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Investigating the Effects of Endurance of Marriage on the Relationship between Attachment and Love Style

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Investigating the Effects of Endurance of Marriage on the Relationship between Attachment and
Love Style

Melissa K. Caris

A dissertation submitted in partial fulfillment

Of the requirements for the degree of

Doctor of Philosophy

In

Clinical Psychology

Seattle Pacific University

School of Psychology, Family, & Community

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DEDICATION

To Daniel, I hope our marriage is enduring and our love is always consummate. To my son, I love you in ways that research cannot explain.

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ABSTRACT

Married individuals, like all other adults use the attachment styles they developed in childhood as part of their framework for how they experience loving relationships. Love can be experienced as commitment, passion, or intimacy or any combination of those styles. The degree of attachment related anxiety or avoidance a married person has can influence how they perceive the experience of different love styles in their close relationships. The present study aimed to evaluate how attachment style influences love style in a sample of married adults ($N= 248$). Participants ranged in age from 23 to 69 ($M=38.6$) and were predominantly female (93.1%) and graduate degree holders (61.7%). Most participants had been married 15 years or less (70.2%). This sample consisted of married adult staff and faculty surveyed at a small private university in the Northwest United States as well as married adults recruited on social media websites. In addition to examining the effect of adult attachment on love style, the study also evaluated the moderating effects of length of marriage. This moderator was included in order to provide a better understanding of a potential mechanism for fostering or inhibiting love, and to identify a possible point for intervention. Results indicate that low levels of attachment related anxiety are significantly predictive of high levels of intimacy ($r=-.53, p < .001$), passion ($r=-.41, p < .001$), and commitment ($r=-.413, p < .001$). Results further indicate that low levels of attachment related avoidance are significantly predictive of high levels of intimacy ($r=-.64, p < .001$), passion ($r=-.56, p < .001$), and commitment ($r=-.51, p < .001$). The length of marriage was the only significant moderator of the relationship between attachment-related avoidance and a passion love style ($b=13.080, t [231] =-7.428, p < 0.001$) suggesting avoidance is more detrimental to the passion of those married 16 years or more compared to those married 15 years or less. These results highlight the importance of assessing for attachment related anxiety and

avoidance in married individuals who may be suffering from deficits in one or more domain of love and that this assessment and related intervention may look similar for both newlyweds and those whose marriages have endured more tests of time.

CHAPTER I – INTRODUCTION

Love and how people experience love has been a subject of much interest to researchers in clinical psychology, and the body of research in this area has been shaped by attention to how attachment impacts the expression of love in adults and in marriage (Hazan & Shaver, 1987; Kobak & Hazan, 1991). The purpose of this study is to contribute to the empirical literature by investigating how the interaction between adult attachment variables and length of a person's marriage influence a person's individual experience of love or love style. Love style is the combination of attributes of love in a person's experience of a relationship that are either present or absent (Hendrick & Hendrick, 1986; Lee, 1973, Sternberg, 1986). Love styles are present in any loving relationship whether the relationship is between parents and children (Inman-Amos, et al., 1994), friendships (Vohs, et al., 2011), dating relationship (Hahn & Blass, 1997), or marriage (Lin & Huddleston-Casas, 2005; Montgomery & Sorell, 1997).

Attachment influences how a person will conceptualize love. Attachment is a behavioral and emotional experience that begins in infancy with a bond between a child and the child's caregiver and continues through adulthood in bonds between romantic partners (Bowlby, 1969). Research on attachment has defined adult attachment along the primary dimensions of anxiety and avoidance (Sibley, et al., 2005). Anxiety in attachment is related to a preoccupation with loss, rejection, and abandonment in relationships that can manifest in a high degree of vigilance (Fraley & Shaver, 2000). Avoidance in attachment is associated with discomfort in relationships and difficulty being intimate or dependent on others (Fraley & Shaver, 2000). Where a person falls on these dimensions influences how he or she will respond to close relationships such as marriage.

There exists empirical support for a relationship between adult attachment and how a person will experience love in interpersonal relationships (Feeney & Noller, 1990; Hazan & Shaver, 1987; Pistole, et al., 1995; Simpson, 1990), but the potential effects of the marital relationship on the relations between these factors or their interactions with each other remains unstudied. Specifically, the literature has yet to examine how the relationship between attachment and endurance of a marriage might shape a love style experience. While previous studies support an association between adult attachment and love style (Collins, et al., 2002; Madey & Rodgers, 2009), the literature also suggests that love style may change throughout a relationship (Sternberg, 1986) while adult attachment is seen as relatively stable (Fraley, et al., 2011). This study serves to investigate how attachment and endurance of marriage manifest and significantly interact to impact love style in a married person.

Experiences in early childhood can have profound influence in later development of relationships and its correlates including personality. The idea that the relationships between parents and children are more important and influential on the development of personality than internal factors such as the psychic drives proposed by Freud alone was foundational in the creation of attachment theory (Bowlby, 1958). Later researchers examined if the influence of early attachment ended with childhood and the parent-child bond and found that in fact the attachment first formed in infancy carries throughout adulthood with the primary attachment figure shifting from a caregiver to a spouse or other long-term romantic partner (Brennan & Shaver, 1995).

With the knowledge that attachment is significant in long-term loving relationships researchers have examined how adult attachment shapes a person's love style (Sprecher & Fehr, 2011). Establishment and commitment to a relationship are key factors in both endurance of

marriage and love style. Throughout the course of a marriage the relationship undergoes changes in how it is perceived by the people in it with perceptions of love changing over time (Swensen & Trahaug, 1985). Furthermore, the behavioral patterns of people who are securely and insecurely attached will influence how they maintain relationships and therefore how they experience love (Mikulincer & Erev, 1991). Given the potentially significant interplay that may exist between attachment, endurance of marriage, and love style an examination of the relationships among these variables is needed, in addition to analysis to measure how these relationships impact married individuals.

CHAPTER II – Literature Review

Love Style

Love is an important human experience that has impacted people throughout time and across cultures. Humans begin experiencing love early in life with infants going through a process of attachment bonding and by preschool age they can report feelings of reciprocal love (Hatfield, et al., 1988). These love feelings will carry on throughout life and into some of a person's most important relationships. In the context of marriage, love is seen as essential not only for establishing a marriage but for maintaining it (Simpson, et al., 1986). Although love in marriage is important, it is far from uniform and the way a person experiences love will vary across and within marriages creating for each a typology of the experience that is termed a person's love style (Sternberg, 1986). There is an incomplete understanding in the existing literature of what mechanisms are at work in the experience of a love style. This study will contribute to the literature by exploring the ways that love style is experienced in marriages of various durations, particularly in relation to bonding patterns created early in a person's life that echo in crucial ways throughout adulthood and marriage.

A person has a love style based on how love is experienced in a particular relationship and love in its various forms is an experience that is shared on a universal basis. Love is a driving motivational system for mates that is associated with emotion and reward (Aron, et al., 2005). Love in the context of a romantic relationship promotes satisfaction and endurance (Hendrick, et al., 1988). More so even than happiness or satisfaction, being in love is a prognosticator of marriage endurance (Willi, 1997).

Defining love as a concept has been a significant area of study throughout the history of psychology. Early research focused on love as individual process, influenced by Freud's (1958) view of love as a process of sexual sublimation. Later research pioneered by Harlow (1958), Bowlby (1958), and others conceptualized love as an attachment process and related it to the bond between parents and children. Researchers began to attempt to further define love into types beginning with Maslow (1962) who theorized about two types of love he termed being love and deficiency love, of which the former type arose from self-actualization processes and the latter type from emotional insecurity. These developments support the idea a person's experience of love may vary depending on individual factors and these factors are often related to the patterns of behavior and emotion that develop during early bonding experiences.

Following these developments Sternberg and Grajek (1984) conducted a factor analysis to determine the nature of love. The nature of love was evaluated using three models taken from the study of intelligence factors: a unitary Spearmanian model, an overlapping bonds Thomsonian model, and a seven primary factors Thurstonian model. Analysis suggested the love model of best fit was the Thomsonian model in which love is seen as overlapping bonds in affect, cognition, and motivation. This research on the nature of love as seen through its constituent factors led Sternberg (1986) to identify the components that would make up the triangular love theory which underlies the concepts of love styles. The following is an examination of the theory of how a person's individual experience of the components of love comprises the person's love style.

Love as a Triangle

The core of Sternberg's theory of love (1986) centers on the triangle in which the top vertex is intimacy, the left-hand vertex is passion, and the right-hand vertex is

decision/commitment. In confirmation of the theory, Aron and Westbay (1996) identified these three components as the prototype of love using principal-factors analysis. To fully understand the theory, it is important to define these terms, intimacy, passion, and decision/commitment in the way Sternberg (1986) uses them.

Intimacy

The common core of many central relationships in a person's life such as parents, siblings, close friends, and romantic partners is the component of intimacy (Levinger, et al., 1977). In all these relationships, intimacy is the component that encourages feelings of connection, bonding, and closeness. Within Sternberg's (1986) triangular theory, intimacy is seen as being achieved when a person experiences a sufficient number of feelings connected to closeness, bonding, and connectedness although what is considered sufficient may vary from person to person. These feelings can include a variety of experiences directed towards the loved one as identified by Sternberg and Grajek (1984) such as mutual understanding, emotional support, and intimate communication.

Passion

The component of love that is seen as reciprocal with intimacy is passion in that the two are likely to covary with each other (Sternberg, 1986). However, intimacy and passion may not always have a positive covariance and certain relationships may emphasize one component at the expense of the other, for example, people who intentionally spurn intimacy to attain greater sexual passion. Where intimacy is the component associated with bonding passion is through arousal both physiological and psychological that is realized in behavior, emotions, and cognitions (Hatfield & Traupmann, 1981; Hatfield & Sprecher, 1986). Passion is related to the satisfaction of motivational needs such as sex, self-esteem, or self-actualization and is present in

relationships that are not romantic in nature such as parents and children. These two types of arousal are also reciprocal with psychological arousal leading to physiological arousal and so on.

Decision and Commitment

The final component, decision/commitment is related to short- and long-term relationships (Sternberg, 1986). Decision is typically associated with short term relationship and the decision to love someone. Commitment is related to the decision to stay in love with someone. Generally, decision precedes commitment such as deciding to date or marry someone but sometimes a person will be committed to another before they decide to love them. Decision/commitment is related to the other two components in a close and temporal way. When intimacy or passion are piqued in a relationship, often decision/commitment will follow, but this is not always the case, because in some relationships such as with family members intimacy/passion will follow decision/commitment. In a successful relationship one expects to see that decision/commitment as stable (Lemieux & Hale, 1999).

Relationship of the Components

The triangular love theory (Sternberg, 1986) posits that these components are alike in that in close relationships each component is present or absent to varying degrees which may change depending on the type of relationship. However, these components differ in how much awareness and control a person has over them. Typically, people experience a high degree of consciousness of intimacy and control over commitment but less awareness and control over the component of passion.

As a relationship grows longer the components that are emphasized tend to change (Sternberg, 1986) with commitment being a greater focus of long-term relationships than of short-term relationships. Likewise, intimacy is a component that is of more prominence in longer

term relationships. The functions of commitment and intimacy can be seen as vital to maintaining a relationship that endures over time. In contrast in short-term relationships passion plays a dominant role that wanes over time.

Love Style Subtypes

Throughout a relationship as the three components combine to varying degrees eight subtypes or styles of love can be distinguished (Sternberg, 1986). When all components are absent this is called nonlove conversely the presence of all components is called consummate love (Sternberg, 1988). An experience of love with only intimacy is called liking, one with only passion is infatuation, and one with only decision/commitment is empty love. An experience that combines intimacy and passion makes up romantic love, companionate love is made up of intimacy and decision/commitment, and fatuous love is decision/commitment combined with passion.

Rationale for a Continued Study of Love Style

Love has been established as a key factor in marriages and is linked with positive outcomes for individuals and marriages (Gonzaga, et al., 2006). Research on love style as based on Sternberg's (1986) triangular love theory reflects these findings. While much of the current literature focuses on the outcomes of love style, less research has been done on the individual factors related to love style.

Research on love has focused on a myriad of different structures of love and factors related to each (Graham, 2011). Although many varied factors could be relevant to the study of love, to limit the scope of this study a focus on love style allows for the establishment of new and specific findings. Attachment literature suggests a correlation between attachment security and development and maintenance of relationships including marital relationships (Kobak & Hazan,

1991). Given love style's theoretical ties to attachment theory, it is an optimal outcome measure to use for this study.

Attachment

Development of Attachment Theory

The theory of attachment can elucidate some of the factors that influence love style. The pioneer researchers in the field of attachment theory were Bowlby and Ainsworth (1989). With the publication of Bowlby's (1982) three-volume series, *Attachment and Loss* the field of psychology was gradually introduced to attachment theory which was seen as an alternative to the pervasive influence of psychoanalytic theories of object relations in explaining why separation causes anxiety (Bretherton, 1985). Bowlby formulated his theory on attachment while working with infants and young children in institutional care and noted the detrimental effects of a lack of interaction with caregivers (Bowlby, 1958). In his theory he postulated that children unconsciously form internal working models based on their experiences with their primary caregivers (Maier, et al., 2004).

Soon after Bowlby first introduced attachment theory, research on the concept was tested with the use of the Strange Situation (Ainsworth, 1991). In the Strange Situation a child's attachment style was determined by observing interaction patterns between the child and the caregiver when the child was exposed to an unknown person and then reunited with the caregiver. Ainsworth et al. (1978) identified three different attachment styles in children who had participated in the strange situation

The secure attachment style was characterized in the children of caregivers who were seen as responsive to their children's distress, comforting, and consistently available. These securely attached children would experience temporary distress when separated from a caregiver

but could be easily comforted. The children who were seen to have an anxious/avoidant attachment style would avoid their caregivers who were generally observed as cold and not responsive to their children's distress. The third style, anxious/ambivalent was identified in children who had caregivers who were not seen as consistent in being available to attend to their children and these children would respond with hyperactivating attachment seeking behaviors. These patterns developed in early childhood appeared to Ainsworth and Bowlby (1991) to create a style of attachment that would follow a child throughout the lifespan.

Attachment in Adulthood

Later research would support the idea that the attachment styles first observed in young children were also present in the interaction patterns of adults (Main, et al., 1985). The internal working model of attachment that was solidified in a child's relationship with a caregiver would impact future relationships by providing a framework for interpersonal interactions (Ainsworth & Bowlby, 1991). In both longitudinal research and research conducted on adults retrospectively about their childhoods these attachment patterns first seen in infancy were evaluated to be stable whether the attachment was secure or insecure (Main, et al., 2005). Redefining Ainsworth's original three attachment styles Main et al. (2005) suggested that adults can be categorized into four attachment styles, secure, dismissive, preoccupied, and disorganized, the latter defined by erratic behavior.

Building on the internal working model theory which Bowlby proposed (1980) that posited that children develop and internalize mental representations of the self and expectations of others as part of the attachment process, Hazan and Shaver (1987) conceptualized romantic love as an attachment process for adults. Just as Ainsworth had observed with children, Hazan and Shaver noticed that adults fell into attachment patterns and could be labeled as secure,

anxious/avoidant, and anxious/ambivalent. Adult attachment style was found to correlate with beliefs about romantic love, availability, and trustworthiness of partners and, how worthy they saw themselves of love (Hazan & Shaver, 1987). These beliefs are related to experiences with parents during childhood. Adults who saw themselves as open to the ideas of romantic love were likely to be securely attached whereas those with an anxious/avoidant style were more likely to express disbelief in falling and staying in love. In those with an anxious/ambivalent style there was a correlation with the belief that true romantic love may be impossible, but these individuals were more likely to see falling in love as achievable.

In a different approach to categorizing the attachment styles Bartholomew and Horowitz (1991) used a two-dimensional model. The dimensions they used were dependence as a model of self and avoidance of intimacy as a model of others and within these dimensions people could be classified from low to high. Using these dimensions as axes Bartholomew and Horowitz (1991) then labeled the four resultant quadrants as categories of attachment. The labels they assigned to these categories were: secure, preoccupied, dismissing, and fearful. The researchers suggested that these categories were related to a person's attributions of self and others. A positive attribution of self and others was related to a secure attachment style while a positive attribution of self with a negative attribution of others was related to the dismissing style. Those with a fearful style had negative attributions of both self and others while those with a preoccupied style had negative attributions of self but positive attributions of others. Through their use of the dimensional model these styles represent how the different internal working models of self and others are present in adults.

In a shift away from categorical styles Fraley and Shaver (2000) introduced a continuous model of adult attachment using the dimensions of anxiety and avoidance. Anxiety is defined as

a preoccupation with loss, rejection, and abandonment in relationships that can manifest in a high degree of vigilance. Avoidance is defined as discomfort in relationships and difficulty being intimate or dependent on others (Fraley & Shaver, 2000). In terms of the behavioral manifestation of these qualities, anxiety can be seen as hyperactivation of attachment behaviors and avoidance as deactivation of attachment behaviors. In their research Fraley and Shaver, (2000) observed that the self-report nature of adult measures reflected the behavioral nature of the attachment and avoidance dimensions. Further support for this continuous and dimensional model over the popular categorical models that preceded it was found in taxometric analyses of both general and specific relationship attachment (Fraley, et al., 2015; Fraley & Waller, 1998). When people are placed on these dimensions the results suggest that those who are higher in attachment anxiety report more anger at their inattentive partners, more vulnerability, and more expressions of a need for responsiveness (Fraley & Shaver, 2000). Conversely, those high in attachment avoidance report less anger at inattentive partners, less vulnerability, and fewer expressions of the need for partner responsiveness.

Rationale for a Continued Study of Attachment

Research has established attachment as a key factor in the development of adult romantic relationships including marriages (Kobak & Rodgers, 1991). However, despite some advances the empirical work is in its infancy as evidenced by Madey and Rodgers (2009) assertion of their own research as novel. If attachment security is related to intimacy and commitment and attachment insecurity with avoidance and anxiety it follows that attachment would be connected to love style and influenced by amount of time spent in such an encompassing relationship as marriage.

Enduring Marriages

Definition of Enduring Marriage

Length of marriage is a factor related to both attachment and love. Long-term marriages are significant in a culture with a high rate of divorce. Although the rate of divorce in the U.S. today is below the peak levels it reached in the 1970s, it remains high both by historical standards in the U.S. and by comparison to the rate in other industrialized nations. (Lehrer & Son, 2017) Data collected in 2012 and 2013 indicated that marriages worldwide have an average duration of 14.8 years with a standard deviation of 11.4 years (Sorokowski et al., 2017). For the purposes of this study, a lengthy or enduring marriage is considered to be one that has lasted more than 15 years. In marriages that endure and those that have yet to meet that mark, the intimacy, passion, and commitment components of Sternberg's triangle can be seen.

Intimacy in Short and Long Marriages

Sternberg (1986) used Berscheid's (1983) theory of emotion in close relationships to plot his hypothesized course of intimacy. In a successful relationship Sternberg suggested that latent intimacy will start at low levels and increase over time while manifest intimacy will peak in mid-relationship. For unsuccessful relationships, the starting pattern is similar but then both latent and manifest intimacy decrease sharply mid-relationship leading to relationship failure.

Research on intimacy in marriage suggests that certain facets of intimacy rise and fall with marital duration. Happiness, seen in intimacy as a happiness experienced with a loved one, is seen to drop after the first few years of marriage and not recover (White & Booth, 1991). However, reflecting the emotional support and mutual understanding facets of intimacy, affection and positivity in conflict resolution was observed to be higher in longer marriages.

Furthermore, those in longer marriages were more likely to view of the marriage as a source of pleasure (Carstensen, et al., 1995).

Passion in Short and Long Marriages

Sternberg (1986) hypothesized passion as taking a rather different course than intimacy. Using Solomon's (1980) theory of acquired motivation as a basis he charted passion as making a large initial jump early in a relationship that then levels off quickly and stabilizes at a lower level for the duration of the relationship. Sternberg makes a comparison between passion and addictive substances remarking that in both cases there is an initial high that facilitates increased use which leads to habituation and symptom withdrawal if use is discontinued.

Research in this area suggests that passion as defined by its facets of arousal and sex follows the course suggested by Sternberg with a large nationally representative sample showing a decline in incidence and frequency of marital sex after the early years of marriage (Call, et al., 1995). Similarly, Hinchliff, and Gott (2004) found that in long-term marriages sexual activity remained important suggesting the stability of the passion curve. Looking at passionate love specifically researchers (Hatfield, et al., 2008) found that time exerted a corrosive effect on the passionate component of love.

Decision and Commitment in Short and Long Marriages

The decision/commitment component of love is an obvious correlate of enduring marriage, and Sternberg (1986) suggested that in such marriages decision/commitment would be experienced as a s-curve. If a relationship is a lasting one, then decision/commitment would quickly move from zero at the beginning of a relationship to a high level of decision/commitment and then level off for the duration. In failed relationships decision/commitment will return to zero when the relationship collapses. In a struggling

relationships decision/commitment might look more like a rollercoaster as decision/commitment lags and rallies.

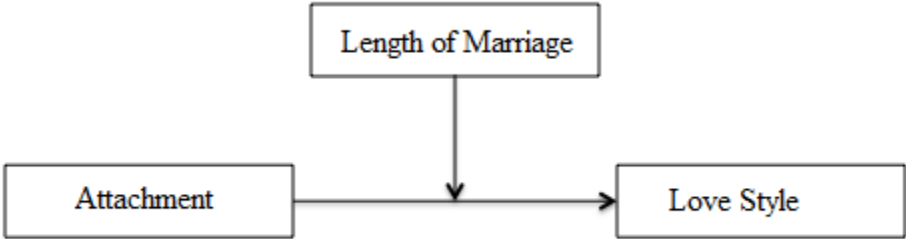
Rationale for Continued Study of Enduring Marriages

Length of marriage is linked to all the components of Sternberg's love triangle meaning that married individuals can have all the combinations of components that make up the love styles. Furthermore, the duration or endurance of the marriage may impact how love is experienced and the love style is perceived. Beyond love style length of marriage has been observed to interact with attachment in married individuals (Feeney, 1994). With these existing links it stands to reason that endurance of marriage is worth investigating as a moderator of the relationship between attachment and love style.

The Present Study

With a clear need for targeted explorations of attachment variables in relation to love style across the lifespan of a marriage, this study aimed to answer the specific question of how attachment and length of marriage interact with each other in the experience of love style in married adults. The first hypothesis of this study sought to replicate previous research findings where attachment predicts love style in adults (Madey & Rodgers, 2009). The second hypothesis was that length, the enduring quality of marriage would moderate the relationship between attachment and love style. That is, it was expected that in individuals who have been married longer the relationship between attachment and love style will be reduced; while in those who have been married for shorter amounts of time, the relationship between attachment and love style will increase. The hypothesized relationships in the form of a conceptual model are displayed in Figure 1.

Figure 1. Conceptual, diagrammatic model of hypothesized relationships



CHAPTER III - Method

Participants

Determining Sample Size

Participants were recruited from both the faculty and staff of a small private university in the Pacific Northwest as well as through online recruitment on social networking sites. Four hundred seventy-three (92.7% female) married individuals were recruited from a private, predominantly undergraduate institution in the Pacific Northwest via email. Additional participants from outside the aforementioned university were recruited through social media groups.

Recruitment, Eligibility, and Sample Characteristics

Participants were recruited through email invitations and posts on social networking sites. By using email all staff and faculty of the private university were the recipients of an email inviting them to participate in the study. Through use of social networking site postings individuals were provided information about the study and given an opportunity to participate. No monetary or other incentives were offered for participation other than the indirect benefit inherent in assisting in psychological research. There were two eligibility requirements for participation in the study. First all participants had to be at least 18 years of age. The second requirement was that the participant currently be married.

The final study sample included 248 (92.7% female) married individual participants who ranged from 21 to 69 years old, with a mean age of 38.8 years ($SD = 9.69$). Approximately 23.6% number of participants identified the length of their marriage as being less than 5 years, 46.5% of participants identified the length of their marriage as 5 – 15 years, 16.6% identified the length of their marriage as 16 – 24 years, and 13.3% identified the length of their marriage as 25 years or longer.

Consent and Confidentiality

Invitations to participate included a brief description of the study and a link to an online survey administered by Qualtrics.com (a website designed for survey materials). After clicking the link provided in the invitation emails, participants were first directed to an informed consent and eligibility page. Upon providing consent and proving eligibility, confidentiality was protected by randomly generated assignment of a unique participant identification number. The author's university Institutional Review Board approved the study before the commencement of recruitment or data collection procedures.

Procedure

Following recruitment participants who agreed to informed consent and were determined to be eligible for participation were given a demographic questionnaire to collect information on age, sex, length of marriage, and other demographic information. Participants were then given measures on attachment and love style. All measures were completed using Qualtrics.com on the participant's own personal computer. At the conclusion of the measures, participants were given a debriefing message which contained researcher contact information for any follow-up questions or concerns.

Measures

Participant demographic characteristics.

A demographic questionnaire was used to determine variables needed for eligibility criteria and identification of study variables. The demographic questionnaire consisted of 8 items. Participants identified their age, gender, employment status, education level attained, religious affiliation, and the number of children they have. Participants indicated how long they had been married on a categorical scale (*0-5 years, 6-15 years, 16-24 years, or 25+ years*).

Love Style Measure

Love style was measured using the Triangular Love Scale (TLS; Sternberg, 1997). The TLS instructs the person completing it to answer 45 items by filling in the name of a loved one in the blanks of the items and answering in terms of agreement with which statement. Answers are given on a 9-point Likert scale ranging from 1 (*Not at all*) to 9 (*Extremely*). The TLS has 15 items for each component of the triangular love theory : intimacy (e.g., “I receive considerable emotional support from _____”), passion (e.g., “When I see romantic movies and read romantic books, I think of _____”), and commitment (e.g., “Even when _____ is hard to deal with, I remain committed to our relationship.”). The TLS has shown adequate reliability (.90)

and concurrent validity (Whitley, 1993). The TLS has also demonstrated high internal consistency (.95). In a factor analysis using a three-factor rotated solution the three factors in each analysis were congruent with those predicted by the theory (Sternberg, 1997).

Attachment Measure

Attachment was measured using the Experiences in Close Relationships-Revised (ECR-R; Fraley, Waller, & Brennan, 2000) which is a 36-item questionnaire designed for either online or pencil and paper use. The ECR-R is a measure of individual differences in attachment related anxiety and avoidance. Items are written in the first person and assess two subscales, attachment-related anxiety and attachment-related avoidance with each subscale containing 18 items. These subscales were not named on the scale but are clustered together for ease of scoring. Each item on the ECR-R is rated by participants on a seven-point Likert-type scale that ranges from *strongly disagree* to *strongly agree*. Examples of items included, “I’m afraid that I will lose my partner’s love” (Anxiety), “I find it difficult to allow myself to depend on romantic partners (Avoidance).”

The ECR-R norms are based on people who have taken the ECR-R online through Fraley’s lab website ($N=17,000$). In this sample 73% of participants were female, 21% were married, and the average age was 27. The ECR-R total internal consistency reliability coefficient alpha was $>.90$. The anxiety subscale internal consistency reliability coefficient alpha was 0.95 and the avoidance subscale internal consistency reliability coefficient alpha was 0.93 (Sibley & Liu, 2004). The test-retest reliability coefficient was $r = .94$.

Analyses

To test the model for my first hypothesis, that individual differences in attachment will predict love style, I conducted a simple bivariate correlation analysis. To test the models for my

second hypothesis, that length of marriage will moderate the relationship between attachment and love style it was necessary to perform six multiple linear regression analyses, one for each combination of the three love styles and the two dimensions of attachment. Data analyses were conducted with SPSS 26. In each of the six models the primary variable of interest was the moderating variable, length of marriage. If the interaction between the independent variable and the moderator variable was statistically significant for any of the six models, then the null hypothesis (no moderation) was rejected, and it was concluded there is a moderation effect. Attachment scores were obtained by totaling the attachment avoidance subscales on the Experiences in Close Relationships-Revised. Love style was obtained by totaling the intimacy, passion, and commitment scales of the Triangular Love Scale.

CHAPTER IV – Results

Data Preparation and Analyses of Assumptions

Demographic variables were analyzed; among the 248 study participants a total of 174 (70.2%) were married 15 years or less and 74 (29.8%) were married 16 years or more. A total of 30 (12.1%) study participants did not report their age (although they indicated they were 18 years or older). Among the remaining 218 study participants, the average (and standard deviation) age was 38.6 (9.6) and the range was 23 to 69. A total of 15 (6.0%) reported their gender as male, 231 (93.1%) female, and 2 (0.8%) Other. The distribution of the highest level of education achieved was 105 (42.3%) Doctoral degree, 48 (19.4%) Master's degree, 40 (16.1%) Bachelor's degree, 9 (3.6%) some graduate school, 18 (7.3%) Associate degree, 21 (8.5%) some college, and 7 (2.8%) High school diploma. A total of 158 (63.7%) study participants reported their employment status as "Employed full-time", 30 (12.1%) "Employed part-time", 42 (16.9%)

“Unemployed/not working”, and 18 (7.3%) “Student”. A total of 33 (13.3%) study participants did not report the number of children they had. Among the remaining 215 study participants the average (and standard deviation) number of children was 2.11 (1.39) and the range was 0 to 9. A total of 3 (1.2%) study participants did not report their religious affiliation. Among the remaining 245 study participants, the distribution of religious affiliation was 92 (37.1%) Protestant, 37 (14.9%) Atheist, 36 (14.5%) Other, 31 (12.5%) Agnostic, 21 (8.5%) Mormon/LDS , 20 (8.1%) Catholic, 5 (2.0%) Jewish, 2 (0.8%) Muslim, and 1 (0.4%) Baha’i.

Table 1 *Participant Demographics (N=473)*

	<i>N</i>	%
Married		
Less than 15 years	174	70.2
16 years or more	74	29.8
Sex		
Female	231	93.1
Male	15	6.0
Other	2	0.8
Education		
High school diploma	7	2.8
Some college	21	8.5
Associate degree	18	7.3
Bachelor’s degree	40	16.1
Some graduate school	9	3.6
Master’s degree	48	19.4
Doctoral degree	105	42.3
Employment		
Student	18	7.3
Unemployed/not working	42	16.9
Employed part-time	30	12.1
Employed full-time	158	63.7
Religious affiliation		
Protestant	92	37.1
Atheist	37	14.9
Other	36	14.5
Agnostic	31	12.5
Mormon	21	8.5
Catholic	20	8.1

Jewish	5	2.0
Muslim	2	0.8
Baha'i	1	0.4

The data were screened for missingness and violation of assumptions prior to analysis. Among the remaining 462 respondents, 13 (2.8% of the sample) failed to indicate they were married, and they were omitted from the analysis. Among the 449 eligible respondents, 201 (44.8% of the sample) failed to complete two instruments required for this study, the Triangular Love Scale (TLS); (Sternberg, 1997) and the Experiences in Close Relationships-Revised (ECR-R); (Fraley, Waller, & Brennan, 2000) and were deleted from the analyses. Outlier analysis evaluated for violation of linearity, normality, independence, and homogeneity assumptions prior to analyzing the models. Outliers were identified using studentized deleted residuals on a model by model basis and are discussed below. Following deletions, the sample consisted of 248 participants. Descriptive statistics are displayed in Table 2.

Table 2 *Descriptive Statistics for Independent and Dependent Variables*

	N		Mean	Std. Deviation	Minimum	Maximum
	Valid	Missing				
Intimacy Love Scale	248	0	118.931	17.1010	38.0	135.0
Passion Love Scale	248	0	96.528	24.3922	22.0	135.0
Commitment Love Scale	248	0	123.210	16.9769	17.0	135.0
Attachment-related anxiety scale	248	0	2.401	0.9751	1.0	6.1
Attachment-related avoidance scale	248	0	2.192	0.9892	1.0	6.5

Table 3 shows Cronbach's alpha statistic for the love style and attachment scale scores. A common rule-of-thumb is a Cronbach's alpha of 0.70 or greater is indicative of acceptable reliability. All scale scores had a Cronbach's alpha of 0.90 or greater indicating excellent internal consistency reliability for the independent and dependent variables.

Table 3 *Cronbach's Alpha Statistic for the Love Style and Attachment Scales*

Variable	Cronbach's alpha (n = 248)	Number of items
Intimacy Love Scale	0.96	15
Passion Love Scale	0.94	15
Commitment Love Scale	0.96	15
Attachment-related anxiety scale	0.90	16
Attachment-related avoidance scale	0.95	18

Hypothesis Tests

Hypothesis 1: Individual differences in attachment will predict love style

It was expected that secure attachment will predict more consummate love styles. The assumptions for Pearson's correlation statistics were evaluated prior to evaluating the hypothesis. Inspection of scatterplots between each of the three love style scores versus each of the two attachment scores indicated linearity and that no outliers assumptions were satisfied. Inspection of histograms for each of the three love style scores and the two attachment scores indicated the normality assumption was satisfied. It was concluded that all the assumptions were satisfied, and Pearson's correlation statistic was used to evaluate hypothesis 1.

Table 4 is a correlation matrix that shows the correlation between each of the three love styles and the two attachment scores. According to Cohen (1988), small, medium, and large effect sizes for hypothesis tests about the Pearson's correlation coefficient r (in absolute value) are: $r=0.1$, $r=0.3$ and $r=0.5$, respectively. There was a statistically significant ($p < 0.001$), strong negative correlation between each of the three love style scores and each of the two attachment scores. The Pearson's correlation statistics ranged from -0.41 (Commitment vs Anxiety and Passion vs Anxiety) to -0.64 (Intimacy vs Avoidance). It was concluded the level of attachment-related anxiety and attachment-related avoidance are predictive of intimacy, passion and commitment love styles. Specifically, lower levels of attachment-related anxiety and attachment-

related avoidance are predictive of higher levels of intimacy, passion, and commitment love styles.

Table 4 *Pearson's Correlation Matrix to Test Hypothesis 1*

		Attachment- related anxiety scale	Attachment- related avoidance scale
Intimacy Love Scale	Pearson Correlation	-0.530	-0.635
	<i>p</i> -value	<0.001	<0.001
	N	248	248
Passion Love Scale	Pearson Correlation	-0.412	-0.563
	<i>p</i> -value	<0.001	<0.001
	N	248	248
Commitment Love Scale	Pearson Correlation	-0.413	-0.506
	<i>p</i> -value	<0.001	<0.001
	N	248	248

Hypothesis 2: Length of Marriage will Moderate the Relationship between Attachment and Love Style

It was expected that in longer marriages, the relationship between attachment and love style would be less, while in shorter marriages, the positive relationship between attachment and love style would increase.

Because there were three measures of love style and two measures of attachment, it was necessary to perform six multiple linear regression analyses, one for each combination of love style and attachment. For each of the six regression models the primary variable of interest was the moderating variable, length of marriage. If the interaction between the independent variable and the moderator variable was statistically significant for any of the six models, then the null hypothesis (no moderation) was rejected, and it was concluded there was a moderation effect.

Model 1: Intimacy love style versus attachment-related anxiety and length of marriage.

The dependent variable was the intimacy love style score. The independent variables were attachment-related anxiety, length of marriage, and the interaction between attachment-related anxiety and length of marriage. The assumptions for multiple linear regression were evaluated prior to conducting the analysis. Inspection of a scatterplot between the intimacy love style score and the attachment-related anxiety score separately for each category of the moderator variable (length of marriage) indicated the linearity assumption was satisfied. Inspection of the studentized deleted residuals identified five outliers so the assumption regarding no outliers was not satisfied. To correct for the violation of the outlier assumption, the five study participants with outlying observations were removed from the analysis of Model 1. The five observations were retained in the database for the analysis subsequent models presented below. Inspection of the leverage values indicated 22 observations with larger than expected values, so the assumption of no leverage points was not satisfied. To correct for the violation of leverage assumption, the 22 study participants with large leverage values were removed from the analysis of Model 1. The 22 observations were retained in the database for the analysis subsequent models presented below. Cook's distance values were less than 1 for all observations so the assumption there were no influential values was satisfied. All three independent variables had a variance inflation factor (VIF) less than 10 indicating the multicollinearity assumption was satisfied. Inspection of a scatterplot between the studentized residuals versus the predicted values separately for each group of the moderator variable (length of marriage) indicated the homoscedasticity assumption was satisfied. Inspection of a histogram of the studentized residuals indicated the normality assumption was satisfied. It was concluded that after omitting the five observations with outlying values and 22 observations with large leverage values the

assumptions were satisfied, and multiple linear regression was used to evaluate hypothesis 2 – Model 1.

As discussed above, five observations with outlying values and 22 observations with large leverage values were removed from this analysis leaving a sample size of $n = 221$. Table 4 shows the overall model with three independent variables, anxiety, length of marriage, and the interaction between length of marriage and anxiety was statistically significant, $F(3, 217) = 22.4$; $p < 0.001$; $R^2 = 0.24$; $f^2 = 0.32$. The interpretation of R^2 is, the three independent variables collectively explain 24% of the total variance in the dependent variable, intimacy love style. The effect size for this model was $f^2 = 0.32$, which is a large effect size. This means the model is a very good predictor of the intimacy love style score.

Table 5 *Multiple Linear Regression Overall Model for Testing Hypothesis 2: Length of Marriage as a Moderator of the Relationship Between Intimacy Love Style and Attachment-related Anxiety.*

Model ^{a, b, c}	Sum of Squares	df	Mean Square	F	<i>p</i> -value
Regression	10322.868	3	3440.956	22.399	<0.001
Residual	33335.295	217	153.619		
Total	43658.163	220			

a. Dependent Variable: Intimacy Love Scale.

b. Predictors: (Constant), How long have you been married?, Attachment-related anxiety scale, Interaction between attachment-related anxiety and length of marriage.

c. $R^2 = 0.24$; $f^2 = 0.32$

Although the overall model was statistically significant, Table 5 shows only the attachment-related anxiety score was statistically significant ($p < 0.001$). In particular, the interaction between length of marriage and attachment-related anxiety was not statistically

significant, $p = 0.24$. It was concluded that length of marriage does not moderate the relationship between intimacy love style and attachment-related anxiety. In other words, the relationship between intimacy love style and attachment-related anxiety is the same regardless of length of marriage.

Table 6 *Multiple Linear Regression Coefficients for Testing Hypothesis 2: Length of Marriage as a Moderator of the Relationship Between Intimacy Love Style and Attachment-related Anxiety*

Model ^a	Unstandardized Coefficients		Standardized Coefficients	t	p-value
	B	Std. Error	Beta		
(Constant)	138.993	2.702		51.436	<0.001
Attachment-related anxiety scale	-7.593	1.059	-0.451	-7.170	<0.001
How long have you been married?	5.421	7.608	0.166	0.713	0.477
Interaction between attachment-related anxiety and length of marriage	-3.813	3.210	-0.276	-1.188	0.236

a. Dependent Variable: Intimacy Love Scale

Model 2: Passion love style versus attachment-related anxiety and length of marriage

The dependent variable for Model 2 was the passion love style score. The independent variables were attachment-related anxiety, length of marriage, and the interaction between attachment-related anxiety and length of marriage. The assumptions for multiple linear regression were evaluated prior to conducting the analysis as discussed above for Model 1. All of the assumptions were satisfied except for outliers and leverage values. There were 2 observations with outlying values and 22 observations with large leverage values. Those 24 observations were removed from the analysis of this model but retained in the database for testing subsequent models presented later in this report. After removing the 24 observations it was concluded the

assumptions were satisfied and multiple linear regression was used to test hypothesis 2 – Model 2. The sample size for this model was 224.

Table 7 shows the overall model with three independent variables, anxiety, length of marriage, and the interaction between anxiety and length of marriage was statistically significant, $F(3, 220) = 21.36; p < 0.001; R^2 = 0.23; f^2 = 0.30$. The interpretation of R^2 is the three independent variables collectively explain 23% of the total variance in the dependent variable, passion love style. The effect size for this model was $f^2 = 0.30$, which is a large effect size. This means the model is a good predictor of the passion love style score.

Table 7 *Multiple Linear Regression Overall Model for Testing Hypothesis 2: Length of Marriage as a Moderator of the Relationship Between Passion Love Style and Attachment-related Anxiety.*

Model ^{a, b, c}	Sum of Squares	df	Mean Square	F	p-value
Regression	26574.573	3	8858.191	21.359	<0.001
Residual	91240.387	220	414.729		
Total	117814.960	223			

a. Dependent Variable: Passion Love Scale

b. Predictors: (Constant), How long have you been married?, Attachment-related anxiety scale, Interaction between attachment-related anxiety and length of marriage

c. $R^2 = 0.23; f^2 = 0.30$

Although the overall model was statistically significant, Table 8 shows only the attachment-related anxiety score was statistically significant. In particular, the interaction between length of marriage and attachment-related anxiety was not statistically significant, $p = 0.22$. It was concluded that length of marriage does not moderate the relationship between passion love style and attachment-related anxiety. In other words, the relationship between passion love style and attachment-related anxiety is the same regardless of length of marriage.

Table 8 *Multiple Linear Regression Coefficients for Testing Hypothesis 2: Length of Marriage as a Moderator of the Relationship Between Passion Love Style and Attachment-related Anxiety*

Model ^a	Unstandardized Coefficients		Standardized Coefficients	t	p-value
	B	Std. Error	Beta		
(Constant)	126.202	4.378		28.824	<0.001
Attachment-related anxiety scale	-11.691	1.698	-0.433	-6.884	<0.001
How long have you been married?	8.128	12.446	0.153	0.653	0.514
Interaction between attachment-related anxiety and length of marriage	-6.368	5.178	-0.287	-1.230	0.220

a. Dependent Variable: Passion Love Scale

Model 3: Commitment love style versus attachment-related anxiety and length of marriage.

The dependent variable was the commitment love style score. The independent variables were attachment-related anxiety, length of marriage, and the interaction between attachment-related anxiety and length of marriage. The assumptions for multiple linear regression were evaluated prior to conducting the analysis as discussed above for Model 1. All the assumptions were satisfied except for outliers and leverage values. There were four observations with outlying values and 22 observations with large leverage values. Those 26 observations were removed from the analysis of this model but retained in the database for testing subsequent models presented later in this report. After removing the 26 observations it was concluded the assumptions were satisfied and multiple linear regression was used to test hypothesis 2 – Model 3. The sample size for this model was 222.

Table 9 shows the overall model with three independent variables, anxiety, length of marriage, and the interaction between anxiety and length of marriage was statistically significant,

$F(3, 218) = 17.55; p < 0.001; R^2 = 0.20; f^2 = 0.25$. The interpretation of R^2 is the three independent variables collectively explain 20% of the total variance in the dependent variable, commitment love style. The effect size for this model was $f^2 = 0.25$, which is a medium to large effect size. This means the model is a good predictor of the commitment love style score.

Table 9 *Multiple Linear Regression Overall Model for Testing Hypothesis 2: Length of Marriage as a Moderator of the Relationship Between Commitment Love Style and Attachment-related Anxiety*

Model ^{a, b, c}	Sum of Squares	Df	Mean Square	F	<i>p</i> -value
Regression	6977.394	3	2325.798	17.554	<0.001
Residual	28883.890	218	132.495		
Total	35861.284	221			

a. Dependent Variable: Commitment Love Scale

b. Predictors: (Constant), How long have you been married?, Attachment-related anxiety scale, Interaction between attachment-related anxiety and length of marriage

c. $R^2 = 0.20; f^2 = 0.25$

Although the overall model was statistically significant, Table 10 shows only the attachment-related anxiety score was statistically significant. In particular, the interaction between length of marriage and attachment-related anxiety was not statistically significant, $p = 0.78$. It was concluded that length of marriage does not moderate the relationship between commitment love style and attachment-related anxiety. In other words, the relationship between commitment love style and attachment-related anxiety is the same regardless of length of marriage.

Table 10 *Multiple Linear Regression Coefficients for Testing Hypothesis 2: Length of Marriage as a Moderator of the Relationship Between Commitment Love Style and Attachment-related Anxiety*

Model ^a	Unstandardized Coefficients		Standardized Coefficients	t	p-value
	B	Std. Error	Beta		
(Constant)	139.374	2.475		56.319	<0.001
Attachment-related anxiety scale	-6.350	0.960	-0.426	-6.615	<0.001
How long have you been married?	3.882	7.073	0.130	0.549	0.584
Interaction between attachment-related anxiety and length of marriage	-0.832	2.991	-0.066	-0.278	0.781

a. Dependent Variable: Commitment Love Scale

Model 4: Intimacy love style versus attachment-related avoidance and length of marriage.

The dependent variable was the intimacy love style score. The independent variables were attachment-related avoidance, length of marriage, and the interaction between attachment-related avoidance and length of marriage. The assumptions for multiple linear regression were evaluated prior to conducting the analysis as discussed above for Model 1. All of the assumptions were satisfied except for outliers and leverage values. There were five observations with outlying values and 15 observations with large leverage values. Those 20 observations were removed from the analysis of this model but retained in the database for testing subsequent models presented later in this report. After removing the 20 observations it was concluded the assumptions were satisfied and multiple linear regression was used to test hypothesis 2 – Model 4. The sample size for this model was 228.

Table 11 shows the overall model with three independent variables, avoidance, length of marriage, and the interaction between avoidance and length of marriage was statistically significant, $F(3, 224) = 43.8$; $p < 0.001$; $R^2 = 0.37$; $f^2 = 0.59$. The interpretation of R^2 is the three independent variables collectively explain 37% of the total variance in the dependent variable, intimacy love style. The effect size for this model was $f^2 = 0.59$, which is a very large effect size. This means the model is an excellent predictor of the intimacy love style score.

Table 11 *Multiple Linear Regression Overall Model for Testing Hypothesis 2: Length of Marriage as a Moderator of the Relationship Between Intimacy Love Style and Attachment-related Avoidance*

Model ^{a, b, c}	Sum of Squares	Df	Mean Square	F	<i>p</i> -value
Regression	13998.768	3	4666.256	43.752	<0.001
Residual	23889.912	224	106.651		
Total	37888.680	227			

a. Dependent Variable: Intimacy Love Scale

b. Predictors: (Constant), How long have you been married?, Attachment-related avoidance scale, Interaction between attachment-related avoidance and length of marriage

c. $R^2 = 0.37$; $f^2 = 0.59$

Although the overall model was statistically significant, Table 12 shows only the attachment-related avoidance score was statistically significant. In particular, the interaction between length of marriage and attachment-related avoidance was not statistically significant, $p = 0.28$. It was concluded that length of marriage does not moderate the relationship between intimacy love style and attachment-related avoidance. In other words, the relationship between

intimacy love style and attachment-related avoidance is the same regardless of length of marriage.

Table 12 *Multiple Linear Regression Coefficients for Testing Hypothesis 2: Length of Marriage as a Moderator of the Relationship Between Intimacy Love Style and Attachment-related Anxiety*

Model ^a	Unstandardized Coefficients		Standardized Coefficients	t	p-value
	B	Std. Error	Beta		
(Constant)	140.368	2.157		65.074	<0.001
Attachment-related avoidance scale	-9.277	0.967	-0.575	-9.593	<0.001
How long have you been married?	4.574	4.389	0.159	1.042	0.298
Interaction between attachment-related avoidance and length of marriage	-2.272	2.103	-0.166	-1.080	0.281

a. Dependent Variable: Intimacy Love Scale

Model 5: Passion love style versus attachment-related avoidance and length of marriage.

The dependent variable was the passion love style score. The independent variables were attachment-related avoidance, length of marriage, and the interaction between attachment-related avoidance and length of marriage. The assumptions for multiple linear regression were evaluated prior to conducting the analysis as discussed above for Model 1. All the assumptions were satisfied except for outliers and leverage values. There was one observation with an outlying value and 15 observations with large leverage values. Those 16 observations were removed from the analysis of this model but retained in the database for testing subsequent models presented later in this report. After removing the 16 observations it was concluded the assumptions were

satisfied and multiple linear regression was used to test hypothesis 2 – Model 5. The sample size for this model was $n = 232$.

Table 13 shows the overall model with 3 independent variables, avoidance, length of marriage, and the interaction between avoidance and length of marriage was statistically significant, $F(3, 228) = 35.7; p < 0.001; R^2 = 0.32; f^2 = 0.47$. The interpretation of R^2 is the three independent variables collectively explain 32% of the total variance in the dependent variable, passion love style. The effect size for this model was $f^2 = 0.47$, which is a large effect size. This means the model is an excellent predictor of the passion love style score.

Table 13 *Multiple Linear Regression Overall Model for Testing Hypothesis 2: Length of Marriage as a Moderator of the Relationship Between Passion Love Style and Attachment-related Avoidance.*

Model ^{a, b, c}	Sum of Squares	df	Mean Square	F	<i>p</i> -value
Regression	40103.676	3	13367.892	35.675	<0.001
Residual	85435.630	228	374.718		
Total	125539.306	231			

a. Dependent Variable: Passion Love Scale

b. Predictors: (Constant), How long have you been married?, Attachment-related avoidance scale, Interaction between attachment-related avoidance and length of marriage

c. $R^2 = 0.32; f^2 = 0.47$

Table 14 shows all three independent variables were statistically significant. In particular the interaction between length of marriage and attachment-related avoidance was statistically significant ($p = 0.003$). It was concluded that length of marriage moderates the relationship between passion love style and attachment-related avoidance. In other words, the relationship between passion love style and attachment-related avoidance depends on the length of marriage.

Table 14 *Multiple Linear Regression Coefficients for Testing Hypothesis 2: Length of Marriage as a Moderator of the Relationship Between Passion Love Style and Attachment-related*

Avoidance

Model ^a	Unstandardized Coefficients		Standardized Coefficients	t	p-value
	B	Std. Error	Beta		
(Constant)	125.849	3.975		31.657	<0.001
Attachment-related avoidance scale	-13.080	1.761	-0.458	-7.428	<0.001
How long have you been married?	19.847	8.091	0.383	2.453	0.015
Interaction between attachment-related avoidance and length of marriage	-11.406	3.830	-0.466	-2.978	0.003

a. Dependent Variable: Passion Love Scale

Based on the results described in Table 13 we see among those who are married 15 years or less, the coefficient for attachment related avoidance is -13.08. Thus, among those married 15 years or less the average passionate love score is expected to decrease by 13.08 points for every one-point increase in attachment related avoidance. Among those married 16 years or more, the coefficient for attachment related avoidance is -24.49. Thus, among those married 16 years or more, the average passionate love score is expected to decrease by 24.49 points for every one-point increase in attachment related avoidance. In other words, a higher level of attachment related avoidance is more detrimental to a passion love style among those married 16 years or more compared to those married 15 years or less.

Model 6: Commitment love style versus attachment-related avoidance and length of marriage.

The dependent variable was the commitment love style score. The independent variables were attachment-related avoidance, length of marriage, and the interaction between attachment-

related avoidance and length of marriage. The assumptions for multiple linear regression were evaluated prior to conducting the analysis as discussed above for Model 1. All of the assumptions were satisfied except for outliers and leverage values. There were 7 observations with an outlying value and 15 observations with large leverage values. Two of the 7 observations with outlying values were among the 15 observations with large leverage values. Thus, omitting the 7 outliers left 13 values with large leverage values. Consequently, 20 observations were removed from the analysis of this model. After removing the 20 observations it was concluded the assumptions were satisfied and multiple linear regression was used to test hypothesis 2 – Model 6. The sample size for this model was $n = 228$.

Table 15 shows the overall model with 3 independent variables, avoidance, length of marriage, and the interaction between avoidance and length of marriage was statistically significant, $F(3, 224) = 27.9$; $p < 0.001$; $R^2 = 0.27$; $f^2 = 0.37$. The interpretation of R^2 is the three independent variables collectively explain 27% of the total variance in the dependent variable, commitment love style. The effect size for this model was $f^2 = 0.37$, which is a large effect size. This means the model is an excellent predictor of the commitment love style score.

Table 15 *Multiple Linear Regression Overall Model for Testing Hypothesis 2: Length of Marriage as a Moderator of the Relationship Between Commitment Love Style and Attachment-related Avoidance*

Model ^{a, b, c}		Sum of Squares	df	Mean Square	F	<i>p</i> -value
2	Regression	8920.386	3	2973.462	27.854	<0.001
	Residual	23911.982	224	106.750		
	Total	32832.368	227			

a. Dependent Variable: Commitment Love Scale

b. Predictors: (Constant), How long have you been married?, Attachment-related avoidance scale, Interaction between attachment-related avoidance and length of marriage

c. $R^2 = 0.27$; $f^2 = 0.37$

Although the overall model was statistically significant, Table 16 shows only the attachment-related avoidance score was statistically significant. In particular, the interaction between length of marriage and attachment-related avoidance was not statistically significant, $p = 0.91$. It was concluded that length of marriage does not moderate the relationship between commitment love style and attachment-related avoidance. In other words, the relationship between commitment love style and attachment-related avoidance is the same regardless of length of marriage.

Table 16 *Multiple Linear Regression Coefficients for Testing Hypothesis 2: Length of Marriage as a Moderator of the Relationship Between Commitment Love Style and Attachment-related Avoidance.*

Model ^a	Unstandardized Coefficients		Standardized Coefficients	t	p-value
	B	Std. Error	Beta		
(Constant)	139.710	2.129		65.612	<0.001
Attachment-related avoidance scale	-7.309	0.942	-0.496	-7.763	<0.001
How long have you been married?	3.309	4.408	0.123	0.751	0.454
Interaction between attachment-related avoidance and length of marriage	-0.251	2.129	-0.019	-0.118	0.906

a. Dependent Variable: Commitment Love Scale

Summary

This study showed statistically significant evidence that each of the 3 love styles, intimacy, passion, and commitment were strongly negatively correlated with both attachment-related anxiety and attachment-related avoidance. The correlations ranged from -0.41 (Commitment vs Anxiety and Passion vs Anxiety) to -0.64 (Intimacy vs Avoidance). This means there is strong evidence to suggest more secure attachment tends to be correlated with a greater amount of love. The length of marriage (15 years or less versus 16 years or more) was a statistically significant moderator of the relationship between the passion love style and attachment-related avoidance. Specifically, a higher level of attachment-related avoidance (i.e., less secure attachment) is more detrimental to a passion love style among those married 16 years or more compared to those married 15 years or less. There was insufficient evidence to suggest the length of marriage moderates the relationship between intimacy or commitment love styles and either attachment-related anxiety or attachment-related avoidance. There was also insufficient evidence to suggest length of marriage moderates the relationship between passion love style and attachment-related anxiety.

CHAPTER V – Discussion

The initial hypotheses of the present study were partially supported. The first hypothesis was supported in that individual differences in attachment predicted love style such that lower levels of attachment related anxiety and avoidance are predictive of higher levels of intimacy, passion, and commitment. The second hypothesis was partially supported, in that length of marriage moderated the relationship between passion and attachment related avoidance.

Interpretation of Findings

Predicting Love Style

Results of this study suggested that individual differences in adult attachment style plays a role in predicting the level of love style factors in married individuals. Specifically, analysis showed that the degree to which a person experiences attachment-related anxiety or attachment-related avoidance significantly predicted the level of passion, intimacy, and commitment he or she reported. The finding that secure attachment dimensions predicted more consummate love is consistent with previous research on the relationship between adult attachment style and love. Studies have examined adult attachment style and found that secure attachment styles tend to be associated with positive correlates of love. One explanation of this association is that adults with secure attachment styles are able to use constructive and positive working models of self and others (Mikulincer & Shaver, 2007). Those with secure attachment were also more likely to report enhanced relationship quality (Collins & Read, 1990) and more stable relationships (Kirkpatrick & Davis, 1994).

Attachment has also been shown to correlate directly with the love factors identified by Sternberg (1988). A secure attachment style has been shown to be related to sexual passion as well as romantic and harmonious passion (Davis, et al., 2004; Paquette, et al., 2020). The positive relationship between attachment security and intimacy also has empirical support in romantic relationships (Land, et al., 2011; Pielage, et al., 2005). There is similarly research to suggest a relationship between commitment and attachment security (Etcheverry, et al., 2012; Tran & Simpson, 2009). In the present study, those who reported lower attachment-related anxiety and avoidance reported the greater identification with passion, intimacy, and commitment in their relationships.

The Interaction of Attachment and Length of Marriage

It was it was hypothesized that in longer marriages, the relationship between attachment and love style would be less, while in shorter marriages, the positive relationship between attachment and love style would increase. However, the only significant interaction finding was that length of marriage moderated the relationship between attachment-related avoidance and the love style of passion. It may be that longer marriage length strengthens the relationship between attachment-related avoidance and the love style of passion such that there is a greater decrease in passion for those with attachment-related avoidance in longer marriages. The general ability of lengthy marriages to increase the strength of the relationship between attachment and passion is consistent with past research on relationship length and decreased passion. Sternberg (2004) himself theorized that over time the key role that passion plays in developing relationships would be supplanted by intimacy and commitment. Passion is defined by romance, physical attraction, and sexual consummation all of which have been found to decline as relationships endure over time (Acker & Davis, 1992; Hatfield, et al., 2008; Sims & Meana, 2010). In addition, those with higher levels of attachment-related avoidance are likely to find the experience of passionate love more challenging than others do in any stage of marriage (Valdez, et al., 2020). It seems that the longer a partner with higher levels of attachment-related avoidance is in a relationship, the lower their capacity for experiencing love in a passionate manner. While it was hypothesized that similar interactions would be present with the other variables in this study it is unclear why they did not materialize. One factor that may have inhibited the interaction effects with the other variables is the limitation this study had on being able to parse out more fine-grained stages of marriage that might have shown for example that secure attachment and intimacy have a stronger correlation in the first few years of marriage.

Clinical Applications

Although there was insufficient evidence to suggest that length of marriage moderates the relationship between intimacy or commitment love styles and either attachment-related anxiety or attachment-related avoidance, the present study suggests some potential pathways for promoting a more consummate love style in married individuals. First, in the current study, married participants who reported more security in their attachment dimensions also reported higher levels of the love style elements; likely due to the positive working models associated with secure attachment dimensions. This finding supports previous research that emphasizes the benefits of attachment in marital satisfaction (Banse, 2004; Davila, et al., 1998; Jones, et al., 2011) and other indicators of marital health and endurance. Given this, couple therapists would do well to consider evaluating adult attachment dimensions as a part of assessment and treatment planning with couples engaged in treatment for relationship distress. Assessing the attachment style of each partner would allow for a consideration of differences in style between the partners as well as serving as an overall barometer for relationship health. In the case of an attachment style imbalance educating the partners on how their individual attachment styles are affecting their interactions with each other could be a helpful part of an initial treatment phase.

Along with the support this study found for continued efforts to promote secure attachment, the results also suggest the importance of considering length of marriage when assessing for the impact of attachment related avoidance on passion in the marriage. Specifically, it seems that the longer the marriage lasts the more detrimental attachment related avoidance is to a passionate love style. This could mean that without intervention, individuals who report higher levels of attachment related avoidance will have a harder time experiencing passionate love especially when they have been married for a longer time. For couple therapists and

therapists working with individuals on relationship distress, the present study suggests the need to both assess for and address attachment related avoidance especially with clients who are presenting with problems related to passion. When such a client is identified one avenue for treatment would be to target the avoidance with interventions aimed at increasing exposure to the avoided facets of the relationship especially those related to passion. If avoidance is decreased this may increase the likelihood of the individual to experience passionate love and ultimately consummate love, that is love that high in all love styles in their marriage.

Limitations and Directions for Future Research

The present study included several limitations related to data collection, measurement, and statistical analysis which require the use of caution when considering the interpretation of the findings. In the future researchers should endeavor to address these methodological limitations to advance the field. One limitation is that all data were collected at a single time point. This limitation prevents causal interpretations of the findings. When considering the relationship between adult attachment style and love style the implications of the single time point data collection is an obvious limitation. In particular, attachment style was hypothesized to be a variable which at low levels inhibits love style and at higher level promotes it, but these variables were measured at the same time. It is therefore possible that the relationship is such that attachment changes based on the type of loving relationship one is in as an adult. Future studies could attempt to parse this relationship more effectively by studying how these variables change as a relationship progresses over time.

The study was further limited by a rather unusual sample. As mentioned in the methodology section the participants were recruited from among faculty and staff at a single university and from social media website groups targeted at academic professionals nationwide

at various universities which resulted in a sample where 42.3% of participants had a doctoral degree and an additional 19.4% had master's degrees. Furthermore, the sample was 93.1% female and 63.7% of participants were engaged in full-time employment. As there is a gap in the literature surrounding the marital proclivities of female academics it is not possible to say with certainty how these demographics affected the results if at all. However, it is worth noting that this study draws its conclusions from a non-representative sample that reflected the typical married individual to the extent that further caution should be exercised when attempting to generalize the results.

With consideration to the methodological issues described above future researchers could add to the field in a beneficial way by designing a study that seeks to examine the relationship between adult attachment style and love style with a more representative sample in a longitudinal way. This would allow for an exploration of casual links between attachment and love style in a typical married individual as they progress through their marriages' different stages.

Conclusion

With marriage occupying a prominent place in the lives of many adults it is worth considering the role of attachment and marital endurance in the love experience of married individuals. Efforts to improve methods of facilitating more positive outcomes for people in marriages are crucial to ensuring healthy relationships which are the building blocks of a stable society. Attachment theory suggests that bonds formed with early childhood caregivers lay the groundwork for the internal working models that influence how an adult will view a romantic partner. A secure attachment style will create conditions in an adult that facilitate the perception of love in a different way than those with higher levels of attached-related anxiety and avoidance. Adult secure attachment is characterized by successful long-term relationships. In an

effort to examine factors which may influence love styles across attachment styles, the present study examined the role of length of relationship in the love style experienced among married individuals. The degree to which an individual experienced attachment-related anxiety and avoidance was found to be predictive of their level of the love styles of passion, intimacy, and commitment. There was little evidence to suggest that length of marriage influenced the relationship between attachment style and love style, except in the case of attachment-related avoidance and passion in which case a longer marriage appeared to exert a negative influence on that relationship. However, more research is needed to account for the limitations of the current study's design and sample. The results emphasize the importance of considering the role attachment plays in how people experience love. Results also suggest the need to attend more to the relationship between passion and attachment-related avoidance in longer-term marriages. There is possible clinical utility of interventions by couple therapists to assess attachment and love style and tailor interventions to help couples with mismatches or deficits in love style. Future research into love style in married individuals should aim to address the limitations of this study's cross-sectional nature and limited sample.

APPENDIX A – Demographic Questionnaire

What is your age?

What is your gender

- Male
- Female
- Non-binary
- Transgender
- Other (please specify)

How long have you been married?

- Under 5 years
- 5-15 years
- 16-24 years
- 25 years or longer

What is your employment status?

- Employed full-time
- Employed part-time
- Unemployed/not working
- Student

What is the highest level of education you have completed?

- Some grade school (K-12)
- High school diploma
- Some college
- Associate's degree
- Bachelor's degree
- Some grad school
- Master's degree
- Doctoral degree

What is your religious affiliation

- Protestant
- Catholic
- Mormon/LDS
- Muslim
- Buddhist
- Baha'i
- Atheist
- Agnostic
- Jewish
- Other (please specify)

Do you have a child/children (check one or more options)

- No
- Yes, a biological child/children with my current spouse
- Yes, a biological child/children with someone other than my current spouse
- Yes, an adopted child/children with my current spouse
- Yes, an adopted child/children with someone other than my current spouse
- Yes, a stepchild/stepchildren

How many children do you have?

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