were excluded.

Test-retest reliability over four weeks with college students ranged from r = 0.67 to 0.91 for the total cognition scale with r = 0.86 as the stability coefficient for the total EFI scores (Enright & Rique, 2000). Internal consistencies were found *r*'s to be in the high .90s (McCullough, 1995; Subkovial et al., 1995). Concurrent validity on the single-item forgiveness scores was found to have positive correlations for affect (r = 0.46), behavior (r = 0.36), cognition (r = 0.40), and total forgiveness (r = 0.46; Doran,

Kalayjian, Toussaint, & DeMucci, 2012). In the current sample, internal consistencies on each scale were not analyzed, as the analysis only included the total forgiveness score. The internal consistency coefficient on total forgiveness in the current study was r = .97.

#### Procedure

An application for approval to conduct this study from the university Internal Review Board was submitted and approved. Adult participants who met inclusion criteria (25 years or older, in a six-month or more committed relationship) were solicited through community programs and local places of worship. Additional participants were recruited through the graduate school listserv at a Rocky Mountain region university. Snowball sampling through online social networking was utilized. Data were collected online via email and through online survey software (Qualtrics). Incentive for participation included entrance into a raffle to win one of four \$25 Visa gift cards, if the participant so desired.

#### Analyses

The statistical analyses were dictated by the research questions designed to examine relationships between attachment style, forgiveness, and love. The research questions include (Q1) Does forgiveness mediate the relationship between anxious attachment and commitment in adult love relationships? (Q2) Does forgiveness mediate the relationship between anxious attachment and intimacy in adult love relationships? (Q3) Does forgiveness mediate the relationship between anxious attachment and passion, in adult love relationships? (Q4) Does forgiveness mediate the relationship between avoidant attachment and commitment in adult love relationships? (Q5) Does forgiveness mediate the relationship between avoidant attachment and intimacy in adult love relationships? (Q6) Does forgiveness mediate the relationship between avoidant attachment and passion in adult love relationships?

The current study included a total of 90 participants, which met the recommendation to obtain a medium effect size (Green, 1991). All data were analyzed using Osborne and Waters' (2002) methods for testing assumptions as related to multiple regression procedures. This includes the assumption that variables are normally distributed, the assumption that if the relationship between independent and dependent variables are not linear that could increase the risk of Type II, and that homoscedasticity is present, which states that there is the same degree of error variance across the distribution of scores. The current study took measure to account for these assumptions.

#### **Baron Kenny Model**

The procedures developed by Baron and Kenny (1986) were utilized in order to assess the potential mediating relationship of forgiveness between attachment style and love for each of the six hypotheses and research questions. The equations utilized in this model include *Y* that represents the dependent variable, *X* that represents the independent variable, *M* that represents the mediating variable,  $B_0$ ,  $B_1$ , and  $B_2$  that represent the regression coefficients, and *e* that represents error. According to this model, mediation occurs when (1) the independent variable accounts for significant variance in the dependent variable by calculating  $Y = B_0 + B_1X + e$ . This step indicates an effect that may be mediated. (2) The independent variable accounts for significant variance in the mediator variable. This step involves treating the mediator as if it were an outcome variable. This is calculated by  $M = B_0 + B_1X + e$ . (3) The mediator variable accounts for significant variance in the variable. This is calculated by  $Y = B_0 + B_1M + e$ . By controlling for the independent variable, the effect of the mediator on the outcome variable was established. (4) The relationship of the independent variable (attachment style) with the dependent variable (love) decreases significantly when controlled for the mediator variable (forgiveness) that is calculated by  $Y = B_0 + B_1X + B_2M + e$ . The effect of *X* on *Y* when controlling for *M* should be zero in order to establish a complete mediation. A Sobel's *Z* test calculated the significance of the regression coefficients.

In order to address the first two steps of the Baron Kenny model, two separate bivariate linear regressions were conducted for avoidant and anxious attachment to assess the relationship between attachment style and love as well as attachment style and forgiveness. Beta and *p*-values were reported. For steps three and four, a multiple regression was conducted with attachment style as a predictor for both forgiveness and love that established forgiveness as a mediating variable. The current study conducted a total of 17 regression analyses, as there were two independent variables (*anxious* and *avoidant attachment*), one mediating variable (forgiveness), and three dependent variable constructs (*intimacy*, *passion*, and *commitment*), and four steps for each of the six research questions A significance level of .003 was used to test for the regression analyses. A Bonferroni correction factor was conducted with models that yielded the p < .0083 level of significance (i.e., .05/6 (3 IVs plus 3DVs) = .0083 (Huck, 2012).

#### Results

Of the 141 total items on all three surveys, any participants that had 29 or more items missing were omitted from data analyses and 32 were omitted due to either submitting incomplete surveys (90 percent or more) or meeting exclusion criteria. For surveys with less than 90 percent missing data, mean substitution was utilized for surveys with missing data. Seventeen surveys (18.8%) were subjected to mean substitution analysis. Two participants completed the three instruments, but did not complete the demographic information. Data on the EFI, TLS, and ECR-R from these participants were included in the data analysis, but the demographics from these participants are missing in the reported results. The demographics are listed in Tables 20 and 21. Table 20

Demographic	n	%
Sex		
Women	66	73.3
Men	22	24.4
Race/Ethnicity		
White/Caucasian	80	88.8
Latino/Hispanic	6	6.6
Asian American	2	2.2
Multiracial/Multiethnic	2	2.2
African American	0	0.0
American Indian	0	0.0
Indian American	0	0.0
Pacific Islander	0	0.0
Relationship Type		
Heterosexual	82	91.1
Same-Sex	6	6.6

Demographics for Sex, Race/Ethnicity, and Relationship Type of Sample\*

\*Two participants did not report demographic information.

### Table 21

Demographic	Range	М	SD	n	Percentage
Age	25-66	46	12.3	88	97.77
Relationship length	6 months - 45 years	12.46 years	11.68 years	88	97.77
Importance of religion/spirituality 1 (not at all important) 2 3 4(moderately important) 5 6 7 (very important)	1-7	4.63	2.28	15 6 9 9 7 7 31	16.6 6.6 10 10 7.7 7.7 34.4

Age, Relationship Length, and Importance of Religion/Spirituality of Sample\*

\*Two participants did not report demographic information.

The current study did not find any significant differences based on these demographic variables and the overall results. Differences in age, spirituality, and relationship length in the current sample did not yield any significant differences either.

As shown Table 22, the analyses for the ECR-R did not yield significant results on the anxiety and avoidance scales. These data indicate that the sample was skewed toward individuals endorsing a secure attachment style. On the TLS, all components of love were negatively skewed suggesting that participants endorsed high levels of intimacy, passion, and commitment in their current relationships. The mean scores for intimacy and passion fell within the average range, and commitment fell within the somewhat above average range, per the norms for the TLS. Commitment was the most leptokurtic of the three components. The results of the EFI were also negatively skewed, and the data show that participants reported higher levels of forgiveness when compared to norms reported from previous studies. Such studies include (Sarinopoulous, 1996; Subkovial et al., 1995).

#### Table 22

Pearson's r	Correlations.	for Study	Variables	(n = 90)	)

Variables	1	2	3	4	5	6
1. Anxiety	-					
2. Avoidance	.385*	-				
3. Intimacy	023	138	-			
4. Passion	039	067	.813*	-		
5. Commitment	091	105	.878*	.844*	-	
6. Forgiveness	037	106	.795*	.667**	.688*	-

\*Correlation is significant at the 0.01 level (2-tailed).

Based on the research questions, the following hypotheses were formulated and tested: (H1) Forgiveness, as measured by the EFI mediates the effect of anxious attachment, as measured by the ECR-R on commitment, as measured by the TLS; (H2) Forgiveness, as measured by the EFI mediates the effect of anxious attachment, as measured by the ECR-R on intimacy, as measured by the TLS; (H3) Forgiveness, as measured by the EFI mediates the effect of anxious attachment, as measured by the EFI mediates the effect of anxious attachment, as measured by the ECR-R on passion, as measured by the TLS; (H4) Forgiveness, as measured by the EFI mediates the effect of avoidant attachment, as measured by the ECR-R on commitment, as measured by the TLS; (H5) Forgiveness, as measured by the EFI mediates the effect of avoidant attachment, as measured by the TLS; and (H6) Forgiveness, as measured by the ECR-R on passion, as measured by the ECR-R on passion, as measured by the ECR-R on passion, as measured by the TLS; and the EFI mediates the effect of avoidant attachment, as measured by the TLS.

The Baron Kenny (1986) model was utilized to examine this hypothesis by

treating attachment style (anxious or avoidant) as the independent variable, X,

forgiveness as the mediating variable, M, and components of love (intimacy, commitment,

or passion) as the dependent variable, Y. The results of the analyses are indicated in

Tables 23-28.

Baron Kenny Model of Regression with Anxious Attachment as the Independent Variable, Forgiveness as the Mediating Variable, and Commitment as the Dependent Variable

Step	Variables	$r^2$	Adj. r <sup>2</sup>	В	SE B	В	t	р
Step 1	Anxious (Constant) Commitment	.008	003	-2.496	2.918	091	856	.395
Step 2	Anxious (Constant) Forgiveness	.001	010	-1.705	4.857	037	351	.726
Step 3	Forgiveness (Constant) Commitment	.474	.468	.415	.047	.688	8.902	.000
Step 4	Anxious	.478	.466	-1.792	2.130	065	841	.403
	(Constant) Forgiveness (Constant) Commitment			.413	.047	.686	8.849	.000

Baron Kenny Model of Regression with Anxious Attachment as the Independent Variable, Forgiveness as the Mediating Variable, and Intimacy as the Dependent Variable

Step	Variables	$r^2$	Adj. r <sup>2</sup>	В	SE B	β	t	р
Step 1	Anxious (Constant) Intimacy	.001	011	545	2.493	023	219	.827
Step 2	Anxious (Constant) Forgiveness	.001	010	-1.705	4.857	037	351	.726
Step 3	Forgiveness (Constant) Intimacy	.633	.628	.408	.033	.795	12.309	.000
Step 4	Anxious (Constant)	.633	.624	.151	1.521	.006	.099	.921
	Forgiveness (Constant) Intimacy			.408	.033	.796	12.235	.000

Baron Kenny Model of Regression with Anxious Attachment as the Independent Variable, Forgiveness as the Mediating Variable, and Passion as the Dependent Variable

Step	Variables	$r^2$	Adj. r²	В	SE B	β	t	р
Step 1	Anxious (Constant) Passion	.002	-0.10	-1.259	3.442	039	366	.715
Step 2	Anxious (Constant) Forgiveness	.001	010	-1.705	4.857	037	351	.726
Step 3	Forgiveness (Constant) Passion	.445	.439	.473	.056	.667	8.399	.000
Step 4	Anxious (Constant) Forgiveness (Constant) Passion	.445	.432	454 .472	2.582 .057	014 .667	176 8.341	.861 .000

Baron Kenny Model of Regression with Avoidant Attachment as the Independent Variable, Forgiveness as the Mediating Variable, and Commitment as the Dependent Variable

Step	Variables	$r^2$	Adj. r <sup>2</sup>	В	SE B	β	t	р
Step 1	Avoidant (Constant) Commitment	.011	.000	-2.401	2.436	105	986	.327
Step 2	Avoidant (Constant) Forgiveness	.011	.000	-4.052	4.041	106	-1.003	.319
Step 3	Forgiveness (Constant) Commitment	.474	.468	.415	.047	.688	8.902	.000
Step 4	Avoidant	.475	.463	728	1.795	032	406	.686
	(Constant) Forgiveness (Constant) Commitment			.413	.047	.685	8.766	.000

Baron Kenny Model of Regression with Avoidant Attachment as the Independent Variable, Forgiveness as the Mediating Variable, and Intimacy as the Dependent Variable

Step	Variables	r <sup>2</sup>	Adj. r <sup>2</sup>	В	SE B	β	t	Р
Step 1	Avoidant (Constant) Intimacy	.019	.008	-2.700	2.065	138	-1.308	.194
Step 2	Avoidant (Constant) Forgiveness	.011	.000	-4.052	4.041	106	-1.003	.319
Step 3	Forgiveness (Constant) Intimacy	.633	.628	.408	.033	.795	12.309	.000
Step 4	Avoidant (Constant) Forgiveness (Constant) Intimacy	.635	.627	-1.059 .405	1.273 .033	054 .790	831 12.129	.408 .000

Baron Kenny Model of Regression with Avoidant Attachment as the Independent Variable, Forgiveness as the Mediating Variable, and Passion as the Dependent Variable

Step	Variables	$r^2$	Adj. r²	В	SE B	β	t	р
Step 1	Avoidant (Constant) Passion	.004	007	-1.801	2.873	067	627	.532
Step 2	Avoidant (Constant) Forgiveness	.011	.000	-4.052	4.041	106	-1.003	.319
Step 3	Forgiveness (Constant) Passion	.445	.439	.473	.056	.667	8.399	.000
Step 4	Avoidant (Constant) Forgiveness (Constant) Passion	.445	.432	.116 .473	2.170 .057	.004 .668	.053 8.310	.958 .000

The results of the six mediation analyses all yielded the same results at each step of the model. Step one of the analyses did not yield significant results, and did not support hypotheses that attachment style would predict the component of love in romantic relationships. Step 2 also did not yield significant results, as attachment did not predict a path to forgiveness. Step 3 did find significant results; forgiveness predicted the component of love. The significant relationship between forgiveness and the component of love that was found in step 3 accounted for the significant relationship found in step 4. The significance in step 4 is due only to the relationship between forgiveness and the component of love; attachment was not a predictor of love. Forgiveness was not a mediating variable between attachment and love in this study. Due to a low number of reported insecure attachment styles, a median split was performed on attachment style in order to determine whether or not individuals with less secure attachment scored lower on forgiveness than did individuals with secure attachment. The median split found that the differences in forgiveness scores between high anxiety attachment and low anxiety attachment were negligible. There was also no significant difference in the forgiveness scores between high avoidant attachment and low avoidant attachment after the median split was conducted.

### Discussion

In the current study, the regression model found that forgiveness had a predicted love, but did not find a significant relationship between attachment style and forgiveness. Forgiveness did not mediate the relationship between attachment style and love. Although the overall model of establishing the mediating quality of forgiveness between attachment style and love was not established, the current study has provided helpful data for informing the interventions Counseling Psychologists use in treatment.

The most prominent limitation of this study was the homogeneity of the sample's attachment style, as few participants scored high for avoidant or anxious attachment styles. McCarthy (1999) provides data that are beneficial to consider, because this study examined the effect of high anxious and avoidant attachment styles had on love. McCarthy administered the adult attachment questionnaire (Hazar & Shaver, 1987) to participants and interviewed them about their relationships (APFA; Hill et al., 1989). His results indicated that individuals with high anxious or avoidant attachment styles had lower ratings of their interpersonal relationships overall. If the current study had more participants with high anxious or avoidant attachments styles, it may have been possible

to establish significant relationships between attachment style and love as well as attachment style and forgiveness. Additionally, attempting to work with individuals with insecure attachment tends to be difficult, as they are reportedly less likely to participate in research due to lack of trusting the researcher (Ainsworth et al., 1978).

Other areas of the study may have limited participation. It has been found that self-report measures may not be the best method to assess a psychological construct, as participants are forced to adhere to closed-ended, pre-determined responses (Hill & Lambert, 2004). Online assessment has also been shown to yield less accurate results, as participants are more likely to misunderstand instructions, give less attention to online surveys, and are more likely to drop out of the study (Dillman, Smyth, & Christian, 2009). Dillman et al. (2009) indicated that online surveys are more likely to be overlooked by potential participants. In the current study precautions were taken to avoid some of these potential complications to data collection. As much as possible, participants were contacted in-person and were offered the option to complete the survey by paper and pencil; however, all participants chose to complete the survey online. Participants were provided with the researcher's contact information, so that they could ask clarifying questions. Finally, the majority of the respondents were solicited through social media outlets, indicating that this was an effective method to recruit participants.

Participants who do not have access to the Internet are much less likely to have had the opportunity to become aware of the study. Use of computers may have restricted those of a lower socioeconomic status, who do not have the means to complete the survey online. Finally, the length of the survey may have led to participants prematurely dropping out, as the survey consisted of 141 items. Future research may seek to recruit participants from samples more likely to have insecure attachment styles to further assess these hypotheses. It may be beneficial to alter the method of seeking participants, such as recruiting participants from a clinical population, such as couples seeking couples counseling. Future studies may benefit from removing the requirement of participants being in a current relationship that has lasted at least six months. This may open up the possibility for individuals with low commitment and those with highly anxious or avoidant attachment styles to participate.

Future studies in this area may contribute to the growth of forgiveness-astreatment in counseling, including areas within gender differences. The current study did not limit the type of offenses that were in need of being forgiven. Research has indicated that men and women quantify interpersonal offenses differently (Elkins, Phillips, & Konopaske, 2002; Kruger et al., 2013; Taylor et al., 2000). Gender differences in perceived level of betrayal from a specific offense and typical behaviors to cope with the offense may better inform researchers on how to build specific forgiveness techniques.

Future researchers may want to take other cultural factors into consideration when defining constructs and recruiting participants. In the current study, the term "committed relationship" was not defined. With recent trends in coupling, it is not always clear what a committed relationship is. Many couples are choosing to cohabitate without entering marriage. Others meet through online dating websites and may not meet in person for several months in the relationship, or may never meet face to face. Modern terms for certain behaviors also muddy the definition of commitment. Young people may use slang words such as "talking," "hanging out," "hooking up," "dating" or making the relationship "Facebook official" (Tong, 2014). Future research may focus on developing

operation definitions for these terms, and utilizing the terms to help develop a more universal definition of commitment when exploring love relationships. Additionally, the term commitment may also be problematic for understanding people who do not engage in monogamous relationships. Future researchers may want to construct a definition of commitment that is more inclusive across populations to include those who may identify as polyamorous or in other ways that are not considered monogamous.

## Conclusion

Although this study was unable to produce results indicating mediation between attachment style and love, it does highlight the importance of the presence of forgiveness in satisfying love relationships. The findings that support of the importance of forgiveness are especially pertinent to counseling psychologists working with couples. Future research may continue to examine the role that forgiveness plays among individuals with insecure attachment styles in their love relationships. It would also benefit the field of couples counseling for future research to better develop interventions that utilize forgiveness into the therapeutic process.

#### REFERENCES

- Ainsworth, M. D. S. (1989). Attachment beyond infancy. *American Psychologist, 44*, 709-716.
- Ainsworth, M. D. S., & Wittig, B. A. (1969). Attachment and exploratory behavior of one-year olds in a strange situation. In B. M. Foss (Ed.), *Determinants of infant behavior* (Vol. 4, pp. 111-136). London: Methuen.
- Allemand, M., Amberg, I., Zimprich, D., & Fincham, F. D. (2007). The role of trait forgiveness and relationship satisfaction in episodic forgiveness. *Journal of Social* and Clinical Psychology, 26, 199-217.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*, 1173-1182.
- Baskin, T. W., & Enright, R. D. (2004). Intervention studies on forgiveness: A metaanalysis. *Journal of Counseling Psychology*, 45, 251-257.
- Bowlby, J. (1982). Attachment and loss: Vol. 1. Attachment. New York: Basic Books. (Original work published 1969)
- Collins, N. L., & Feeney, B. C. (2000). A safe haven: An attachment theory perspective on support seeking and care giving in intimate relationships. *Journal of Personality and Social Psychology*, 78(6) 1053-1073.
- Coyle, C. T., & Enright, R. D. (1997). Forgiveness intervention with post-abortion men. Journal of Consulting and Clinical Psychology, 65, 1042-1046.
- Davidson, F. (Producer), & Davidson, J. (Director). (2005). Mary Ainsworth: Attachment and the growth of love [Motion picture]. Santa Margarita, CA: Davidson Films, Inc.

- Denham, S. A., Neal, K., Wilson, B. J., Pickering, S., & Boyatzis, C. J. (2005).
  Emotional development and forgiveness in children: Emerging evidence. In E. J.
  Worthington, Jr. (Ed.), *Handbook of forgiveness* (pp. 127-142). New York:
  Routledge.
- Derrick, J. L., & Murray, S. L. (2007). Enhancing relationship perceptions by reducing felt inferiority: The role of attachment style. *Personal Relationships*, *14*, 531-549.
- Dewitte, M., & De Houwer, J. (2008). Proximity and distance goals in adult attachment. *European Journal of Personality*, 22(8), 675-694.
- DiBlasio, F. M. (1998). The use of decision-based forgiveness intervention within intergenerational family therapy. *Journal of Family Therapy*, *20*, 77-94.
- Dillman, D. A., Smyth, J. D., & Christian, L. M. (2009). *Internet, mail, and mixed-mode surveys: The tailored design method.* Hoboken, NJ: John Wiley & Sons, Inc.
- Doran, J. M., Kalayjian, A., Toussaint, L., & DeMucci, J. (2012). The relationship between trauma and forgiveness in post-conflict Sierra Leone. *Psychological Trauma: Theory, Research, Practice, and Policy, 4*, 614-623.
- Elkins, T. J., Phillips, J. S., & Konopaske, R. (2002). Gender-related biases in evaluations of sex discrimination allegations: Is perceived threat the key? *Journal of Applied Psychology*, 87, 280-292.
- Ellis, A. (1950). Love and family relationships of American college girls. *American Journal of Sociology*, 55, 55-56.

- Enright, R. D., & Coyle, C. T. (1998). Researching the process model of forgiveness
  within psychological interventions. In E. L. Worthington Jr. (Ed.), *Dimensions of forgiveness: Psychological research and theological perspectives* (pp. 139-161).
  Philadelphia: Templeton Foundation Press.
- Enright, R. D., & Rique, J. (2000/2004). The Enright Forgiveness Inventory manual. Madison, WI: International Forgiveness Institute.
- Enright, R. D., & Fitzgibbons, R. P. (2000). *Helping clients forgive: An empirical guide* for resolving anger and restoring hope. Washington, DC: American
   Psychological Association.
- Enright, R. D., & the Human Development Study Group. (1991). The moral development of forgiveness. In W. Kurtines & J. Gerwirtz (Eds.), *Handbook of moral behavior and development* (Vol. 1, pp. 123-152). Hillsdale, NJ: Erlbaum.
- Feeney, J. A., & Noller, P. (1990). Attachment style as a predictor of adult romantic relationships. *Journal of Personality and Social Psychology*, *58*(2). 281-291.
- Feeney, J. A., Noller, P., & Hanrahan, M. (1994). Assessing adult attachment. In M. B. Sperling & W. H. Berham (Eds.), *Attachment in adults: Clinical and developmental perspectives* (pp. 128-152). New York: Guilford Press.
- Finkel, E. J., Rushbult, C. E., Kumashiro, M., & Hannon, P. (2002). Dealing with betrayal in close relationships: Does commitment promote forgiveness? *Journal* of Personality and Social Psychology, 28, 956-974.
- Florian, V., Mikulincer, M., & Bucholtz, I. (1995). Effects of adult attachment style on the perception and search for social support. *Journal of Psychology: Interdisciplinary and Applied, 129*, 665-676.

- Fraley, R. C., Waller, N. G., & Brennan, K. A. (2000). An item response theory analysis of self-report measures of adult attachment. *Journal of Personality and Social Psychology*, 78, 350-365.
- Freedman, S. R., & Enright, R. D. (1996). Forgiveness as an intervention goal with incest survivors. *Journal of Consulting and Clinical Psychology*, 64, 983-992.

Freud, S. (1952). Group psychology and the analysis of ego. In The major works of

- Green, S. B. (1991). How many subjects does it take to do a regression analysis? Multivariate Behavioral Research, 26, 499-510.
- Hatfield, E., & Walster, G. W. (1981). *A new look at love*. Reading, MA: Addison-Wesley.
- Hill, J., Harrington, R., Fudge, H., Rutter, M., & Pickles, A. (1989). Adult Personality
   Functioning Assessment (APFA): An investigator-based standardized interview.
   British Journal of Psychiatry, 155, 24-35.
- Huck, S. W. (2012). *Reading statistics and research* (6<sup>th</sup> ed.). Boston, MA: Pearson Education.
- Kachadourian, L. K., Fincham, F. D., & Davila, J. (2004). The tendency to forgive in dating and married couples: The role of attachment and relationship satisfaction. *Personal Relationships*, 11, 373-393.

Kruger, D. J., Fisher, M. L., Edelstein, R. S., Chopik, W. J., Fitzgerald, C. J., & Strout, S. L. (2013). Was that cheating: Perceptions vary by sex, attachment anxiety, and behavior. *Evolutionary Psychology*, *11*, 159-171.

- LaGuardia, J. G., Ryan, R. M., Couchman, C. E., & Deci, E. L. (2000). Within-person variation in security of attachment: A self-determination theory of perspective on attachment, need fulfillment, and well-being. *Journal of Personality and Social Psychology*, 79(3), 367-384.
- Lee, J. A. (1973). *Colours of love: An exploration of the ways of loving*. Toronto: New Press.
- Levy, K. N., & Davis, K. E. (1988). Lovestyles and attachment styles compared: Their relations to each other and to various relationship characteristics. *Journal of Social and Personal Relationships*, 5, 439-471.
- Lu, Z., Huo, L., & Gao, W. (2006). Reliability and validity of Experiences in Close Relationships-Revised version. *Chinese Mental Health Journal, 20*, 716-719.
- Madey, S. F., & Rodgers, L. (2009). The effect of attachment and Sternberg's triangular theory of love on relationship satisfaction. *Individual Differences Research*, 7(2), 76-84.
- McCarthy, G. (1999). Attachment style and adult love relationships and friendships: A study of a group of women at risk for experiencing relationship difficulties.
   *British Journal of Medical Psychology*, 72, 305-321.
- McCullough, M. E. (1995). Forgiveness as altruism: A social-psychological theory of forgiveness and tests of its validity. Unpublished doctoral dissertation, Virginia Commonwealth University, Richmond.
- McCullough, M. E. (2000). Forgiveness as human strength: Theory, measurement, and links to well-being. *Journal of Social and Clinical Psychology*, *19*, 43-55.

- McCullough, M. E., Fincham, F. D., & Tsang, J-A. (2003). Forgiveness, forebearance, and time: The temporal unfolding of transgression-related interpersonal motivations. *Journal of Personality and Social Psychology*, 84, 540-557.
- McCullough, M. E., Worthington, E. L., Jr., & Rachal, K. C. (1997). Interpersonal forgiving in close relationships. *Journal of Personality and Social Psychology*, 73, 321-336.
- Mikulincer, M., & Shaver, P. R. (2007). *Attachment in adulthood: Structure, dynamics, and change*. New York: Guilford Press.
- Miller, H. L., & Siegel, P. S. (1971). *Loving: A psychological approach*. New York: Wiley.
- Miller, R. S. (1997). Inattentive and contented: Relationship commitment and attention to alternatives. *Journal of Personality and Social Psychology*, *73*(4), 758-766.
- Murphy, J. G. (2005). Forgiveness, self-respect, and the value of resentment. In E. J. Worthington, Jr. (Ed.), *Handbook of forgiveness* (pp. 33-40). New York: Routledge.
- Murstein, B. L. (1988). A taxonomy of love. In R. J. Sternberg, Jr. & M. L. Barnes (Eds.), *The psychology of love* (pp. 13-37). New Haven, CT: Yale University Press.

Nygren, A. (1953). Agape and eros. Philadelphia: Westminster Books.

Osborne, J., & Waters, E. (2002). Four assumptions of multiple regression that researchers should always test. *Practical Assessment, Research & Evaluation*, 8(2). Retrieved February 9, 2014 from http://PAREonline.net/getvn.asp?v=8&n=2

- Sarinopoulos, S. (1996). Forgiveness in adolescence and middle adulthood: Comparing the Enright Forgiveness Inventory with the Wade Forgiveness Scale. Unpublished Master's thesis. University of Wisconsin-Madison.
- Sternberg, R. J. (1986). A triangular theory of love. *Psychological Review*, *93*(2), 119-135.
- Sternberg, R. J. (1997). Construct validation of a triangular love scale. *European Journal of Social Psychology*, 27(3), 313-335.
- Strelan, P., & Covic, T. (2006). A review of forgiveness process models and a coping framework to guide future research. *Journal of Social and Clinical Psychology*, 25(10), 1059-1085.
- Subkovial, M. J., Enright, R. D., Wu, C., Gassin, E. A., Freedman, S., Olson, L. M., & Sarinopoulos, I. (1995). Measuring interpersonal forgiveness in late adolescence and middle adulthood. *Journal of Adolescence*, 18, 641-655.
- Taylor, S. E., Klein, L. C., Lewis, B. P., Gruenewald, T. L., Gurung, R. A. R., & Updegraff, J. A. (2000). Biobehavioral resposes to stress in females: Tend-andbefriend, not fight-or-flight. *Psychological Review*, 107, 411-429.
- Tong, H. M. (2014). *Chick flicks lie: Sugar-free accounts of a positive pessimist.* Bloomington, IN: Author House, LLC

Vuncannon, J. R. (2007). The perceptions of attachment style and forgiveness in romantic couples. *Dissertation Abstracts International Section B: The Sciences and Engineering*, 67(12-B), 7432.

- Woldarsky Meneses, C., & Greenberg, L. S. (2010). The construction of a model of the process of couples' forgiveness in emotion-focused therapy for couples. *Journal* of Marital and Family Therapy, 37, 491-502.
- Worthington, E. L., Jr. (2000). Is there a place for forgiveness in the justice system? *Fordham Urban Law Journal, 27,* 1721–1734.
- Worthington, E. L., Jr. (2005). The initial question about the art and science of forgiving.In E. L. Worthington (Ed.), *Handbook of forgiveness* (pp. 1-13). New York:Routledge.
- Worthington, E. L., Jr. (2006). Forgiveness and reconciliation. New York: Routledge.
- Worthington, E. L., Jr., Berry, J. W., & Parrott, L. III. (2001). Unforgiveness, forgiveness, religion, and health. In T. G. Plante, & A. Sherman (Eds.), *Faith and health: Psychological perspectives* (pp. 107–138). New York: Guilford.
- Worthington, E. L., Jr., & Wade, N. G. (1999). The social psychology of unforgiveness and forgiveness and implications for clinical practice. *Journal of Social and Clinical Psychology*, 18, 385-418.