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## **Attachment, Trait Mindfulness, and Expectations in Married Women: A Moderated Mediation Model**

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Attachment, Trait Mindfulness, and Expectations in Married Women: A Moderated  
Mediation Model

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A dissertation submitted in partial fulfillment

Of the requirements for the degree of

Doctor of Philosophy

In

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Seattle Pacific University

School of Psychology, Family, & Community

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### ABSTRACT

Historically, the term marital satisfaction has been used to describe the subjective quality of marriage; however, some researchers have proposed that marital satisfaction as a construct overlooks fundamental relational components that could elucidate a more precise portrayal of marital functioning. Utilizing archival data, I examined individual differences in attachment orientation and trait mindfulness predicting marital expectations, a process that informs marital satisfaction. Using a moderated mediation model, I hypothesized that (a) attachment avoidance would negatively predict marital expectations, (b) trait mindfulness would mediate the relationship between attachment avoidance and marital expectations, (c) attachment anxiety would moderate the relationship between attachment avoidance and marital expectations, (d) attachment anxiety would moderate the relationship between attachment avoidance and trait mindfulness, and (e) the effect of attachment avoidance on marital expectations via trait mindfulness would differ depending on levels of attachment anxiety. Participants were 332 married women recruited via email invitation and social media to participate in a larger study on marriage. Participants completed an online survey that included an assortment of measures. Measures included in my study were the Marital Comparison Level Index (MCLI; Sabatelli, 1984), the Experiences in Close Relationships–Revised scale (ECR-R; Fraley et al., 2000), and the Five Facet Mindfulness Questionnaire–Short Form (FFMQ-SF; Bohlmeijer et al., 2011). Results from primary multiple regression analyses revealed a direct negative effect of attachment avoidance on marital expectations ( $B = -0.335, p < .01, CI95 -0.579$  to  $-0.114$ ) as well as negative effects of attachment avoidance ( $B = -0.202, p < .001, CI95 -0.260$  to  $-0.147$ ) and attachment anxiety ( $B = -0.213, p < .001, CI95 -0.330$  to  $-0.099$ ) on trait mindfulness. Results

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from ancillary analyses revealed that attachment anxiety and attachment avoidance interacted to predict trait mindfulness facet, nonreactivity, at a level that approached significance ( $B = 0.061$ ,  $p = .054$ ). Results suggest that attachment avoidance may be particularly influential in perceiving actualized marital expectations. Further, attachment avoidance and attachment anxiety may differentially impact trait mindfulness as a unitary construct and by individual facets. Findings implicate clinical considerations tailored to married women experiencing interpersonal dissatisfaction as well as suggestions for future research.

*Keywords:* attachment orientation, trait mindfulness, marital expectations

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## CHAPTER I – INTRODUCTION

### **Purpose**

The purpose of this study is to examine marital expectations as a function of attachment orientation and the hypothesized mechanism, trait mindfulness, in a sample of married women. Researchers have long been interested in better understanding the functioning of marital relationships and have historically used marital satisfaction as an outcome variable to represent the subjective evaluation of the overall quality of marriage (Bahr et al., 1983). Despite marital satisfaction continuing to be a more commonly explored outcome variable in marriage research (see Hadden et al., 2014), researchers have raised concern that marital satisfaction may be too broad and ambiguous a construct to capture particular underlying processes of marital satisfaction (see Ehnis, 1986). That is, by examining marital satisfaction as an outcome, researchers may have overlooked fundamental components of marital satisfaction that could elucidate a more precise portrayal of marital functioning. One notable component that correlates positively with marital satisfaction is marital expectations, or the extent to which individuals perceive their expectations as being met in the context of marriage (Ehnis, 1986). Examining marital expectations as an outcome provides a narrower, more measurable account of an individual's subjective evaluation of marriage quality. Thus, in seeking to better understand marital quality at a more comprehensive level, in my study I explore marital expectation as an outcome variable.

Further, it seems likely that the extent to which an individual believes that their marital expectations have been unmet, met, or exceeded, a process based on perception, may be

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informed by characterological attributes that impact the way in which they perceive and conceptualize the self in relation to others. Romantic attachment orientation, or, the degree to which an individual is comfortable with interpersonal trust and intimacy within a romantic partnership (Hazan & Shaver, 1987) is one such characterological feature that may predict perceptions of actualized marital expectations, as an individual's level of comfort in seeking support from and relying on their romantic partner may predict not only what that individual expects to receive in the marital relationship but also whether or not that individual perceives their expectations as met. No prior study, to my knowledge, has examined the direct relationship between romantic attachment orientation and marital expectations; however, this relationship seems likely given that secure attachment orientation (i.e., comfortable with trust and intimacy) has been found to predict romantic relationship satisfaction (Holland et al., 2012; Jones et al., 2011; McNelis & Segrin, 2019) as well as beliefs about partner responsiveness (Segal & Fraley, 2016).

Finally, the proposed relationship between romantic attachment orientation and marital expectations may be explained, in part, by an additional characterological attribute, trait mindfulness, which serves to direct an individual's attention to internal processes (i.e., thoughts, emotions, bodily sensations), accept such processes without judgement, and focus on the present moment (Bishop et al., 2004). As such, individuals with secure romantic attachment orientation may be more likely to endorse that their marital expectations have been met because of their enhanced ability to notice and accept in the present moment intrapersonal (i.e., internal self) processes within an interpersonal (i.e., self and other) context. Thus, in this study I explore the

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indirect effect of trait mindfulness on the relationship between romantic attachment orientation and marital expectations.

Of note, because my study is based on the analysis of archival data, predominantly provided by female-identifying participants with limited participation by individuals identifying as other genders, my inquiry will focus on women. In the following section, I delineate the theoretical underpinnings and extant research of marital expectations in the context of marital quality and satisfaction. I then discuss attachment theory and research in the context of marital relationships and explore how romantic attachment orientation may negatively predict marital expectations. Finally, I outline mindfulness theory and research and discuss how trait mindfulness both empirically and conceptually relates to both romantic attachment orientation and marital expectations.

### **Marital Expectation Research**

Researchers have long been interested in factors that contribute to the overall quality of marital relationships. Historically, the term marital satisfaction has been used to describe the general subjective quality of a marriage (Bahr et al., 1983), despite much debate regarding exactly which elements of a marital relationship this term actually encompasses (see Ehnis, 1986). For decades, researchers used the term marital satisfaction as a blanket descriptor for various relationship qualifiers, including marital success, happiness, adjustment, cohesion, consensus, and expectations, to name a few (Bahr et al., 1983; Ehnis, 1986). Within recent literature, the term marital satisfaction is still used to describe the nature of a marital relationship

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to a greater extent than other terms that may capture underlying elements, or, components, that perhaps more precisely inform the quality of a marital relationship (see Hadden et al., 2014).

According to Ehnis (1986), in examining the quality of a marital relationship, it is necessary to first understand how marital partners perceive their relationship, as individual differences in perception determine subjective endorsement of whether or not a marital relationship is deemed satisfactory. In order to assess such perceptions, marital expectations, or, beliefs about what an individual should receive in the relationship, must be considered (Sabatelli, 1984). Romantic partners hold expectations of various matters, some of which include expression of affection, communication, shared hobbies and interests, shared roles and responsibilities, and coping with marital discord (Ehnis, 1986). It is essential to examine the extent to which romantic partners perceive their expectations as realized in marital relationships because, although marital expectations have been positively associated with marital satisfaction (Bahr et al., 1983; Ehnis, 1986; Fletcher et al., 1999) as well as overall physical and mental well-being within the context of marriage (Polachek & Wallace, 2015), these two constructs (marital expectations and marital satisfaction) are not necessarily interchangeable terms (Sabatelli, 1984). Rather, marital expectations appear to be an essential piece of the marital satisfaction puzzle, despite the limited amount of attention it has received in marriage research.

### **Social Exchange Paradigm**

The subjective process in formulating and evaluating marital expectations is best understood through the social exchange paradigm (Thibaut & Kelley, 1959). In developing the social exchange paradigm, Thibaut and Kelley (1959) and Kelley and Thibaut (1978) examined

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two subjective processes utilized in determining costs and rewards (i.e., subjective evaluation) of a relationship and observed that relational costs and rewards must always be considered with reference to expectations. The first subjective process in determining relational costs and rewards is termed the comparison level—an individual's expectation of what they feel they deserve in the relationship (Thibaut & Kelley, 1959). Importantly, the comparison level, itself, represents a mid-point (i.e., needs are unmet, met, or exceeded), with endorsements falling above the mid-point indicating an optimal perception of the relationship (i.e., expectations are exceeded) and endorsements falling below the mid-point indicating a subpar perception of the relationship (i.e., expectations are unmet). Thibaut and Kelley (1959) further asserted that an individual's comparison level is informed by outcomes and perceptions of past relationships which offer a reference point in determining how the individual comparatively perceives their current relationship. Furthermore, Ehnis (1986) argued that the subjective process by which marital partners formulate expectations for their marriage may depend on dispositional traits, for example, the way in which an individual reacts and responds to interpersonal exchanges within the marital relationship.

The second subjective process in determining relational costs and rewards is termed the comparison level alternative, or the point within a current relationship at which an individual is no longer accepting particular outcomes and, instead, perceives an alternative choice (e.g., a different romantic partner) as effecting a better reward-cost outcome (Thibaut & Kelley, 1959). Taken together, the two subjective processes suggest that individuals who endorse relational outcomes below their comparison level (i.e., belief that expectations have not been met) may be more likely to seek alternative and comparatively more attractive opportunities (i.e., decreased

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commitment to the current relationship), whereas individuals who endorse relational outcomes at or above their comparison level may be less likely to seek alternative opportunities, as they perceive that their expectations have been realized at a satisfactory level.

### **Marital Satisfaction and Expectations in Females**

Interestingly, gendered social roles, which are believed to be shaped by socialization processes and power inequalities (Ferree, 2010), may have important implications for expectations of spouses in marital relationships. Historically, women, especially those who were raised in the early half of the 20<sup>th</sup> century, have been socialized to value caregiving and relational communion and to focus their attention on the emotional needs of their significant others (Boerner et al., 2014). Additionally, women may be socialized to expect certain characteristics and behaviors of their male spouses based on socially constructed models of masculinity (e.g., breadwinner; Boerner et al., 2014). For example, as discussed by Boerner and colleagues (2014), it is possible that some women expect their spouses to be “strong and silent” (socialized gendered attributes of males) and, thus, may not acknowledge their own untended emotional needs in their relationship. Conversely, it is possible that because women have been socialized to focus their attention on the quality of interpersonal relationships, they may be more vulnerable to relationship stressors (Boerner et al., 2014). In fact, observational studies have demonstrated that older women, relative to men, are more likely to be confrontational in acknowledging and addressing their marital problems (Carstensen et al., 1995).

Indeed, numerous studies examining marital satisfaction have suggested that women typically rate their marriages as less satisfying than do men (e.g., Bulanda, 2011; Windsor &



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Butterworth, 2010), although this observation is most likely to occur in clinical samples (i.e., those in marital therapy; Jackson et al., 2014). Despite a considerable shift in the distribution of power and role responsibilities in heterosexual marital relationships since the 1980s (Amato et al., 2007), low marital satisfaction in women continues to be associated with a lack of equitable division of labor in the home. Although husbands participate in household chores to a greater degree than in past decades (Sayer, 2005), wives continue to take on a disproportionate amount of household chores, child-care, and emotional management and support within the family unit, relative to their husbands, even while being employed in full-time professional careers (e.g., Baxter, 2000; Bianchi & Milkie, 2010; Loscocco & Walzer, 2013). As such, examining marital expectations in my all-female-identifying sample may further elucidate extant research regarding female perceptions within marital relationships.

### **Summary of Marital Expectations Research**

As explicated, the extent to which an individual perceives their expectations as met in a marital relationship is a meaningful component to consider in examining marital quality. Because the evaluation of marital quality is based on subjective, perceptual processes, it is important to understand why romantic partners differ in their perception of marital outcomes, that is, why some individuals, relative to others, perceive greater discrepancies between what they expect to receive in a marital relationship and what they believe they receive. As both attachment and trait mindfulness theories suggest stable characterological differences in intrapersonal responses to interpersonal interactions, examining romantic attachment orientation and trait mindfulness in relation to marital expectations may provide insight into individual

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differences in perceiving whether marital expectations have been unmet, met, or exceeded. In the following section, I discuss attachment theory and research which suggest a possible negative association between romantic attachment orientation and marital expectations.

### **Attachment Theory and Research**

Although many conceptualizations exist, adult romantic attachment orientation (e.g., Hazan & Shaver, 1987), in general, marks the extent to which an individual is comfortable with intimacy and easily trusts their partner (i.e., secure attachment), fears intimacy and closeness with their partner (i.e., avoidant attachment), or desires an excessively high level of reciprocity from and closeness with their partner (i.e., anxious attachment). Following Hazan and Shaver's (1987) conceptualization of romantic attachment orientation, here, the term secure attachment orientation describes individuals who are lower in both avoidant and anxious attachment, whereas the term insecure attachment orientation describes individuals who are highly anxiously-attached and/or avoidantly-attached.

Conceptualization and classification of adult romantic attachment is rooted in foundational work examining infantile attachment styles. Early attachment theorists (e.g., Bowlby, 1977) conceptualized attachment as the human propensity to make strong intimate bonds with certain others and that such propensity was determined by the degree to which the infant believes that (a) the mother is the sort of person that would provide comfort and protection and (b) the self is the sort of person that the mother is likely to comfort and support. Bowlby called these infant-held beliefs working models, or, mental representations of the self, attachment figures, and the self in relation to others that inform intimate relationships. Although Bowlby's

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conceptualization of attachment theory focused on mother/infant attachment bonds, he also suggested that such working models, formed through early attachment experiences, influence individuals across the lifespan (Bowlby, 1977). That is, humans are believed to internalize working models during infancy and childhood, and these working models become relatively stable default mechanisms through which individuals experience and make sense of intimate interactions in adulthood (Vicary & Fraley, 2007).

Upon Bowlby's (e.g., 1977) theorization of attachment, researchers (e.g., Ainsworth et al., 1987; Bartholomew & Horowitz, 1991; Collins & Read, 1990; Hazan & Shaver, 1987; Main et al., 1985) began exploring and identifying individual differences in attachment orientation expressed throughout the lifespan. For the sake of brevity, I highlight critical findings from studies that have been influential in understanding attachment in adult romantic relationships.

Foundationally, Ainsworth and colleagues (1987) investigated the reliance of infants on their mothers as a source of security by observing mother/infant attachment behaviors. From numerous observations, Ainsworth and colleagues (1987) identified three categories of infant attachment: secure, anxious-resistant, and avoidant. They observed secure infants as readily comforted upon their mothers' return after separation, anxious-resistant infants as displaying ambivalence towards their mothers upon return, and avoidant infants as avoiding proximity or interaction upon reunion with their mothers (Ainsworth et al., 1987). Through their research, Ainsworth and her colleagues provided a measurable framework for demonstrating mother/infant attachment which sparked curiosity in fellow researchers as to how infant attachment orientation may transpire in intimate adult relationships.

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In recognizing the lack of attachment classification in adult romantic relationships at the time, Hazan and Shaver (1987) expounded upon Ainsworth and colleagues' (1987) classification system in developing a self-report measure for assessing adult romantic attachment. Results from Hazan and Shaver's (1987) research suggested three styles of romantic attachment: secure, avoidant, and anxious/ambivalent. The researchers characterized secure attachment by happiness, trust, and friendship; avoidant attachment by fear of intimacy, emotional highs and lows, and jealousy; and anxious/ambivalent attachment by excessive need for constant reciprocation and validation (Hazan & Shaver, 1987).

Bartholomew and Horowitz (1991) expanded upon Hazan and Shaver's (1987) model of romantic attachment orientation to include an additional form of avoidant attachment, as Bartholomew and Horowitz (1991) believed the former three-category classification of attachment to be too reductionistic. That is, Bartholomew and Horowitz (1991) believed that Hazan and Shaver's (1987) conceptualization of avoidant attachment (i.e., avoidance of trust and intimacy) may have actually described those individuals who avoided trust and intimacy because of fear of rejection (i.e., fearful-avoidant) and, therefore, were, in fact, both highly avoidantly- and anxiously-attached. Thus, Bartholomew and Horowitz (1991) suggested an additional attachment prototype, dismissing-avoidant, that may more appropriately capture those individuals who are highly avoidantly-attached but not anxiously-attached. That is, these individuals with a dismissing-avoidant attachment orientation may prefer relationships of a detached nature. As such, Bartholomew and Horowitz's (1991) model of attachment suggests four prototypes: secure (i.e., low anxiety and avoidance), anxious/preoccupied (i.e., high anxiety,

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low avoidance), fearful-avoidant (i.e., high anxiety, high avoidance), and dismissing-avoidant (i.e., low anxiety, high avoidance).

As explained by Scharfe (2017), Bartholomew and Horowitz (1991) classified individuals into one of these four attachment prototypes through time-consuming interviews that required a strenuous coding process. The tedious nature of this methodology proved impractical for researchers who desired large samples in order to obtain sufficient statistical power. Additionally, social and personality researchers typically utilized multivariate statistical techniques to analyze data which required large samples and continuous variables (Scharfe, 2017). To meet the needs of researchers who analyzed large samples through multivariate statistical techniques, Bartholomew and her colleague developed the Relationship Scales Questionnaire (RSQ; Griffin & Bartholomew, 1994) to measure attachment continuously, rather than categorically. Although the RSQ yielded acceptable stability over time, its reliability was lower than desired.

To improve the reliability of attachment self-report measures that produce continuous scores, Brennan and colleagues (1998) developed the Experiences in Close Relationships scale (ECR) based on a conglomeration of various attachment constructs. The results of Brennan and colleagues' (1998) factor analysis suggested that attachment as a construct consisted of two orthogonal dimensions (i.e., attachment anxiety and attachment avoidance) and that the reliability of these dimensions had improved, relative to Griffin and Bartholomew's (1994) RSQ scales. Still, though, Fraley and colleagues (2000) claimed that the ECR failed to adequately predict individual differences in attachment security. To abate this concern, they reanalyzed Brennan and colleagues' (1998) data and developed the Experiences in Close Relationships -

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Revised scale (ECR-R; Fraley et al., 2000), which has demonstrated powerful predictability of individual differences in attachment on a continuous scale.

Addressing the importance of recognizing individual, nuanced differences in attachment, Scharfe (2017) listed several benefits of measuring attachment continuously rather than categorically. First, Scharfe (2017) noted that measuring attachment categorically may increase statistical error and reduce the power to detect effects. For example, an individual may have an attachment orientation that lies close to the boundaries that separate different attachment categories and, as a result, may be misclassified within a category that does not accurately represent that individual. Second, baseline proportions of attachment categories differ by sample (e.g., clinical vs. nonclinical), indicating that the extent to which attachment categories are represented is highly impacted by unique sample characteristics and individual experiences. Finally, categorization of attachment assumes that individuals are reducible to a fixed classification of how they experience themselves in relation to others. Because individual experience is often too contextual to fit nicely into one category, a continuous method of measuring attachment may be preferable. In adhering to these considerations, attachment orientation, here, refers to the continuous representation of attachment. I use other attachment-related terms (e.g., secure, insecure, avoidantly-attached, and anxiously-attached) solely for descriptive purposes.

As indicated, attachment orientation may be differentially conceptualized and considered by context (e.g., mother-infant bond vs. adult romantic relationship) and by theoretical, empirical, and statistical development. However, common to all conceptualizations is the notion that all individuals experience attachment avoidance and anxiety to some degree, with securely-

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attached individuals expressing lower levels of both attachment avoidance and anxiety and insecurely-attached individuals expressing higher levels of attachment avoidance *and/or* attachment anxiety. In my study, I utilize attachment avoidance as an independent variable and attachment anxiety as a moderating variable. According to Fraley (2021), when predicting a pattern of results that cannot be modeled as an additive combination of the two dimensions (e.g., predicting that highly secure individuals will report expectations as met, and those who are highly avoidant, anxious, or both will report expectations as unmet), an interaction term must be included to characterize the pattern. Thus, in my study, I assess the interaction between attachment avoidance and attachment anxiety.

### **Attachment Orientation in Females**

In general, conclusions from prior studies examining sex differences in romantic attachment orientation suggest similar attachment patterns in males and females (e.g., Beckes & Simpson, 2009). Some researchers (e.g., Del Giudice, 2011), however, have proposed that men and women may acquire and maintain differentially unique romantic attachment orientation patterns as a means to regulate long-term bonding and parental investment. For example, Jackson and Kirkpatrick (2007) theorized that attachment anxiety is a female-biased strategy designed to maximize investment from and closeness with romantic partners and kin. Interestingly, Jackson and Kirkpatrick (2007) suggest that, in women, attachment anxiety acts as a counterstrategy against partner attachment avoidance, which they believe to be a male-biased strategy. Further, they hypothesized that some attachment anxiety may be adaptive in women under moderate levels of environmental stress, whereas highly dangerous and stressful life events may prompt

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increased attachment avoidance (Jackson & Kirkpatrick, 2007). In response to such hypotheses, Del Giudice (2011) conducted a meta-analysis that explored sex differences in attachment orientation and found empirical evidence of a female bias toward attachment anxiety and a male bias toward avoidance.

Although these findings from Del Giudice's (2011) meta-analysis support the hypothesis that women may be more likely to experience attachment anxiety, it is important to reiterate that other studies (e.g., Beckes & Simpson, 2009) seem to suggest no such biases. Additionally, prior studies on sex differences in attachment orientation typically have not considered differences in gender or in sexual orientation, other than heterosexuality. Thus, it is unclear whether significant findings highlight meaningful biological mechanisms, socialized constructs, or both. As discussed in the following section, attachment orientation fundamentally influences how individuals are affected by and perceive their romantic partnership.

### **Attachment Orientation and Marital Expectations**

Research on the role of attachment orientation in the overall functioning of romantic relationships suggests that, in general, romantic attachment orientation negatively predicts relationship satisfaction, such that higher levels of attachment avoidance and/or attachment anxiety predict lower levels of relationship satisfaction (Chung, 2014; Holland et al., 2012; Ho et al., 2012). Conversely, the more comfortable an individual is trusting and seeking intimacy with their romantic partner (i.e., lower levels of attachment anxiety or avoidance), the more likely they are to endorse relationship satisfaction. Further, romantic attachment orientation appears to correlate with commitment to the romantic relationship, such that anxious and avoidant



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attachment orientations are both negatively associated with commitment (i.e., those individuals who are uncomfortable relying on and seeking intimacy in the romantic partnership may be less committed to the relationship), although avoidant attachment appears to be more negatively associated with commitment than is anxious attachment (see Hadden et al., 2014). In fact, the degree to which an individual is committed to the romantic relationship may, in part, explain why securely-attached individuals may be more likely to report satisfactory marital relationships, whereas insecurely-attached individuals may be more likely to report unsatisfactory marriages (Ho et al., 2012). That is, an individual who is uncomfortable relying upon and seeking intimacy (i.e., insecure attachment) with their romantic partner may report less marital satisfaction because they are less personally committed to the partnership. Notably, Hadden and colleagues (2014) suggested that perhaps highly anxiously- or avoidantly- attached individuals struggle with romantic commitment because of the way in which they perceive their romantic partners, namely as risky investments.

### *Attachment Anxiety*

Although anxiously-attached individuals may show a preoccupation with commitment (Feeney & Noller, 1990), the generally negative association between anxious attachment and romantic commitment may be influenced by anxiously-attached individuals' tendency to catastrophize relatively manageable relationship problems and to believe that true love is rare to come by (Hadden et al., 2014). Additionally, anxiously-attached individuals tend to endorse higher levels of the belief that marriage is advantageous; however, they also tend to endorse lower levels of the belief that marriage is permanent (Jensen et al., 2015). As such, anxiously-attached individuals may be apprehensive to commit to a romantic relationship because of their

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perception, or rather expectations, that any sort of disruption in relational harmony may indicate that their relationship is not representative of what they idealize as true love, further perpetuating their belief that a successful romantic relationship may exist, but that it must not be their current relationship.

### *Attachment Avoidance*

Individuals with high levels of attachment avoidance tend to perceive risk in intimacy (Brunell et al., 2007), display increased aversion to commitment (Birnie et al., 2009), expect their relationship to fail (Hazan & Shaver, 1994), and report less trust (Vicary & Fraley, 2007). Additionally, avoidantly-attached individuals tend to endorse lower levels of the belief that marriage is advantageous, permanent, or a priority (Jensen et al., 2015). As such, avoidantly-attached individuals may struggle with commitment, in part, because of their expectations that their relationship will ultimately fail and because of their deficiencies in receiving and providing intimacy and support. Further, avoidant attachment appears to have a stronger negative association with commitment, relative to anxious attachment, perhaps because not only do avoidantly-attached individuals tend to believe that marriage may not be permanent, but they also tend to believe that marriage is neither a priority nor beneficial.

### **Summary of Attachment Theory and Research**

Because individuals with insecure romantic attachment orientation may be less likely to endorse marital satisfaction and because individuals who perceive their marital expectations as unmet are less likely to endorse marital satisfaction, it seems likely that individuals who endorse higher degrees of anxious or avoidant romantic attachment may be more likely to believe that

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their marital expectations are not met. Avoidantly-attached individuals may be more likely than securely-attached individuals to perceive their romantic relationship as nonbeneficial or fleeting, and anxiously-attached individuals may be more likely than their securely-attached counterparts to perceive their own romantic relationship as not meeting their idealized image of a satisfactory romantic relationship. Thus, the likelihood of insecurely-attached (i.e., highly avoidantly- and/or anxiously-attached) individuals remaining committed to a romantic relationship may be minimal, because doing so may be considered too risky of an investment, as expectations may be perceived as unmet.

Such consideration of risk versus benefit in romantic partnership exemplifies the process of considering the self, a romantic other, and the self in relation to a romantic other within the internal working model framework proposed by Bowlby (1977). By its very nature, then, attachment orientation, which is founded upon one's internal working model, should not only predict the level of marital expectation an individual endorses, it should also influence the degree to which an individual recognizes and regulates their own internal experiences as it relates to how they perceive their partner, a process commonly referred to as mindfulness (Bishop et al., 2004). In the following section, I discuss mindfulness theory as well as extant research that examines the empirical and conceptual relationships of attachment orientation with trait mindfulness and trait mindfulness with marital expectations.

### **Mindfulness Theory and Research**

Mindfulness is defined as paying attention to experiences in the present moment from a nonjudgmental stance (Kabat-Zinn, 2003) and has been shown to foster effective emotion

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regulation (Hill & Updegraff, 2012), empathy (Trent et al., 2016), and perspective taking (Birnie et al., 2010). Mindfulness is distinguished by its two general forms, trait mindfulness and state mindfulness, that differ in terms of how mindfulness is actualized: inherently (i.e., trait) or through effortful practice (i.e., state). Although these two forms are differentially classified, they can and often do coexist, such that an individual may be inherently mindful while simultaneously choosing to practice mindfulness (Kiken et al., 2015).

Because mindfulness, by its definition, is giving attention to what is currently taking place in the individual's mind and body as well as in interpersonal interactions, every person is innately mindful, although there are individual differences in the degree of inherent awareness one experiences in the present moment (i.e., trait mindfulness, Baer et al., 2008). State mindfulness, on the other hand, is an active practice, via meditation, of effortful, directive attention towards momentary external stimuli (e.g., sounds), internal stimuli (e.g., thoughts, emotions, bodily sensations), or breathing (Sedlmeier et al., 2012). Repeated effortful practice of mindfulness may help habituate attention regulation skills, acceptance, and nonjudgmental attitudes of self and others and generalize these skills to daily life events (Kiken et al., 2015), suggesting that individuals who may not be innately mindful throughout their daily lives do, in fact, have the capacity to adapt their awareness and interpretation of mind and body states of themselves and others beyond their typical characterological tendencies. Although meditation practices for purposes of achieving state mindfulness are undoubtedly valuable in increasing self- and other-awareness, for my study I focus on trait mindfulness and its mechanistic role through which adult romantic attachment may impact marital expectations, as trait mindfulness appears

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to be based on inherent processes that influence individual perception of the self in relation to others that may be similarly implicated in attachment orientation.

Although mindfulness research typically focuses solely on individual well-being through awareness of internal processes, the study of mindfulness as a construct was originally interested in its potential to assist in the development and maintenance of love, empathy, and healthier relationships with others (for a summary, see Karremans et al., 2017). Despite the fact that the theoretical foundation of mindfulness is based upon fostering interpersonal attunement, research that empirically examines the possible role of mindfulness in how individuals perceive themselves in relation to their romantic partners is limited. As the fostering of interpersonal attunement appears to have been the initial primary function of mindfulness, it makes sense, then, that trait mindfulness may play an important role in the impact of romantic attachment orientation on the extent to which marital expectations are perceived as met. Here, I highlight several studies that have examined the relationship between attachment orientation and mindfulness and explain how these two constructs are related.

### **Trait Mindfulness and Attachment Orientation**

In general, the majority of research that has examined mindfulness in an interpersonal context has produced findings that suggest a negative association between insecure romantic attachment orientation and trait mindfulness (e.g., Caldwell & Shaver, 2013; Jones et al., 2011; Shaver et al., 2007). That is, individuals with higher levels of attachment anxiety and avoidance tend to be lower in trait mindfulness. Only findings from one study (i.e., Walsh et al., 2009) within attachment and mindfulness literature, to my knowledge, indicated mixed results, such

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that only attachment anxiety (but not attachment avoidance) negatively correlated with trait mindfulness. Thus, in general, an internalized sense of felt security may have important implications for one's ability to mindfully notice and accept both intrapersonal and interpersonal experiences in the present moment.

Ryan and colleagues (2007) proposed that perhaps trait mindfulness is promoted through the same developmental processes necessitated in attachment, namely the presence of an early secure attachment relationship marked by attentive, accepting, and appropriately responsive caregiving. As an infant seeks and consequently receives comfort, security, and acceptance from their caregiver during moments of felt uncertainty or internal turmoil, the infant may subsequently internalize their attachment figure's care and, throughout their lifetime, develop their own sense of self- and other- acceptance, thereby fostering and strengthening mindfulness at a characterological level. An infant with an attachment figure who does not provide adequately sensitive responses during moments of distress may learn that seeking the comfort of their attachment figure is an unhelpful or dangerous strategy for decreasing stress. As such, in an attempt to regulate their own distress, the infant may develop alternative strategies involving avoidant and/or anxious behaviors that tend to be utilized into adulthood and manifest in romantic relationships (Ryan et al., 2007). Avoidant behaviors may include downregulating or dissociating techniques utilized to avoid certain painful thoughts and emotions in order to prevent further anticipated or expected emotional damage from the attachment figure, such as being rejected for seeking comfort and support or having thoughts and emotions dismissed as insignificant. Anxiously-attached individuals, on the other hand, may learn to regulate their distress using hyperregulating strategies (e.g., constant monitoring of potential threats to the

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relationship; repetitive reassurance seeking; attempting to garner additional support from others) because early attempts at seeking comfort from attachment figures may have been met with intrusive or inconsistent responses (Bowlby, 1977; Mikulincer et al., 2003).

As indicated, insecure romantic attachment orientation and trait mindfulness appear to not only be empirically related but may also evolve from a common source. Because of the negative association between romantic attachment orientation and trait mindfulness and given the proposition that insecurely-attached individuals may have a thwarted ability to regulate their own distress through self-acceptance and self-compassion, it seems likely, then, that insecurely-attached individuals may have less of an inherent ability to be mindfully aware and accepting of both intrapersonal and interpersonal experiences in present-moment occurrences. Although the association between romantic attachment orientation and trait mindfulness has been established empirically, the indirect effect of trait mindfulness on the relationship between romantic attachment orientation and marital expectations and commitment remains unstudied. In the following section, I describe extant research regarding the relationship between trait mindfulness and marital satisfaction and discuss how discrepancies between marital expectations and perceived outcome may be influenced by trait mindfulness.

### **Trait Mindfulness and Marital Expectations**

To reiterate, trait mindfulness in the context of relationships is an implicit, nonjudgmental awareness of one's own experience in the present moment as it may directly or indirectly affect or be impacted by the other person in the partnership (Bishop et al., 2004). In fact, trait mindfulness appears to play an important role in romantic partnerships, as it has been positively

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associated with marital satisfaction in a number of recent studies (e.g., Johns et al., 2015; Jones et al., 2011). Despite the observed relationship between trait mindfulness and marital satisfaction, marital expectations, which is positively correlated with marital satisfaction (Bahr et al., 1983; Ehnis, 1986; Fletcher et al., 1999) has not been directly examined in relation to trait mindfulness in any prior study. As such, in this study I examine the direct relationship between trait mindfulness and marital expectations and propose that trait mindfulness may positively predict marital expectations, based on the observation that trait mindfulness positively predicts marital satisfaction.

The proposed positive relationship between trait mindfulness and marital expectations, such that individuals higher in trait mindfulness may be more likely to endorse marital expectations as met or exceeded, may be explained by a highly mindful individual's tendency to remain present and accepting of internal processes and, consequently, to forego forming expectations of how they believe their marital relationship should proceed. That is, by nature, someone who is highly mindful is more likely to notice and accept present-moment intrapersonal and interpersonal experiences without judgment or evaluative comparison (Bishop et al., 2004) and, subsequently, may be less likely to form expectations in the first place because when one remains present, there is less utility in calling to mind previously established thoughts and assumptions anticipated for future events. As such, when asked, an individual higher in trait mindfulness, relative to an individual lower in trait mindfulness, may report that their marital expectations have been met, at the very least, because they are less likely to make evaluative comparisons between expectations and perceived outcomes (i.e., a neutral perspective). Further, individuals higher in trait mindfulness may be more likely to endorse marital expectations as met



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or even exceeded because such individuals may be better equipped to accept the self in relation to others, thus welcoming the behaviors of their romantic partners for what they are, not what they should be.

An alternative proposed explanation of the possible positive relationship between trait mindfulness and marital expectations may be that individuals higher in trait mindfulness may, in fact, formulate expectations in the same way as individuals lower in trait mindfulness but, discordantly, may not overidentify with their emotional responses to discrepancies between marital expectations and perceived outcome, as might individuals lower in trait mindfulness. That is, establishing expectations may, arguably, be a normative and necessary relational process, as it allows the individual formulating such expectations to identify and evaluate relational processes that may inform the quality and functioning of the partnership (Fletcher & Simpson, 2000). However, as in any circumstance, expectations directed towards a romantic partner or the romantic relationship, in general, do not always match reality. The mis-match between expectation and actual outcome may not, itself, be problematic; rather it may be that the judgement of and overidentification with the emotional reactions to such discrepancy (i.e., lower mindful awareness) may prove detrimental. In fact, empirical evidence suggests that individuals low in trait mindfulness may overidentify with particular emotional responses because of their stunted ability to effectively regulate emotions (Hill & Updegraff, 2012). As such, when asked, an individual higher in trait mindfulness may report met or exceeded marital expectations, as they may readily notice and accept internal responses to discrepancies between expectations and outcome in the present moment and proceed in an emotionally flexible, nonjudgmental manner (i.e., perceive expectations as met or exceeded). Conversely, individuals lower in trait

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mindfulness may not be fully aware of their internal processes in relation to their partner or may become so engrossed by their reactionary thoughts and emotions that they are unable to proceed flexibly in the present moment, thereby struggling to accept particular relational dynamics for what they are and, instead, believing that their marital expectations have not been met.

Taken together, empirical findings suggest that marital dissatisfaction may be influenced by discrepancies between expectations of how the romantic partner and/or relationship should be and how the relationship actually manifests, whereas marital satisfaction appears to increase as marital expectations are perceived as met or exceeded or, rather, as discrepancies between expectations and outcomes are accepted without judgement (Bahr et al., 1983; Ehnis, 1986; Fletcher et al., 1999). Further, it seems possible that trait mindfulness may play an important role in how an individual perceives such discrepancies, such that individuals higher in trait mindfulness, may be more readily aware of their own moment-to-moment internal experiences and more likely to accept the behaviors of their partners. Such mindful awareness, marked by self- and other-acceptance, may promote the perception of fulfilled marital expectations. However, individuals lower in trait mindfulness may have more difficulty noticing, without judgement, their own internal processes as well as understanding and accepting the thoughts, emotions, and behaviors of their partners, thereby judging their partner's efforts, relative to their expectations of such efforts, as subpar.

### **Trait Mindfulness in Females**

In considering trait mindfulness in my all-female-identifying sample, prior research findings suggest that females may be biased towards particular trait mindfulness facets as

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measured by the Five-Factor Mindfulness Questionnaire (Baer et al., 2008). For example, both Harnett and colleagues (2016) and Alispahic and Hasanbegovic-Anic (2017) found that female participants scored lower than male participants on the nonreactivity sub scale. Further, females have demonstrated significantly higher scores, relative to males, in the observe factor (Alispahic & Hasanbegovic-Anic, 2017). Similarly, Gilbert and Waltz (2010) found that the observe factor was particularly important for women when examining self-efficacy for health behaviors. Furthermore, the describe factor has been shown to be significantly related to better health behaviors in females (Gilbert & Waltz, 2010), a finding that the authors suggested implied that women benefit from putting their observations of sensations, thoughts, and feelings into words. Thus, results of prior studies indicate that different aspects of trait mindfulness may be uniquely important in impacting overall trait mindfulness scores in females.

### **Summary of Mindfulness Theory and Research**

As evidenced, trait mindfulness appears to be an important link between adult romantic attachment orientation and marital expectations. First, insecure attachment orientation appears to correlate negatively with marital commitment and satisfaction (Chung, 2014; Holland et al., 2012; Ho et al., 2012; Jones et al., 2011; McNelis & Segrin, 2019) as well as perceived partner responsiveness (Segal & Fraley, 2016), and these relationships may be informed by the extent to which romantic expectations are perceived as actualized. That is, avoidantly- and anxiously-attached individuals, relative to securely-attached individuals, may be less likely to endorse commitment to a marital relationship, as they may perceive marriage as a risky investment, and they may be more likely to perceive greater discrepancies between what they expect in a

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romantic relationship and what they perceive they receive in the partnership. Trait mindfulness may be an important mechanism through which adult romantic attachment orientation and marital expectations are associated, as both constructs (i.e., attachment orientation and marital expectations) are implicated by one's capacity to regulate and accept internal experiences within an interpersonal context. That is, insecurely-attached individuals may be more likely to endorse discrepancies between what they expect and what they believe they actually experience (i.e., expectations perceived as unmet) in their marriage, perhaps because of a general paucity in mindful acceptance of their own internal reactions as well as the behaviors of their partner. Individuals with lower levels of attachment anxiety or avoidance (i.e., securely-attached), on the other hand, may be less likely to endorse such discrepancies (i.e., expectations perceived as met or exceeded) because these individuals may have an enhanced ability to readily notice and accept present-moment internal responses to circumstances in the marital partnership.

### **Current Study**

The primary purpose of the present study was to examine the potential predictive effects of attachment avoidance, attachment anxiety, and trait mindfulness on marital expectations. I tested a moderated mediation model to examine the proposed effect of attachment avoidance on marital expectations via trait mindfulness at varying levels of attachment anxiety. Based on my integration of extant theory and empirical findings regarding attachment orientation, trait mindfulness, and marital expectations as it relates to marital satisfaction, I tested the following hypotheses:

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H-1: Attachment avoidance would negatively predict marital expectations, such that those with higher levels of attachment avoidance would be less likely to endorse marital outcomes as meeting their expectations (i.e., unmet expectations). Conversely, those with lower levels of attachment avoidance would be more likely to endorse marital outcomes as meeting or exceeding their expectations.

H-2: Trait mindfulness would mediate the relationship between attachment avoidance and marital expectations, such that highly avoidant individuals may have more difficulty noticing and accepting present-moment intrapersonal processes within interpersonal contexts (i.e., lower trait mindfulness) and, thus, be less likely to perceive their marital expectations as met. Conversely, individual with lower levels of attachment avoidance may readily notice and accept present-moment intrapersonal processes within interpersonal experiences (i.e., higher trait mindfulness) and, thus, be more likely to perceive their marital expectations as met.

H-3: Attachment anxiety would moderate the relationship between attachment avoidance and marital expectations, such that high levels of attachment anxiety would strengthen the negative relationship between attachment avoidance and marital expectations.

H-4: Attachment anxiety would moderate the relationship between attachment avoidance and trait mindfulness, such that high levels of attachment anxiety would strengthen the negative relationship between attachment avoidance and trait mindfulness.

H-5: The effect of attachment avoidance on marital expectations via trait mindfulness would differ depending on levels of attachment anxiety.

CHAPTER II – METHOD

**Participants and Procedure**

My study was approved by the Seattle Pacific University's Institutional Review Board prior to data collection. Data for my study were obtained as part of a larger study on marriage. Participants were recruited through an email invitation sent to Seattle Pacific University faculty and staff as well as through social media sites (e.g., facebook.com). The email invitation and posts to social media sites included a brief description of the study and a link to an online survey administered through qualtrics.com. The survey included an assortment of measures, although only three were used for my study. The survey took participants less than 45 minutes, on average, to complete. Those who participated in the marriage study at large were 474 individuals who met study criteria, including being at least 18 years of age and in a marital relationship. Following data screening and management of missingness, participants in my study were 332 females.

**Measures**

**Marital Expectations**

The Marital Comparison Level Index (MCLI; Sabatelli, 1984) is a 32-item self-report questionnaire based on Thibaut and Kelley's (1959) social exchange perspective of comparative processes that assesses the degree to which marital outcomes measure up to one's expectations. Respondents are asked to rate the extent to which they believe current marital experiences meet their expectations on a 7-point scale ranging from -3 (*much worse than expected*) to 0 (*as expected*) to +3 (*much better than expected*). Example items include, "The amount of

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responsibility your partner accepts for household chores,” and “The amount of criticism your partner expresses.” Scale scores are assigned relative to each rating, such that a scale score of 1 represents a rating of -3, a scale score of 4 represents a rating of 0, and a scale score of 7 represents a rating of +3. The sum of all items yields a total score that ranges from 32 to 224, with higher scores indicating more favorable evaluations of outcomes relative to expectations.

Through factor analysis, the MCLI was found to be unidimensional (Sabatelli, 1984). Further, the MCLI has demonstrated acceptable internal consistency (Cronbach’s coefficient  $\alpha = .93$ ,  $SEM = 1.95$ ) and concurrent validity (Sabatelli, 1984) with measures of relational equity ( $r = .65$ ) and marital commitment ( $r = .59$ ). In my study, internal consistency was  $\alpha = .96$ .

### **Adult Romantic Attachment**

The Experiences in Close Relationships–Revised (ECR-R; Fraley et al., 2000) is a revised version of Brennan and colleagues’ (1998) Experiences in Close Relationships (ECR) questionnaire and is based on Bartholomew and Horowitz’s (1991) theoretical model of attachment. The ECR-R is a 36-item self-report questionnaire that assesses individual differences in anxious and avoidant attachment. Respondents are asked to rate the extent to which each item describes their feelings in romantic relationships on a 7-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The scale contains two subscales, each consisting of 18 items, that measure the extent to which an individual is concerned about the availability and responsiveness of their romantic partner (anxiety subscale) and the extent to which an individual is comfortable with intimacy and depending on their romantic partner (avoidance subscale). Example items from the anxiety subscale include, “I’m afraid that I will lose my partner's love,”

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and “I often wish that my partner's feelings for me were as strong as my feelings for him or her.” Example items from the avoidance subscale include, “It helps to turn to my romantic partner in times of need,” and “I feel comfortable sharing my private thoughts and feelings with my partner.” Higher scores on the anxiety and avoidance subscales indicate higher levels of attachment anxiety and avoidance, respectively, and lower subscale scores reflect attachment security. According to Fraley (2021), in order to measure attachment as one continuous dimension, the two dimensions (i.e., anxiety and avoidance) are folded into a one-dimensional space that captures attachment security at one end and attachment insecurity at the other end. The anxiety and avoidance scores can be averaged to tap the dimension that runs at a 45-degree angle across the two-dimensional space. The secure end, then, represents low levels of attachment anxiety and low levels of attachment avoidance, whereas the insecure end captures high levels of both attachment anxiety and avoidance (i.e., fearful-avoidance; Bartholomew & Horowitz, 1991).

In the original sample, the internal consistency reliability was  $\alpha = .91$  for the anxiety factor and  $\alpha = .94$  for the avoidance factor (Fraley et al., 2000). Further, an observed correlation between the anxiety and avoidance subscales of the ECR-R ( $r = .51$ ; Fairchild & Finney, 2010) indicated that these two subscales reflect distinct, yet correlated, dimensions of attachment. Additionally, test-retest reliabilities of the anxiety and avoidance subscales over a 3-week period were  $r_s = .94$  to  $.95$  (Sibley et al., 2005). In my study, internal consistency was  $\alpha = .91$  for the anxiety subscale and  $\alpha = .95$  for the avoidance subscale.

### **Trait Mindfulness**



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The Five Facet Mindfulness Questionnaire-Short Form (FFMQ-SF; Bohlmeijer et al., 2011), developed from the Five Facet Mindfulness Questionnaire (FFMQ; Baer et al., 2008) is a 24-item self-report questionnaire used to assess dispositional mindfulness. Respondents are asked to indicate the degree to which each statement is true for them within the last month on a 5-point scale ranging from 1 (*never or very rarely true*) to 5 (*very often or always true*). The FFMQ-SF consists of five subscales that can be considered facets of an overall mindfulness factor: observing (four items that measure noticing or attending to internal and external experiences), describing (five items that measure labeling internal experiences with words), acting with awareness (five items that measure attending to one's activities in the moment), nonjudging (five items that measure a nonevaluative stance toward thoughts and feelings), and nonreactivity (five items that measure allowing thoughts and feelings to come and go). Example items include, "I notice the smells and aromas of things" (observing), "I'm good at finding the words to describe my feelings" (describing), "I am easily distracted" (acting with awareness), "I criticize myself for having irrational or inappropriate emotions" (nonjudging), and "I watch my feelings without getting lost in them" (nonreactivity). Items 4, 5, 7, 8, 11, 12, 14, 17, 19, 22, 23, and 24 are reverse coded. Facet scores are computed by summing the scores of individual items, with higher scores indicating higher trait mindfulness.

The FFMQ-SF has shown adequate construct validity with theoretically related constructs, and all facets of the FFMQ-SF have demonstrated adequate internal consistency (Bohlmeijer et al., 2011), with alpha coefficients ranging from .73 (nonreactivity) to .91 (describing). In my study, internal consistency was .70 for the observing subscale, .86 for the

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describing subscale, .85 for the acting with awareness subscale, .86 for the nonjudging subscale, and .80 for the nonreactivity subscale. Internal consistency for the whole scale was  $\alpha = .88$ .

### **Preliminary Data Analysis**

Data screening and analyses were conducted using RStudio (version 1.1.463). First, in order to generate a conservative estimate of required sample size for a linear multiple regression analysis, I conducted an *a priori* G power analysis using power of .95, alpha of .05, and effect size of .10. Results of the G power analysis revealed that a sample size of at least 176 was needed for adequate power. I then screened the data for duplicate entries, consent, missingness, and violation of assumptions for ordinary least squares regression (i.e., independence, normality, linearity, and homogeneity of variance; Hayes, 2017). Of the 421 initial observations (i.e., only female-identifying individuals), four had a duplicate entry. That is, two participants appeared to take the survey twice (i.e., two pairs of identical IP addresses), with their first attempts showing a pattern of non-responsivity to survey items, save for some initial demographic information, and their second attempts showing full participation, suggesting that both of these individuals closed out of the survey and returned to complete it at, perhaps, a more convenient time. As such, for these two participants, the insufficient duplicates were deleted and the more fully-completed observations were retained ( $N = 419$ ). All 419 participants indicated consent to participate.

Next, I screened for missing data and managed missingness using available item analysis (AIA; Parent, 2013). AIA is a strategy for managing missing data that uses available data for analysis and excludes cases with missing data points only for analyses in which the data points would be directly involved. Parent (2013) suggested that AIA is equivalent to more complex

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methods (e.g., multiple imputation) across variations of sample size, magnitude of associations among items, and degree of missingness. Missing data analyses were conducted with the R packages *mice* (version 3.4.0), *Amelia* (version 1.7.5), and *BaylorEdPsych* (version 0.5). I began by deleting cases where missingness was 90% or more. Of the remaining observations ( $N = 376$ ), missing values represented 8.9% of the cells; 50.5% of the cases had non-missing data. For the 9% of the dataset with missing values, there were 20 patterns of missingness, with the most common ( $n = 190$ ) being non-missing. Of cases with missing values, the number of items ranged between 1 and 25. The next most common patterns of missingness included those participants who did not report their age ( $n = 24$ ), those who did not respond to any of the items measuring trait mindfulness ( $n = 16$ ), and those who did not report their age and who did not respond to any of the items measuring trait mindfulness ( $n = 3$ ). The pattern of missingness represented by those who did not respond to trait mindfulness items resembled monotonicity (e.g., once an individual skipped an item, they discontinued the survey). Additionally, scales were calculated using Parent's (2013) recommendation that some reasonable amount of missingness be allowed. Thus, I permitted up to 20% missingness, resulting in 333 observations eligible for further analysis.

In order to obtain distributional characteristics of the data, I utilized the *psych* package (version 1.9.12) to assess for skewness and kurtosis. The *psych* package reports skew and kurtosis indices as  $z$  scores. Values that are generally considered severely skewed are  $> 2.0$ , and values considered severely kurtotic are  $> 7$  to 20 (Kim, 2013). Results suggested that the distributions for all variables, including demographic data, were not significantly skewed or kurtotic.

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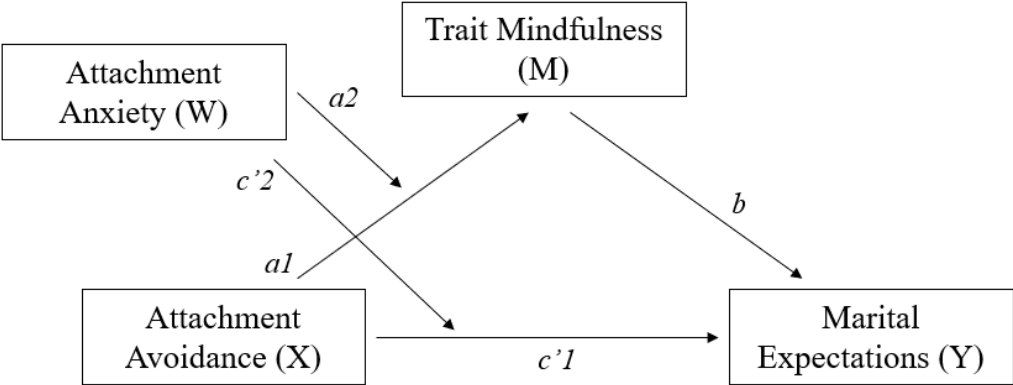
Next, I assessed for outliers using Mahalanobis distance ( $D^2_M$ ; De Maesschalck, Jouan-Rimbaud, & Massart, 2000), which indicates the distance in variance units between the profile of scores for that case and the vector of sample means, correcting for intercorrelations. The outlier function reports the distance from each datapoint to the vector of sample means (i.e., compares the squared Mahalanobis distance for each data point to the expected values of  $\chi^2$ ) and produces a quantile-quantile (“Q-Q”) plot with the  $n$  most extreme data point labeled (De Maesschalck et al., 2000). Upon inspection of the top five most extreme scores within my data set, one particular case indicated maximum values in both attachment avoidance (6.50;  $> 3 SD$  above mean) and marital expectations (1.59;  $> 3 SD$  below mean). Because both of these values for this individual case were severely skewed and, therefore, not accurate representations of the data distribution, I removed this case from further analysis. As such, participants included for final analyses were 332 females in marital relationships.

### **Primary Data Analysis**

As seen in the conceptual diagram (Figure 1), I assessed a moderated mediation model predicting marital expectations (Y) from attachment avoidance (X) mediated by trait mindfulness (M). I further hypothesized that both the attachment avoidance/trait mindfulness ( $a$  path) and the attachment avoidance/marital expectations ( $c'$  path) relationships would be moderated by attachment anxiety (W). Data were analyzed with maximum likelihood estimation in the R package lavaan (v. 0.6-5), and the significance of effects were tested with 1000 bootstrapped confidence intervals. In the next section, I report the results of both descriptive and primary analyses.

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Figure 1. *The Proposed Moderated Mediation Model*



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### CHAPTER III – RESULTS

#### **Descriptive Analyses**

Participants included for analysis were 332 married females residing in the United States. Full participant characteristics are presented in Table 1. Participants were female with an average age of 38.7 years ( $SD = 9.60$ , range = 23 to 69 years). Regarding length of marriage, nearly half of participants (48.8%) indicated 5 to 15 years, 22.6% indicated under 5 years, and the remainder of participants (16.0% and 12.7%, respectively) indicated 16 to 24 year or 25 years or longer. Most participants were parents (76.8%) and reported having one (23.5%) or two (38.0%) children. Participants were primarily employed full time (66.0%) and most frequently indicated having completed a doctoral degree (45.5%), master's degree (19.9%), or bachelor's degree (13.6%) as their highest level of attained education.

Upon inspection of descriptive variables, the variable, children, significantly correlated with the dependent variable, marital expectations (see Table 2). Historically, findings have consistently suggested that women demonstrate significant decreases in marital satisfaction levels upon having children (e.g., for a review, see Ehnis, 1986). Thus, because having children is significantly negatively correlated with marital expectations in my study, and because research suggests that having children significantly impacts marital satisfaction in women, I included children as a covariate in my ancillary analyses.

Means, standard deviations, and correlations for all variables are presented in Tables 2. The following variables included in the primary analysis had significant correlations: attachment avoidance subscale was correlated positively with attachment anxiety subscale, attachment

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avoidance subscale was correlated negatively with both marital expectations and trait mindfulness, attachment anxiety subscale was correlated negatively with both marital expectations and trait mindfulness, and trait mindfulness was positively correlated with marital expectation.

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Table 1. *Participant Demographics*

Variable	<i>n</i> (%)
Marriage length	
5-15 years	162 (48.8)
Under 5 years	75 (22.6)
16-24 years	53 (16.0)
25 years or longer	42 (12.7)
Employment	
Employed full time	219 (66.0)
Unemployed/not working	52 (15.7)
Employed part time	36 (10.8)
Student	25 (7.5)
Education	
Doctoral degree	151 (45.5)
Master's degree	66 (19.9)
Bachelor's degree	45 (13.6)
Some college	31 (9.3)
Associate degree	19 (5.7)
Some graduate school	13 (3.9)
High school diploma	7 (2.1)
Children	
Yes	255 (76.8)
No	37 (11.1)
Number of children	
2	126 (38.0)
1	78 (23.5)
3	38 (11.4)
4	23 (6.9)
0	15 (5.1)
5	9 (4.5)
7	3 (0.9)
6	1 (0.3)
8	1 (0.3)
9	1 (0.3)

*Note.* Forty participants did not report children and 37 participants did not report number of children.



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Table 2. Means, Standard Deviations, and Correlations of Variables (Including Demographic Data)

	<i>M</i>	<i>SD</i>	Av	Anx	Mind	Exp	Age	Leng	Emp	Edu	Child	Num
Av	2.20	1.01	--									
Anx	2.41	1.03	0.58***	--								
Mind	3.37	0.51	-0.41***	-0.48***	--							
Exp	4.79	1.04	-0.49***	-0.39***	0.19***	--						
Age	38.74	9.60	0.10	-0.07	0.13*	-0.04	--					
Leng	2.78	0.97	0.02	0.16**	-0.20***	0.02	-0.59***	--				
Emp	1.73	1.14	-0.11*	-0.08	-0.02	0.09	-0.07	0.06	--			
Edu	3.61	1.51	0.07	0.08	-0.04	0.07	0.08	0.02	-0.02	--		
Child	1.87	0.33	0.13*	0.06	-0.01	-0.21***	0.37***	-0.34***	0.08	-0.13*	--	
Num	2.12	1.33	0.19***	0.04	-0.03	-0.08	0.46***	-0.34***	0.16**	0.11	0.38***	--

*Note.* Av = attachment avoidance (ECR-R; higher scores indicate higher avoidance). Anx = attachment anxiety (ECR-R; higher scores indicate higher anxiety). Mind = trait mindfulness (FFMQ-SF; higher scores indicate higher trait mindfulness). Exp = marital expectations (MCLI; higher scores indicate better than expected marital experiences). Age = participant age. Leng = marriage length (1 = under 5 years, 2 = 5-15 years, 3 = 16-24 years, 4 = 25 years or longer). Emp = employment status (1 = employed full-time, 2 = employed part-time, 3 = unemployed/not working, 4 = student). Edu = educational attainment (1 = some grade school, 2 = high school diploma, 3 = some college, 4 = associate degree, 5 = bachelor's degree, 6 = some graduate school, 7 = master's degree, 8 = doctoral degree). Child = participant is a parent (1 = no, 2 = yes). Num = number of children.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

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### Primary Analyses

I evaluated a moderated mediation model, including marital expectations as the dependent variable, attachment avoidance as the independent variable, trait mindfulness as a proposed mediator, and attachment anxiety as a proposed moderator. I followed Hayes' (2017) recommendation of investigating data in a piecewise fashion by first sequentially evaluating components of my full model and then assembling them. First, I examined the proposed relationship of attachment avoidance (X) and attachment anxiety (W) predicting marital expectations (Y). The omnibus test was statistically significant,  $F(3, 326) = 37.109, p < .001, R^2 = .26$ . Results revealed that attachment avoidance significantly predicted marital expectations ( $B = -0.315, p < .05$ ), supporting my first hypothesis (H-1) that attachment avoidance would negatively predict marital expectations. Attachment anxiety, however, did not significantly predict marital expectations ( $B = -0.083, p = .487$ ). Further, the interaction between attachment anxiety and attachment avoidance was not significant ( $B = -0.034, p = .429$ ). As such, my third hypotheses (H-3), that attachment anxiety would moderate the relationship between attachment avoidance and marital expectations, was not supported.

According to Hayes (2017), sound analytic practice includes further probing conditional effects in order to better discern the substantive interpretation of the relationship between variables. The Johnson-Neyman technique (e.g., Hayes & Matthes, 2009) is a separate analysis that can be used to assess conditional effects. Through the Johnson-Neyman technique, the analysis, as opposed to the investigator, derives any existing values of the moderator that identify any changes in significance of the effect of the independent variable on the dependent variable

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along the continuum of the moderator (Hayes, 2017). Upon probing the conditional effects of my data using the Johnson-Neyman approach, results suggested that the effect of attachment avoidance on marital expectations was significant ( $p < .01$ ) throughout the full range of attachment anxiety (1 *SD* below the mean  $B = -0.36$ , mean  $B = -0.40$ , and 1 *SD* above the mean  $B = -0.43$ ). This finding is consistent with my results indicating a significant  $c'$  path and a non-significant interaction effect, such that the negative relationship between attachment avoidance and marital expectation was significant at various levels of attachment anxiety; however, attachment avoidance and attachment anxiety did not significantly interact to predict marital expectations.

Second, I examined the proposed indirect effect of trait mindfulness (M) on the relationship between attachment avoidance (X) and marital expectations (Y). Again, my first hypothesis (H-1) was supported, such that highly avoidant individuals expressed that their marital expectations were being met at a lesser degree ( $B = -0.514$ ,  $p < .001$ , *CI*<sub>95</sub> -0.617 to -0.405). Additionally, attachment avoidance significantly predicted trait mindfulness in a negative direction ( $B = -0.202$ ,  $p < .001$ , *CI*<sub>95</sub> -0.260 to -0.147). Trait mindfulness, however, did not significantly predict marital expectations ( $B = -0.045$ ,  $p = .685$ , *CI*<sub>95</sub> -0.247 to 0.175). My second hypothesis (H-2), that trait mindfulness would mediate the relationship between attachment avoidance and marital expectations, was not supported, such that trait mindfulness did not serve as an explanatory mechanism underlying the relationship between attachment avoidance and marital expectations ( $B = 0.009$ ,  $p = .689$ , *CI*<sub>95</sub> -0.039 to 0.051).

Third, I examined the proposed relationship of attachment avoidance (X) and attachment anxiety (W) predicting trait mindfulness (Y). The omnibus test was statistically significant,  $F(3,$

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300) = 34.891,  $p < .001$ ,  $R^2 = .26$ , and results revealed that both attachment avoidance ( $B = -0.132$ ,  $p < .05$ ) and attachment anxiety ( $B = -0.214$ ,  $p < .001$ ) significantly predicted trait mindfulness. The interaction between attachment anxiety and attachment avoidance was not significant ( $B = 0.014$ ,  $p = .516$ ). Upon further probing via the Johnson-Neyman test (e.g., Hayes & Matthes, 2009), results suggested that the effect of attachment avoidance on trait mindfulness was significant ( $ps \leq .01$ ) throughout the full range of attachment anxiety (1 *SD* below the mean  $B = -0.11$ , mean  $B = -0.10$ , and 1 *SD* above the mean  $B = -0.08$ ). This finding is consistent with my results indicating a significant *a* path and a non-significant interaction effect, such that the negative relationship between attachment avoidance and trait mindfulness was significant at various levels of attachment anxiety; however, attachment avoidance and attachment anxiety did not significantly interact to predict trait mindfulness. As such, my fourth hypothesis (H-4), that attachment anxiety would moderate the relationship between attachment avoidance and trait mindfulness, was not supported.

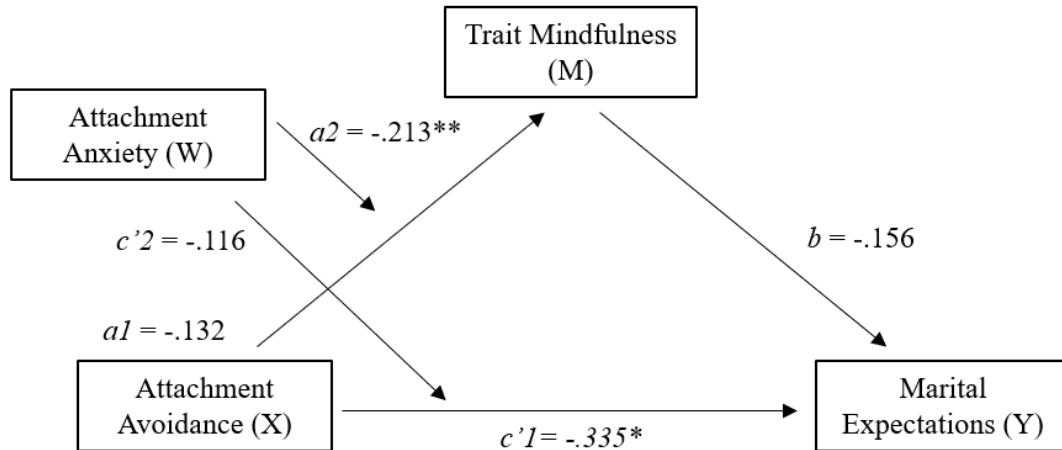
Finally, in a combined analysis, I examined a proposed moderated mediation model predicting the indirect effect of trait mindfulness (M) on the relationship between attachment avoidance (X) and marital expectations (Y), moderated by attachment anxiety (W) on both the *a* path (i.e., attachment avoidance/trait mindfulness relationship) and the direct *c'* path (i.e., attachment avoidance/marital expectations relationship). Full results are presented in Table 3 and a statistical diagram of the proposed model is presented in Figure 2. Results suggested that 22.3% of the variance in the mediator (trait mindfulness) and 22.2% of the variance in the dependent variable (marital expectations) were accounted for by the model. Again, my first hypothesis (H-1) was supported, such that attachment avoidance significantly predicted marital

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expectations ( $B = -0.335, p < .01, CI95 -0.579$  to  $-0.114$ ). Additionally, attachment anxiety did not significantly predict marital expectations ( $B = -0.156, p = .189, CI95 -0.385$  to  $0.079$ ). Again, my third hypothesis (H-3) was not supported, such that the interaction between attachment avoidance and attachment anxiety in predicting marital expectations was not significant ( $B = -0.032, p = .399, CI95 -0.098$  to  $0.054$ ). In contrast to results of my third primary analysis in which I included only attachment avoidance, attachment anxiety, and trait mindfulness in the analysis, results of this combined analysis with all variables included indicate that attachment avoidance no longer significantly predicted trait mindfulness ( $B = -0.132, p = 0.086, CI95 -0.295$  to  $0.007$ ). However, similar to results of my third primary analysis, attachment anxiety significantly predicted trait mindfulness ( $B = -0.213, p < .001, CI95 -0.330$  to  $-0.099$ ). Again, my fourth hypothesis (H-4) was not supported, such that the interaction between attachment avoidance and attachment anxiety in predicting trait mindfulness was not significant ( $B = 0.014, p = .582, CI95 -0.029$  to  $-0.067$ ). Additionally, mirroring results of my second primary analysis, trait mindfulness did not significantly predict marital expectations ( $B = -0.156, p = .189, CI95 -0.385$  to  $0.079$ ). My fifth hypothesis (H-5), that the effect of attachment avoidance on marital expectations via trait mindfulness would differ at varying levels of attachment anxiety, was not supported. That is, the index of moderated mediation (IMM;  $B = -0.002, p = 0.684, CI95 -0.015$  to  $0.006$ ) suggests that the indirect effects of trait mindfulness were not conditional on the values of attachment anxiety (1 *SD* below the mean  $B = 0.018, p = 0.291, CI 95 -0.008$  to  $0.057$ ; mean  $B = 0.015, p = 0.254, CI 95 -0.008$  to  $0.045$ ; and 1 *SD* above the mean  $B = 0.013, p = 0.270, CI 95 -0.007$  to  $0.040$ ).

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Figure 2. *The Statistical Model of Moderated Mediation*



\* $p < .01$ . \*\*  $p < .001$ .

Table 3. *The Effects of a Moderated Mediation Analysis, With Trait Mindfulness as a Mediating Variable*

Path	<i>b</i>	<i>SE</i>	<i>z</i>	<i>p</i>	<i>CI95 (lower, upper)</i>
Mind ~ Avoidance	-0.132	0.077	-1.717	0.086	-0.293, 0.009
Mind ~ Anxiety	-0.213	0.060	-3.585	0.000	-0.322, -0.094
Mind ~ Avoidance x Anxiety	0.014	0.025	0.551	0.582	-0.031, 0.064
Exp ~ Mind	-0.156	0.118	-1.314	0.189	-0.370, 0.093
Exp ~ Avoidance	-0.335	0.120	-2.804	0.005	-0.587, -0.119
Exp ~ Anxiety	-0.116	0.120	-0.966	0.334	-0.350, 0.128
Exp ~ Avoidance x Anxiety	-0.032	0.038	-0.844	0.399	-0.099, 0.052
IMM	-0.002	0.005	-0.407	0.684	-0.019, 0.004

*Note.* One case deleted due to missing values ( $n = 331$ ). Mind = trait mindfulness. Exp = marital expectations. IMM = index of moderated mediation.

CHAPTER IV – DISCUSSION

In this study, I investigated adult romantic attachment orientation, trait mindfulness, and marital expectations in a sample of married women. Considering the relationship between these variables may lend greater clarity in understanding marital satisfaction at a more comprehensive level. Results of this study provide insight into individual differences in which marital expectations are perceived as unmet, met, or exceeded. In the sections below, I interpret results of my moderated mediation analysis, discuss implications and limitations of the results, and offer some concluding thoughts.

**Interpretation of Results**

**Attachment Avoidance as a Predictor of Marital Expectations**

Results revealed a negative direct effect of attachment avoidance on marital expectations. That is, those individuals with lower levels of attachment avoidance were more likely to indicate higher levels of marital expectations (e.g., expectations were met or exceeded), and conversely, those with higher levels of attachment avoidance were more likely to indicate lower levels of marital expectations (e.g., expectations were unmet). This finding offers novel information regarding individual characteristics that may predict expectations within marriages, as no prior study, to my knowledge, has examined the direct relationship between adult romantic attachment orientation and marital expectations. This significant negative relationship between attachment avoidance and marital expectations aligns well with prior findings suggesting a negative relationship between attachment orientation and marital satisfaction (Chung, 2014; Holland et al., 2012; Ho et al., 2012), as marital expectations are thought to be essential components in

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determining marital satisfaction. Importantly, as discussed next, the underlying mechanism of the negative relationship between attachment avoidance and marital expectations remains unknown.

### **The Explanatory Role of Trait Mindfulness**

Results revealed that trait mindfulness did not significantly explain the negative relationship between attachment avoidance and marital expectations, both when analyzed as a simple mediation without attachment anxiety included in the analysis and when analyzed as a moderated mediation with attachment anxiety included. Although attachment avoidance significantly predicted trait mindfulness in my second and third primary analyses, such that highly avoidant individuals were more likely to report lower levels of trait mindfulness, attachment avoidance did not significantly predict trait mindfulness when all variables were included for analysis. However, when considering the magnitude of the relationship between attachment avoidance and trait mindfulness in the final model, the effect size remained relatively similar to the those observed in my second and third primary analyses, suggesting relative consistency throughout various analyses.

Additionally, trait mindfulness did not significantly predict marital expectations. Interestingly, the direction of the relationship between trait mindfulness and marital expectations, although non-significant, was negative, which is opposite the direction (i.e., a positive relationship, such that individuals higher in trait mindfulness would be more likely to endorse marital expectations as met or exceeded) I had predicted. It is possible that these non-significant findings are attributed to the analysis of the overall FFMQ-SF trait mindfulness factor, as opposed to the examination of each of the five trait mindfulness facets (i.e., observing,



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describing, acting with awareness, nonjudging, and nonreactivity), individually. That is, perhaps certain unique aspects of trait mindfulness, rather than a comprehensive account, better predict marital expectations.

In fact, some researchers recommend measuring aspects of trait mindfulness as interdependent components (e.g., Aguado et al., 2015; Linares et al., 2016), as results from such studies have revealed variable statistical relationships among certain trait mindfulness facets and other predictor and/or outcome variables. For example, in an analysis of the indirect effect of trait mindfulness on the relationship between attachment orientation and depressive symptoms, Linares and colleagues (2016) observed that secure attachment orientation (i.e., low levels of attachment avoidance and anxiety) significantly predicted nonjudging but failed to significantly predict observing. Thus, analyzing each facet of the FFMQ-SF separately may facilitate a more refined understanding of the unique aspects of trait mindfulness that may meaningfully relate to attachment orientation and marital expectations. Finally, given the significant predictive relationship between attachment avoidance and marital expectations and the non-explanatory role of trait mindfulness in my study, continued research is necessary to decipher possible variables that help explain the negative effect of attachment avoidance on marital expectations.

### **The Influence of Attachment Anxiety**

Attachment anxiety did not significantly predict marital expectation, although the non-significant relationship did present in the predicted negative direction. Further, attachment anxiety did not interact significantly with attachment avoidance to predict marital expectations. Interestingly, this lack of significant interaction between attachment anxiety and attachment

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avoidance may not be entirely unusual in attachment research. As noted by Fraley (2021), this interaction does not consistently explain much variance in dependent variables across different studies.

Attachment anxiety did, however, predict trait mindfulness at a level of significance, such that individuals who indicated higher levels of attachment anxiety were more likely to report lower levels of trait mindfulness. This finding, as well as the observation that attachment avoidance significantly predicted trait mindfulness in a negative direction in my second and third primary analyses, lend additional support towards prior findings from studies that suggest a negative association between insecure romantic attachment orientation and trait mindfulness (e.g., Caldwell & Shaver, 2013; Jones et al., 2011; Shaver et al., 2007). Finally, attachment anxiety and attachment avoidance did not interact at a significant level to predict trait mindfulness, once again lending corroborating evidence towards Fraley's (2021) observation of limited significant interactions between attachment anxiety and attachment avoidance in attachment research. In consideration of the non-significant effects of trait mindfulness as a mediator, attachment anxiety also did not act as a significant moderator of the indirect effect of attachment avoidance on marital expectations. As such, results did not support my hypothesized moderated mediation model.

Although a full depiction of possible conditional effects cannot be ascertained through this study, it is clear that (a) attachment avoidance significantly predicted marital expectation in a negative direction, (b) attachment avoidance significantly predicted trait mindfulness in a negative direction, except when all variables were included in the analysis, and (c) attachment anxiety significantly predicted trait mindfulness in a negative direction. While I cannot draw any

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conclusions on the impact of attachment anxiety on marital expectations, given its non-significance, the significant negative relationship between attachment avoidance and marital expectations suggests that there may be unique qualities of attachment avoidance that draw on perceptions of actualized marital expectations. Additionally, the significant negative relationships between attachment avoidance and trait mindfulness as well as attachment anxiety and trait mindfulness further establish the previously observed empirical link between attachment security and trait mindfulness.

Although I cannot confirm why participants with higher levels of attachment avoidance were more likely to endorse unmet expectations, I can reason that this relationship is influenced by potential tendencies to perceive risk in intimacy, to expect their relationship to fail, or to be less trusting of their partner. That is, those with higher levels of attachment avoidance may have a propensity towards believing that a negative outcome is inevitable and, in order to protect against or counteract future threat of negative emotional reactivity, they may have reported their expectations as unmet as a means to maintain comfortable distance from the prospect of accepting relational intimacy and trust. Further, perhaps these individuals find it particularly difficult to accept support from their partners, and when asked about actualized marital expectations, they may have perceived their expectations as unmet, perhaps because they do not give their partners an opportunity to provide support in the first place. Furthermore, it could be that these individuals find it relatively challenging to provide their partners with emotional support because doing so could result in an uncomfortable amount of vulnerability, intimacy, and/or trust. As a consequence of not readily providing support for their partners, they may not receive reciprocating support, resulting in unmet needs and expectations.

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Finally, although it was not within the scope of my study to explore explanatory mechanisms of the relationship between insecure attachment orientation and trait mindfulness, it is possible that emotion regulation strategies influenced the significant negative relationship between attachment avoidance and trait mindfulness as well as the negative relationship between attachment anxiety and trait mindfulness, as indicated by Ryan and colleagues (2007). Results are consistent with the idea that an internalized sense of felt security is predictive of one's ability to mindfully notice and accept both intrapersonal and interpersonal experiences in the present moment. It is reasonable to consider that participants who endorsed high levels of attachment avoidance and/or attachment anxiety may have difficulty regulating their emotional reactivity to external and internal stimuli, thus thwarting their ability to maintain mindful awareness and acceptance of present-moment experiences.

### **Implications of Results**

Findings from my study offer unique implications for better understanding predictive factors of both marital expectations and trait mindfulness among women. First, my findings suggest that women who tend to be more avoidantly-attached in their marital relationships are less likely to believe that aspects of their marriages meet their expectations. Such findings add to the literature regarding perceptions of marriage quality among women and paves way for future research to continue exploring variables that may help explain the relationship between attachment avoidance and marital expectations among women as well as other demographic groups.

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Further, as marital expectations are associated with marital satisfaction (Bahr et al., 1983; Ehnis, 1986; Fletcher et al., 1999), and because women, particularly those who attend marriage counseling (Jackson et al., 2014), tend to report more dissatisfaction with their marriages than do men (e.g., Bulanda, 2011; Windsor & Butterworth, 2010), it may be important for clinicians to assess romantic attachment orientation in tandem with beliefs of actualized marital expectations when providing care for married female clients regarding matters related to marital dissatisfaction. Such assessment may aid in the therapeutic exploration of possible predisposing, precipitating, and perpetuating effects of the client's level of comfort in seeking support from and relying on their romantic partner and the client's perception of whether or not they receive what they believe they deserve in their marriage.

Furthermore, my findings that both attachment avoidance and attachment anxiety negatively predicted trait mindfulness suggest that attachment orientation meaningfully informs the degree to which one notices and accepts internal and external stimuli in a present-minded and flexible manner, specifically among married women. Future research that explores attachment orientation and trait mindfulness in relation to additional variables may choose to consider dimensional effects of attachment orientation (i.e., high avoidance and anxiety, low avoidance and anxiety, high avoidance and low anxiety, or high anxiety and low avoidance) in predicting trait mindfulness as to ascertain a more nuanced depiction of findings. Clinicians may consider how a client's unique romantic attachment orientation pattern impacts their level of trait mindfulness, such that perhaps those highly-avoidant individuals with slight levels of attachment anxiety may benefit from mindfulness interventions, as they may have just enough attachment anxiety to activate their awareness of present moment occurrences, whereas highly-avoidant

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individuals with relatively low levels of attachment anxiety may benefit from targeting attachment-related needs, instead, as they may less likely be dysregulated by present external stimuli. Overall, my results underscore the importance of considering the role of romantic attachment orientation in predicting trait mindfulness and marital expectations in both research and practice.

### **Limitations**

Despite some significant findings and associated implications, my study contains mentionable limitations. To begin, my study is not free from sample selection and participant self-selection biases. Regarding sample selection, invitations to participate in the study were sent via email to faculty and staff of the principal investigator's academic institution as well as through social networking and advertising sites. First, the fact that my study invitations were received by participants solely via online-methods likely limited participation only to those individuals with regular access to internet and computer systems. As such, individuals with limited resources and perhaps those of low socio-economic status were unlikely notified to participate in my study. Second, my sample contained a relatively high proportion of college educated individuals. That is, nearly half of my sample (i.e., 45.6%) held doctorate degrees, and only 2.1% of my sample obtained a high school diploma as their highest level of educational attainment, compared to the national average of 28.1% (United States Census Bureau, 2020). Such high educational attainment among participants may indicate that participation was largely driven by faculty and staff members of the principal investigator's academic institution. Thus, it

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is possible that my net may not have been cast wide enough in order to gather a more representative group of people (e.g., those with less educational attainment).

Regarding self-selection bias, it is important to consider that more educated and affluent individuals, in general, are more likely to respond to research surveys (Goyder et al., 2002), a phenomenon that appears to have occurred in my study. Accordingly, because my method of gathering participants appears to have reached a particularly select group of people (i.e., highly educated individuals) and because individuals who elected to participate tended to be highly educated women, it is unclear how generalizable these findings are to people of different gender identities and to those with lower levels of educational attainment and/or socio-economic status. As such, future research may consider exploring romantic attachment orientation, marital expectations, and trait mindfulness with a more representative group of people.

Next, although my study survey included a section that probed for various demographic characteristics, the primary and co-investigators neglected to inquire about several important elements of diversity. First, participants were not asked about their sexual/romantic orientation or the gender of their spouse. As such, these aspects of the marital relationship among female participants are unclear. Although the goal of my study was not to analyze my findings as a function of sexual orientation or the genders of partners, it is important that I address this lack of acquired information, as it is imperative that research on romantic relationships resist promoting heteronormativity by assuming, for example, that all married individuals are in heterosexual relationships.

Additionally, participants were not asked about their ethnicity. Because information on participant ethnicity was not obtained, it is impossible to fully describe and understand the

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intersecting identities of the women in my study, which undoubtedly inform the way in which they experience themselves in relation to their romantic partners. This oversight also introduces limitations to population representation and generalizability of findings. My hope, however, is that my findings can be meaningfully applied to those represented within my sample and that my study findings and limitations can be used as groundwork to inform future research that actively explores romantic attachment and marital expectations within more diverse samples, allowing for these important aspects of diversity to be recognized and better understood.

Finally, my study was cross-sectional in nature. Because marital relationships tend to change and adapt to major life course transitions, yet generally uphold an underlying continuity (Miller, 2000), it may be informative to assess whether participants' marital expectations change or stay relatively static over time. Although I hypothesized that marital expectations may be grounded in characterological attributes (i.e., romantic attachment orientation and trait mindfulness), it is likely that such relational expectations are also driven by circumstance. For example, if a couple has a child, if a spouse starts a new job, or if a spouse experiences changes in their health, marital expectations may also change. Thus, it may be useful to explore the relationship between romantic attachment orientation and marital expectations longitudinally in order to not only observe individual differences in such variables but to also observe potential changes over time.

### **Conclusions**

Despite these limitations, my study is the first to explore and provide empirical evidence of the predictive relationship between adult romantic attachment orientation and marital



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expectations. Further, examining marital expectations as an outcome variable provided a more precise and measurable account of marriage quality as compared to other marriage studies that focus more broadly on marriage satisfaction. Although my theoretical model was not fully supported, significant results revealed that attachment avoidance negatively predicted marital expectations, providing novel insight to characterological predictors of the subjective evaluation of marital relationships. Additionally, both attachment avoidance and attachment anxiety negatively predicted trait mindfulness, supporting extant literature that purports that securely-attached individuals are more likely to be highly inherently mindful. Because trait mindfulness did not significantly serve as a mechanism through which attachment avoidance predicted marital expectations, future research may consider alternative constructs that may help explain the negative relationship between these variables. Finally, my findings emphasize potential clinical considerations, including assessing for and exploring romantic attachment orientation in order to potentially obtain a more comprehensive understanding of female clients' marital expectations and levels of trait mindfulness.

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### APPENDIX

#### **Ancillary Analyses**

For purposes of supplementary exploration, I investigated two additional research questions. First, given that having children significantly correlated with marital expectations in my study, and because findings from prior studies have consistently suggested that women demonstrate significant decreases in marital satisfaction levels upon having children (for a review of the literature, see Ehnis, 1986), I was curious how the descriptive variable, children, might impact the relationship between romantic attachment orientation, trait mindfulness, and marital expectations.

Second, although trait mindfulness is typically conceptualized and often measured as a unitary construct, research suggests that trait mindfulness is multidimensional in nature (e.g., Baer et al., 2008) and that each facet of trait mindfulness may differentially relate with other psychological variables (e.g., Hanley & Garland, 2017). As such, I was curious if any facet of trait mindfulness may differentially impact the relationship between adult romantic attachment orientation and marital expectations in my study. Thus, to supplement my primary analyses, which explored trait mindfulness as a unitary construct, I analyzed several facets of trait mindfulness, separately, as mediating variables.

I explored both of my ancillary investigations using the same sample that I used for my primary analyses, which consisted of 332 females in marital relationships. Additionally, I utilized the same piecemeal approach as used in my primary analyses by first sequentially evaluating components of my full model and then assembling them. In the following sections, I

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review results of my ancillary analyses, exploring children as a covariate and trait mindfulness facets as mediating variables, and close with a summary and discussion of ancillary findings.

### **Children as a Covariate**

Consistent with results of my primary analyses, I assessed a moderated mediation model predicting marital expectations ( $Y$ ) from attachment avoidance ( $X_i$ ), mediated by trait mindfulness ( $M$ ). Additionally, I added children ( $X_{ii}$ ) to the model as a covariate predicting marital expectations. As children significantly correlated with marital expectations in a negative direction in my study, I was curious whether or not children would predict marital expectations, and if so, whether or not attachment avoidance would remain a significant predictor of marital expectations. Data were analyzed with maximum likelihood estimation in the R package lavaan (v. 0.6-5), and the significance of effects were tested with 1000 bootstrapped confidence intervals.

Full piecewise results, which include children as a predictor variable, can be found in Table 4. First, I examined the proposed relationship of attachment avoidance ( $X$ ) and attachment anxiety ( $W$ ) predicting marital expectations ( $Y$ ). Results revealed that neither attachment avoidance ( $B = -0.314, p = .053$ ) nor attachment anxiety ( $B = -0.185, p = .164$ ) predicted marital expectations, although the relationship between attachment avoidance and marital expectations approached significance. Further, attachment avoidance and attachment anxiety did not interact to predict marital expectations ( $B = -0.005, p = .921$ ). Upon probing the conditional effects of my data using the Johnson-Neyman approach, results suggested that the effect of attachment avoidance on marital expectations was significant ( $ps < .01$ ) throughout the full range of attachment anxiety (1  $SD$  below the mean  $B = -0.32$ , mean  $B = -0.33$ , and 1  $SD$  above the mean  $B$

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= -0.33). This finding is consistent with my results indicating a  $c'$  path that approached significance and a non-significant interaction effect, such that the negative relationship between attachment avoidance and marital expectation was nearly significant at various levels of attachment anxiety; however, attachment avoidance and attachment anxiety did not significantly interact to predict marital expectations. Additionally, results revealed that children significantly predicted marital expectations ( $B = -0.494, p < .01$ ).

Second, I examined the proposed indirect effect of trait mindfulness (M) on the relationship between attachment avoidance ( $X_i$ ) and marital expectations (Y), with children ( $X_{ii}$ ) added as a covariate predicting marital expectations. Attachment avoidance significantly predicted both trait mindfulness ( $B = -0.197, p < .001$ ) and marital expectations ( $B = -0.444, p < .001$ ). Again, children significantly predicted marital expectations ( $B = -0.486, p < .001$ ). Consistent with results within my primary analyses, trait mindfulness did not significantly predict marital expectations ( $B = -0.012, p = 0.921$ ) and it did not significantly mediate the relationship between attachment avoidance and marital expectations ( $B = 0.02, p = .922$ ).

Third, in accordance with the piecemeal approach, I also examined the proposed relationship of attachment avoidance ( $X_i$ ) and attachment anxiety (W) predicting trait mindfulness (Y). However, because I chose to investigate children as a covariate predicting marital expectations, I did not add children to this analysis, as this sub-model did not involve marital expectations as an outcome variable. As such, in my final combined analysis, I examined the proposed moderated mediation model predicting the indirect effect of trait mindfulness (M) on the relationship between attachment avoidance (X) and marital expectations (Y), moderated by attachment anxiety (W) on both the  $a$  path (i.e., attachment avoidance/trait mindfulness



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relationship) and the direct  $c'$  path (i.e., attachment avoidance/marital expectations relationship). Additionally, I added children as a covariate ( $X_{ii}$ ) predicting marital expectations. Results of this analysis remained consistent with findings from my primary analyses, such that attachment avoidance significantly predicted marital expectations ( $B = -0.338, p < .05$ ), attachment anxiety significantly predicted trait mindfulness ( $B = -0.252, p < .001$ ), and trait mindfulness did not significantly predict marital expectations ( $B = -0.132, p = .279$ ). Again, attachment avoidance and attachment anxiety did not interact to predict trait mindfulness ( $B = 0.032, p = .313$ ) or marital expectations ( $B = -0.001, p = .983$ ), and trait mindfulness did not act as a significant mediator ( $B = -0.004, p = .551$ ). Once again, children significantly predicted marital expectations ( $B = -0.487, p < .001$ ).

To summarize notable findings from this ancillary investigation, children significantly predicted marital expectations throughout analyses in a negative direction, suggesting that, like having higher levels of attachment avoidance, having children also appears to influence perceptions that marital expectations were met to a lesser degree. Importantly, though, results demonstrated that attachment avoidance remained a significant predictor of marital expectations when children was controlled for in the model. As such, having children does not appear to account for the significant relationship between attachment avoidance and marital expectations; rather, both variables appear to uniquely predict marital expectations.

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Table 4. *The Effects of a Moderated Mediation Analysis, With Children Included as a Covariate*

Path	<i>b</i>	<i>SE</i>	<i>t/z</i>	<i>P</i>	<i>CI95</i> (lower, upper)
Moderation (DV = Exp)					
Intercept	6.376	0.339	18.788	0.000	--
Exp ~ Avoidance	-0.314	0.162	-1.943	0.053	--
Exp ~ Anxiety	-0.185	0.133	-1.394	0.164	--
Exp ~ Children	-0.494	0.156	-3.169	0.002	--
Exp ~ Avoidance x Anxiety	-0.005	0.054	-0.099	0.921	--
Mediation (DV = Exp)					
Exp ~ Avoidance	-0.444	0.063	-6.990	0.000	-0.559, -0.305
Exp ~ Mind	-0.012	0.121	-0.100	0.921	-0.256, 0.220
Exp ~ Children	-0.486	0.148	-3.282	0.001	-0.772, -0.191
Mind ~ Avoidance	-0.197	0.030	-6.588	0.000	-0.256, -0.139
Indirect Effect	0.002	0.024	0.098	0.922	-0.042, 0.052
Moderation (DV = Mind)					
Intercept	4.100	0.143	28.669	0.000	--
Mind ~ Avoidance	-0.132	0.066	-1.999	0.047	--
Mind ~ Anxiety	-0.214	0.059	-3.625	0.000	--
Mind ~ Avoidance X Anxiety	0.014	0.021	0.651	0.516	--
Combined (DV = Exp)					
Mind ~ Avoidance	-0.177	0.094	-1.869	0.062	-0.336, 0.011
Mind ~ Anxiety	-0.252	0.069	-3.649	0.000	-0.379, -0.112
Mind ~ Avoidance x Anxiety	0.032	0.031	1.008	0.313	-0.034, 0.090
Exp ~ Mind	-0.132	0.122	-1.083	0.279	-0.361, 0.113
Exp ~ Avoidance	-0.338	0.150	-2.248	0.025	-0.647, -0.040
Exp ~ Anxiety	-0.219	0.131	-1.666	0.096	-0.479, 0.036
Exp ~ Avoidance x Anxiety	-0.001	0.051	-0.022	0.983	-0.099, 0.102
Exp ~ Children	-0.487	0.142	-3.429	0.001	-0.777, -0.218
IMM	-0.004	0.007	-0.596	0.551	-0.023, 0.005

*Note.* One case deleted due to missing values ( $n = 331$ ). Exp = marital expectations. Mind = trait mindfulness.

### Impact of Trait Mindfulness Facets

As mentioned, despite having been originally conceptualized as a mechanism of relational development and maintenance (Karremans et al., 2017), mindfulness researchers, in general, had not concentrated their efforts on unearthing potential links between mindfulness and

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relationship satisfaction and well-being, until recently (e.g., Johns et al., 2015; Jones et al., 2011; Lenger et al., 2017). Surprisingly, in 2017, Lenger and colleagues were the first to explore how each facet of trait mindfulness related to relationship satisfaction among long-term married couples. They found that, when each facet was analyzed in its own separate model, acting with awareness, describing, nonjudging, and nonreactivity, but not observing, significantly correlated with relationship satisfaction. When they examined all five facets together in the same model, they found that nonjudging was the only facet that significantly predicted relationship satisfaction when controlling for all facets, suggesting that nonjudging may contribute to relationship satisfaction above and beyond the other four facets of trait mindfulness (Lenger et al., 2017).

In light of the findings observed by Lenger and colleagues (2017), for my second ancillary investigation I conducted analyses identical to those in my primary analyses; however, this time I analyzed each piece of the piecemeal approach by individual trait mindfulness facets, separately, rather than by trait mindfulness as a unitary measure. In order to assist in determining which facet(s) to include as mediating variables in my ancillary analyses, I first examined bivariate correlations of each of the five facets with marital expectations (see Table 5). As displayed, only describing, acting with awareness, and nonreactivity facets significantly correlated with marital expectations. As such, I chose to include only these three facets that were significantly correlated with marital expectations in my ancillary analyses. Full results of separate analyses including describing, acting with awareness, and nonreactivity facets as mediating variables are presented in Tables 6, 7, and 8, respectively.

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Adhering to the piecemeal approach, I first examined the proposed relationship of attachment avoidance (X) and attachment anxiety (W) predicting marital expectations (Y). Note, trait mindfulness was not examined in this first analysis. As such, I will not discuss results of this first analysis. Second, I examined the proposed indirect effects of the three selected facets of trait mindfulness (i.e., describing, acting with awareness, and nonreactivity; M), in separate analyses, on the relationship between attachment avoidance (X) and marital expectations (Y). Third, I examined the proposed relationship of attachment avoidance (X) and attachment anxiety (W) predicting each facet of trait mindfulness (Y), in separate analyses. Finally, in a combined analysis, I examined the proposed moderated mediation model predicting the indirect effects of each facet of trait mindfulness (M) on the relationship between attachment avoidance (X) and marital expectations (Y), moderated by attachment anxiety (W) on both the *a* path (i.e., attachment avoidance/trait mindfulness relationship) and the direct *c'* path (i.e., attachment avoidance/marital expectations relationship). Again, I conducted three separate combined analyses to account for each separate facet of trait mindfulness that was shown to correlate significantly with marital expectations.

### *Describing Facet*

In my second analysis of the piecemeal approach, when describing was included as a mediating variable, attachment avoidance significantly predicted both marital expectations ( $B = -0.517, p < .001$ ) and describing ( $B = -0.290, p < .001$ ). Describing did not significantly predict marital expectations ( $B = -0.039, p = .557$ ), nor did it act as a significant mediating variable in the relationship between attachment avoidance and marital expectations ( $B = 0.011, p = .566$ ). In my third analysis, neither attachment avoidance ( $B = -0.091, p = .413$ ) nor attachment anxiety ( $B$

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= 0.069,  $p = .488$ ) significantly predicted describing. As such, attachment avoidance and attachment anxiety did not significantly interact to predict describing ( $B = -0.057$ ,  $p = .111$ ). Finally, in the combined analysis, results suggested that 19.5% of the variance in the mediator (describing) and 21.9% of the variance in the dependent variable (marital expectations) were accounted for by the model. Attachment avoidance ( $B = -0.323$ ,  $p < .01$ ,  $CI95$  -0.582 to -0.086) but not attachment anxiety ( $B = -0.081$ ,  $p = .494$ ,  $CI95$  -0.324 to 0.158) significantly predicted marital expectations. Attachment avoidance and attachment anxiety did not significantly interact to predict marital expectations ( $B = -0.037$ ,  $p = .354$ ,  $CI95$  -0.105 to 0.057). Additionally, neither attachment avoidance ( $B = -0.092$ ,  $p = .525$ ,  $CI95$  -0.404 to 0.155) nor attachment anxiety ( $B = 0.069$ ,  $p = .516$ ,  $CI95$  -0.163 to 0.266) significantly predicted describing, nor did they interact to predict describe ( $B = -0.057$ ,  $p = 0.188$ ,  $CI95$  -0.134 to 0.042). Finally, describe did not significantly predict marital expectations ( $B = -0.059$ ,  $p = .396$ ,  $CI95$  -0.197 to 0.076), and it did not act as a mediator of the relationship between attachment avoidance and marital expectations, moderated by attachment anxiety ( $B = 0.003$ ,  $p = .524$ ,  $CI95$  -0.006 to 0.015).

In sum, significant results from these analyses suggest only that attachment avoidance predicted marital expectations in a negative direction. That is, participants who indicated higher levels of attachment avoidance were also more likely to indicate that their expectations in the marriages were being met to a lesser degree. Similar to results of my primary analyses which indicated trait mindfulness as a significant outcome variable, attachment avoidance significantly predicted the describing facet in a simple mediation analysis; however, attachment anxiety did not significantly predict describing at any point of the piecemeal process.

### *Acting With Awareness Facet*

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In my second analysis of the piecemeal process, when acting with awareness was included as a mediating variable, attachment avoidance significantly predicted both marital expectations ( $B = -0.509, p < .001$ ) and acting with awareness ( $B = -0.276, p < .001$ ). Acting with awareness did not significantly predict marital expectations ( $B = -0.015, p = .856$ ), nor did it act as a significant mediating variable in the relationship between attachment avoidance and marital expectations ( $B = 0.004, p = .859$ ). In my third analysis, neither attachment avoidance ( $B = -0.197, p = .057$ ) nor attachment anxiety ( $B = -0.133, p = .149$ ) significantly predicted acting with awareness, nor did they significantly interact to predict acting with awareness ( $B = 0.000, p = .999$ ). Finally, in the combined analysis, results suggested that 11.0% of the variance in the mediator (acting with awareness) and 21.8% of the variance in the dependent variable (marital expectations) were accounted for by the model. Attachment avoidance ( $B = -0.328, p < .01, CI95 -0.591$  to  $-0.091$ ) but not attachment anxiety ( $B = -0.091, p = .441, CI95 -0.333$  to  $0.148$ ) significantly predicted marital expectations. Attachment avoidance and attachment anxiety did not significantly interact to predict marital expectations ( $B = -0.033, p = .402, CI95 -0.103$  to  $0.057$ ). Additionally, neither attachment avoidance ( $B = -0.197, p = .082, CI95 -0.439$  to  $0.004$ ) nor attachment anxiety ( $B = -0.133, p = .156, CI95 -0.312$  to  $0.054$ ) significantly predicted acting with awareness, nor did they interact to predict acting with awareness ( $B = 0.000, p = 0.998, CI95 -0.070$  to  $0.076$ ). Finally, acting with awareness did not significantly predict marital expectations ( $B = -0.047, p = .571, CI95 -0.217$  to  $0.105$ ), nor did it act as a mediator of the relationship between attachment avoidance and marital expectations, moderated by attachment anxiety ( $B = -0.000, p = .999, CI95 -0.009$  to  $0.007$ ).

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In sum, significant results once again suggest a negative predictive relationship between attachment avoidance and marital expectations. Additionally, when only attachment avoidance, acting with awareness, and marital expectations were analyzed in a simple mediation model, attachment avoidance significantly predicted acting with awareness in a negative direction. That is, participants who reported higher levels of attachment avoidance were also more likely to report lower levels of acting with awareness. This relationship, however, did not hold in the combined analysis when attachment anxiety was included as a moderating variable.

### *Nonreactivity Facet*

In my second analysis of the piecemeal approach, when nonreactivity was included as a mediating variable, attachment avoidance significantly predicted both marital expectations ( $B = -0.500, p < .001$ ) and nonreactivity ( $B = -0.136, p < .001$ ). Nonreactivity did not significantly predict marital expectations ( $B = 0.033, p = .657$ ), nor did it act as a significant mediating variable in the relationship between attachment avoidance and marital expectations ( $B = -0.005, p = .678$ ). In my third analysis, attachment anxiety ( $B = -0.474, p < .001$ ) but not attachment avoidance ( $B = -0.108, p = .269$ ) significantly predicted nonreactivity. Interestingly, attachment avoidance and attachment anxiety interacted to predict nonreactivity at a level that trended towards significance ( $B = 0.061, p = .054$ ). Upon probing the conditional effects of my data using the Johnson-Neyman approach (e.g., Hayes & Matthes, 2009), results suggested that the effect of attachment avoidance on nonreactivity was significant ( $B = 0.10, p < .05$ ) at 1 *SD* above the mean of attachment anxiety and nonsignificant at 1 *SD* below the mean ( $B = -0.02, p = .71$ ) and at the mean of attachment anxiety ( $B = 0.04, p = .39$ ). Finally, in the combined analysis, results suggested that 39.9% of the variance in the mediator (nonreactivity) and 21.8% of the

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variance in the dependent variable (marital expectations) were accounted for by the model.

Attachment avoidance ( $B = -0.322, p < .05, CI95 -0.574$  to  $-0.084$ ) but not attachment anxiety ( $B = -0.107, p = .403, CI95 -0.373$  to  $0.148$ ) significantly predicted marital expectations.

Attachment avoidance and attachment anxiety did not significantly interact to predict marital expectations ( $B = -0.031, p = .439, CI95 -0.100$  to  $0.061$ ). Additionally, attachment anxiety ( $B = -0.474, p < .001, CI95 -0.662$  to  $-0.295$ ) but not attachment avoidance ( $B = -0.108, p = .287, CI95 -0.314$  to  $0.089$ ) significantly predicted nonreactivity. Attachment avoidance and attachment anxiety did not interact to predict nonreactivity ( $B = 0.061, p = 0.095, CI95 -0.009$  to  $0.133$ ). Nonreactivity did not significantly predict marital expectations ( $B = -0.047, p = .579, CI95 -0.219$  to  $0.121$ ), and it did not act as a mediator of the relationship between attachment avoidance and marital expectations, moderated by attachment anxiety ( $B = -0.003, p = .649, CI95 -0.019$  to  $0.008$ ).

In sum, results once again suggest a significant predictive relationship between attachment avoidance and marital expectations. Additionally, when attachment avoidance, nonreactivity, and marital expectations were analyzed in a simple mediation model, attachment avoidance significantly predicted nonreactivity in a negative direction. That is, participants who reported higher levels of attachment avoidance were also more likely to report lower levels of nonreactivity, meaning that these individuals reported being more reactive. This relationship, however, did not hold in the combined analysis when attachment anxiety was included as a moderating variable. Similarly, attachment anxiety significantly predicted nonreactivity in negative directions both when analyzed in a simple moderation model (attachment avoidance and attachment anxiety predicting nonreactivity) and when analyzed in a combined (i.e., moderated



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mediation) model, suggesting that participants who reported higher levels of attachment anxiety were also more likely to report lower levels of nonreactivity (i.e., high reactivity).

Interestingly, when attachment avoidance, attachment anxiety, and nonreactivity were analyzed together in a simple moderation, attachment anxiety and attachment avoidance trended towards significantly interacting to predict nonreactivity. Although this near-significant finding must be interpreted with caution, a review of the simple slopes indicates that as levels of attachment anxiety increase (i.e., from below the mean to equal to or greater than the mean), the negative relationship between attachment avoidance and nonreactivity becomes positive. This antagonistic effect of attachment anxiety on the relationship between attachment avoidance and nonreactivity suggests that highly avoidant individuals reported being more reactive when levels of attachment anxiety were below average; however, as levels of attachment anxiety increased, highly avoidant individuals were increasingly nonreactive. Such a finding is rather perplexing, as one would assume that highly avoidantly-attached individuals present as less reactive, and that increasing levels of attachment anxiety would elicit greater reactivity.

To speculate, first, a highly avoidant individual who constantly attempts to maintain a state of downregulation or dissociation may be more susceptible to acute reactivity when confronted with certain internal or external stimuli, as habitual avoidance may thwart one's ability or willingness to experience, accept, and mindfully regulate emotions. Second, for those individuals who reported experiencing high levels of both attachment avoidance and attachment anxiety, perhaps the presence of increased attachment anxiety mitigates some avoidance behaviors. That is, perhaps increased attachment-anxiety acts to promote social seeking behaviors, like reassurance seeking or garnering social support and validation, that may assist in

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the externalization of distressing thoughts and feelings. Essentially, through such externalization, one may transfer or displace their internalized reactivity over to a listening confidante. As a result of such externalization and displacement of distressing thoughts and emotions, a highly avoidantly- and anxiously-attached individual may perceive themselves as nonreactive because they have seemingly managed their reactivity in a perceivably prosocial manner. Pending such speculation, though, it is important to remain cognizant of the *near*-significant nature of the interaction between attachment avoidance and attachment anxiety in predicting nonreactivity and of the fact that this observation did not hold in the combined analysis, which included marital expectations as an outcome variable.

### **Summary and Discussion**

In my first ancillary investigation, exploring the impact of children as a covariate, I found that participants who have children reported that their marital expectations were met to a lesser degree compared to participants who do not have children. This finding corroborates existing empirical evidence of decreased marital satisfaction levels upon having children (for a review of the literature, see Ehnis, 1986). Importantly, though, having children does not appear to account for the predictive relationship between attachment avoidance and marital expectations in my study. As such, in addition to further exploring the relationship between attachment avoidance and marital expectations, researchers may consider examining conditions and/or mechanisms by which having children predicts perceptions of marital expectations being met.

In my second ancillary analysis, exploring the impact of the trait mindfulness facets on the relationship between attachment orientation and marital expectations, I did not observe any statistically significant predictive relationships between describing, acting with awareness, or

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nonreactivity and marital expectations. Thus, the non-significant impact of trait mindfulness as a unitary predictor variable in my primary analysis appears to capture comparable nonsignificant effects of each facet on marital expectations in my ancillary analyses.

Importantly, though, I did find several significant findings among attachment orientation and the trait mindfulness facets that I included for exploratory analysis. Such significant findings make sense, considering that both attachment avoidance and attachment anxiety significantly predicted trait mindfulness as a unitary construct at various points in my primary analysis. First, attachment avoidance significantly predicted describing, acting with awareness, and nonreactivity, both in negative directions. Additionally, attachment anxiety significantly predicted nonreactivity in a negative direction. Finally, in a simple moderation, attachment anxiety and attachment avoidance interacted to predict nonreactivity at level that approached significance. As such, my findings suggest that both attachment avoidance and attachment anxiety, separately, appear to impact particular facets of trait mindfulness, namely describing, acting with awareness, and nonreactivity. That is, individuals who are highly avoidantly-attached appear to label internal experiences with words to a lesser degree, act with less awareness in the present moment, and be more reactive to internal and external stimuli. Those who are highly anxiously-attached also appear to be more reactive. Notably, varying levels of both attachment avoidance and attachment anxiety, together, nearly interacted to predict nonreactivity, suggesting a possible nuanced effect of attachment orientation on the degree to which women in my study react to internal and external stimuli. Such findings further implicate the importance of considering attachment orientation as a two-dimensional construct as well as exploring individual facets of trait mindfulness in both research and clinical work.

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Table 5. Means, Standard Deviations, and Correlations of Primary Variables of Interest, Including Trait Mindfulness Facets

	<i>M</i>	<i>SD</i>	Av	Anx	Obs	Des	Act	Judge	React	Exp
Av	2.20	1.01	--							
Anx	2.42	1.03	0.58***	--						
Obs	3.59	0.71	-0.10	-0.03	--					
Des	3.68	0.80	-0.37***	-0.28***	0.23***	--				
Act	3.29	0.75	-0.38***	-0.34***	0.26***	0.36***	--			
Judge	3.30	0.86	-0.26***	-0.44***	0.05	0.28***	0.45***	--		
React	3.04	0.72	-0.20***	-0.43***	0.10	0.20***	0.32***	0.51***	--	
Exp	4.79	1.04	-0.49***	-0.39***	0.09	0.16**	0.18**	0.08	0.13*	--

*Note.* Av = attachment avoidance (subscale of ECR-R; higher scores indicate higher avoidance). Anx = attachment anxiety (subscale of ECR-R; higher scores indicate higher anxiety). Obs = observe (FFMQ-SF facet; higher scores indicate higher levels of observing). Des = describing (FFMQ-SF facet; higher scores indicate higher levels of describing). Act = acting with awareness (FFMQ-SF facet; higher scores indicate higher levels of acting with awareness). Judge = nonjudging (FFMQ-SF facet; higher scores indicate higher levels of nonjudging). React = nonreactivity (FFMQ-SF facet; higher scores indicate higher levels of nonreactivity). Exp = marital expectations (MCLI; higher scores indicate better than expected marital experiences).

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

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Table 6. *The Effects of a Moderated Mediation Analysis, With Describing as a Mediating Variable*

Path	<i>b</i>	<i>SE</i>	<i>t/z</i>	<i>p</i>	<i>CI95</i> (lower, upper)
Moderation (DV = Exp)					
Intercept	5.884	0.288	20.462	0.000	--
Exp ~ Avoidance	-0.318	0.133	-2.395	0.017	--
Exp ~ Anxiety	-0.085	0.119	-0.714	0.475	--
Exp ~ Avoidance x Anxiety	-0.033	0.043	-0.772	0.441	--
Mediation (DV = Expect)					
Exp ~ Avoidance	-0.517	0.056	-9.303	0.000	-0.625, -0.401
Exp ~ Describing	-0.039	0.067	-0.587	0.557	-0.172, 0.084
Describing ~ Avoidance	-0.290	0.051	-5.660	0.000	-0.383, -0.180
Indirect Effect	0.011	0.020	0.574	0.566	-0.024, 0.054
Moderation (DV = Describe)					
Intercept	4.055	0.242	16.783	0.000	--
Describing ~ Avoidance	-0.091	0.111	-0.819	0.413	--
Describing ~ Anxiety	0.069	0.100	0.695	0.488	--
Describing ~ Avoidance X Anxiety	-0.057	0.036	-1.599	0.111	--
Combined (DV = Exp)					
Describing ~ Avoidance	-0.092	0.144	-0.636	0.525	-0.354, 0.208
Describing ~ Anxiety	0.069	0.107	0.650	0.516	-0.152, 0.276
Describing ~ Avoidance x Anxiety	-0.057	0.043	-1.317	0.188	-0.141, 0.037
Exp ~ Describing	-0.059	0.069	-0.849	0.396	-0.200, 0.072
Exp ~ Avoidance	-0.323	0.126	-2.574	0.010	-0.568, -0.074
Exp ~ Anxiety	-0.081	0.118	-0.684	0.494	-0.320, 0.164
Exp ~ Avoidance x Anxiety	-0.037	0.040	-0.927	0.354	-0.108, 0.056
IMM	0.003	0.005	0.638	0.524	-0.003, 0.022

*Note.* One case deleted due to missing values ( $n = 331$ ). Exp = marital expectations.

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Table 7. *The Effects of a Moderated Mediation Analysis, With Acting With Awareness as a Mediating Variable*

Path	<i>b</i>	<i>SE</i>	<i>t/z</i>	<i>p</i>	<i>CI95</i> (lower, upper)
Moderation (DV = Exp)					
Intercept	5.884	0.288	20.462	0.000	--
Exp ~ Avoidance	-0.318	0.133	-2.395	0.017	--
Exp ~ Anxiety	-0.085	0.119	-0.714	0.475	--
Exp ~ Avoidance x Anxiety	-0.033	0.043	-0.772	0.441	--
Mediation (DV = Exp)					
Exp ~ Avoidance	-0.509	0.060	-8.424	0.000	-0.635, -0.391
Exp ~ Act	-0.015	0.084	-0.181	0.856	-0.183, 0.137
Act ~ Avoidance	-0.276	0.041	-6.693	0.000	-0.358, -0.200
Indirect Effect	0.004	0.024	0.178	0.859	-0.040, 0.053
Moderation (DV = Act)					
Intercept	3.800	0.231	16.480	0.000	--
Act ~ Avoidance	-0.134	0.106	-1.257	0.210	--
Act ~ Anxiety	-0.007	0.095	-0.073	0.942	--
Act ~ Avoidance X Anxiety	0.017	0.034	0.487	0.627	--
Combined (DV = Exp)					
Act ~ Avoidance	-0.197	0.113	-1.738	0.082	-0.435, 0.009
Act ~ Anxiety	-0.133	0.094	-1.420	0.156	-0.309, 0.063
Act ~ Avoidance x Anxiety	0.000	0.036	0.002	0.998	-0.071, 0.075
Exp ~ Act	-0.047	0.082	-0.849	0.396	-0.200, 0.072
Exp ~ Avoidance	-0.323	0.126	-0.567	0.571	-0.214, 0.109
Exp ~ Anxiety	-0.091	0.118	-0.771	0.441	-0.323, 0.158
Exp ~ Avoidance x Anxiety	-0.033	0.039	-0.839	0.402	-0.104, 0.054
IMM	0.000	0.004	-0.001	0.999	-0.009, 0.007

*Note.* One case deleted due to missing values ( $n = 331$ ). Exp = marital expectations. Act = acting with awareness.

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Table 8. *The Effects of a Moderated Mediation Analysis, With Nonreactivity as a Mediating Variable*

Path	<i>b</i>	<i>SE</i>	<i>t/z</i>	<i>p</i>	<i>CI95</i> (lower, upper)
Moderation (DV = Exp)					
Intercept	5.884	0.288	20.462	0.000	--
Exp ~ Avoidance	-0.318	0.133	-2.395	0.017	--
Exp ~ Anxiety	-0.085	0.119	-0.714	0.475	--
Exp ~ Avoidance x Anxiety	-0.033	0.043	-0.772	0.441	--
Mediation (DV = Exp)					
Exp ~ Avoidance	-0.500	0.054	-9.331	0.000	-0.601, -0.395
Exp ~ React	0.033	0.075	0.444	0.657	-0.104, 0.188
React ~ Avoidance	-0.136	0.041	-3.286	0.001	-0.220, -0.054
Indirect Effect	-0.005	0.011	-0.415	0.678	-0.030, 0.015
Moderation (DV = React)					
Intercept	4.068	0.212	19.226	0.000	--
React ~ Avoidance	-0.108	0.097	-1.106	0.269	--
React ~ Anxiety	-0.474	0.087	-5.439	0.000	--
React ~ Avoidance X Anxiety	0.061	0.031	1.936	0.054	--
Combined (DV = Exp)					
React ~ Avoidance	-0.108	0.101	-1.065	0.287	-0.314, 0.088
React ~ Anxiety	-0.474	0.095	-4.980	0.000	-0.662, -0.295
React ~ Avoidance x Anxiety	0.061	0.036	1.668	0.095	-0.009, 0.133
Exp ~ React	-0.047	0.085	-0.555	0.579	-0.208, 0.136
Exp ~ Avoidance	-0.322	0.126	-2.553	0.011	-0.562, -0.070
Exp ~ Anxiety	-0.107	0.128	-0.836	0.403	-0.356, 0.154
Exp ~ Avoidance x Anxiety	-0.031	0.040	-0.774	0.439	-0.102, 0.056
IMM	-0.003	0.006	-0.455	0.649	-0.021, 0.006

*Note.* One case deleted due to missing values ( $n = 331$ ). Exp = marital expectations. React = nonreactivity.