

**CHANGES IN MARITAL SATISFACTION ACROSS THE TRANSITION TO
PARENTHOOD: THE ROLE OF ADULT ATTACHMENT ORIENTATIONS**

A Thesis

by

JAMIE LEIGH RENTFRO

Submitted to the Office of Graduate Studies of
Texas A&M University
in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE

May 2011

Major Subject: Psychology

Changes in Marital Satisfaction across the Transition to Parenthood:

The Role of Adult Attachment Orientations

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ABSTRACT

Changes in Marital Satisfaction across the Transition to Parenthood:

The Role of Adult Attachment Orientations. (May 2011)

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For parents, the birth of their first child sparks rapid change for each partner and for their romantic relationship. With the stress of the transition to parenthood, many couples experience declining marital satisfaction. However, previous studies have reported wide variation in the magnitude and time course of this decline. The present study sought to determine the trajectory of marital satisfaction across the first 2 years of parenthood. The study also examined the role of anxious and avoidant attachment, as well as relationship dynamics that prevent or augment declines in satisfaction for anxious and avoidant individuals. Data were collected from couples in five assessment waves: 6 weeks before the birth of the first child, and 6, 12, 18, and 24 months postbirth. Both partners completed self-report measures of attachment orientations and relevant situational stressors. It was hypothesized that, for insecurely attached partners, declines in marital satisfaction would be associated with the inability to pursue attachment-related goals. Thus, satisfaction should decline when: 1) anxious individuals are unable to increase proximity to their partners; and 2) avoidant individuals are unable to increase distance from their partners.

Growth curve models examined changes in satisfaction over time, moderated by gender, attachment orientation (anxiety or avoidance), and situational stressors. Results yielded three key findings that largely supported the hypotheses. First, for highly anxious individuals, satisfaction was lower or declined when they perceived their partners as less supportive and more negative toward them, and when they felt their babies interfered more in their romantic relationship. Second, for highly avoidant individuals, satisfaction was lower or declined when they felt their babies interfered more in leisure activities and when they perceived more work-family conflict and more demands from their families. Third, an interesting pattern of gender differences emerged, such that satisfaction often declined more steeply in insecure men than women.

Exploratory analyses revealed additional moderators of the attachment-satisfaction relationship. These are discussed as they relate to the goals of insecurely attached individuals. Findings suggest that attachment insecurities predict dissatisfaction in new parents primarily when situational stressors block the pursuit of secondary attachment goals.

DEDICATION

This thesis is dedicated to my parents, Jeff Rentfro and Susan Geiger. To Dad, who worked long hours and still found time to make me laugh until my sides hurt. To Mom, whose perseverance in her education inspired me to pursue my own. And to all of my parents, I am so grateful to be your daughter.

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INTRODUCTION

When couples become parents for the first time, they experience rapid and dramatic changes in their lives. This transition is often stressful, and it has the potential to produce harmful effects, both for individuals and for the romantic relationship. In addition to facing challenges such as fatigue (Elek, Hudson, & Fleck, 2002; Medina, Lederhos, & Lillis, 2009), monetary strain, and work-family conflict, couples must also learn to be parents and coparents (Van Egeren, 2004). Given the stress involved in the transition, it is no surprise that many couples report a decline in their relationship satisfaction during this time (for a meta-analysis, see Mitnick, Heyman, & Slep, 2009). New parents typically experience steeper declines in marital quality than childless couples (Doss, Rhoades, Stanley, & Markman, 2009; Lawrence, Rothman, Cobb, Rothman, & Bradbury, 2008; Shapiro, Gottman, and Carrère, 2000). And according to C. P. Cowan and Cowan (2000), as many as one-third of couples reach clinical levels of marital distress in the first 18 months after birth. On the other hand, some couples actually become more satisfied in their relationships. Doss et al. (2009) found that 7% of mothers and 15% of fathers experienced sudden increases in marital satisfaction after the birth of their babies.

Many studies have explored patterns and predictors of change in marital satisfaction. They have examined various time frames, from the first 6 months after birth to as much as 5 years after birth. Studies of the first 6 to 12 months have consistently shown large declines in satisfaction for new parents (Grote & Clark, 2001; Rhoades,

Simpson, Campbell, & Grich, 2001). The story is more complex in studies with longer time frames. One study found that satisfaction declines steeply for couples in the first year of parenthood but begins to rebound in the second year (Cox, Paley, Burchinal, & Payne, 1999). Doss et al. (2009) also reported steep declines in relationship quality immediately after birth. But for their couples, satisfaction continued to decline over the next four years. In contrast, Shapiro et al. (2000) found that, when wives became less satisfied during the first 6 years of marriage, the decline began 1 year after the birth of their first child, not immediately after birth. Given these mixed results, further investigation is needed to clarify the timing and magnitude of changes in satisfaction. In the present study, couples were followed for the first 2 years of the transition to parenthood.

Past research also delineates several predictors of declining satisfaction. These predictors primarily involve pre-birth relationship characteristics and characteristics of the child. For example, marital satisfaction drops more in couples who are more romantic before birth and among couples who hold higher expectations about their partners and parenting (Belsky & Rovine, 1990; Lawrence, Nylén, & Cobb, 2007). Parents who perceive their children as having more difficult temperaments also experience greater declines in relationship quality (Belsky & Rovine, 1990).

Declines in relationship satisfaction can have a negative impact on the partners, the child, and the family system as a whole. Romantic partners who are less satisfied tend to experience more depressive symptoms (Beach, Katz, Kim, & Brody, 2003; Remen & Chambless, 2001) as well as higher rates of other psychiatric disorders

(Whisman, 2007). Marital conflict also adversely affects parent-infant attachment, child development, and the family's interaction patterns (Owen & Cox, 1997; Paley et al., 2005; Schore, 2001). Thus, it is important to identify why marital satisfaction plummets for some couples but remains stable or improves for others. The present investigation addressed this issue by examining the direct, longitudinal effect of attachment orientations on relationship satisfaction. This research also explored factors that interact with attachment styles to prevent or augment declines in marital satisfaction.

Attachment Theory

According to attachment theory, individuals develop internal working models of close relationships based on interactions with primary caregivers during childhood, beginning in infancy (Bowlby, 1982). Attachment insecurities stem from early relationships with unreliable, cold or rejecting caregivers. Infants, children, and adolescents develop response patterns characterized by varying levels of attachment avoidance or anxiety, and these response patterns form the basis for adult attachment styles (Hazan & Shaver, 1987).

According to Shaver and Mikulincer (2002), attachment anxiety leads adults to the use of hyperactivating strategies, whereas attachment avoidance leads to deactivating strategies. More anxious individuals strive to increase their proximity to attachment figures. Perceived failures in proximity-seeking result in greater vigilance to attachment threats. This increased vigilance exacerbates the perception of threat and feelings of insecurity, leading to a further intensification of proximity-seeking strategies. Thus, this feedback loop results in constant activation of the attachment system in highly anxious

individuals. In contrast, highly avoidant individuals rarely seek support from close others (Simpson, Rholes, & Nelligan, 1992). They cope with attachment-related threats by pursuing increased self-reliance and distance from others. To keep the attachment system deactivated, more avoidant individuals suppress emotional content, especially that which concerns relationships (for an overview, see Shaver & Mikulincer, 2003). Secure attachment can be conceptualized as the absence of attachment avoidance or anxiety. Mikulincer and Shaver (2007) suggest that secure individuals regulate their distress through support seeking or through the confidence that support is available if they should need it. This support enables them to resolve attachment-related threats so that attention may be directed elsewhere.

Attachment and Marital Satisfaction

Attachment anxiety. Because highly anxious individuals engage in constant support seeking, their relationship satisfaction should be most affected by perceived threats to the availability of attachment figures. Consistent with this, when seeking a sense of trust in their relationships, more anxious people strongly emphasized feeling secure with partners (Mikulincer, 1998). Partner unavailability or rejection may threaten their fragile sense of security, leading to marital dissatisfaction. The present study tested three potential moderators of the relationship between anxiety and marital satisfaction: perceived social support, negative partner behaviors, and perceptions of the baby's interference in the romantic relationship. I expected dissatisfaction to be higher among people with more anxious attachment styles, particularly if they perceived their partners as failing to provide adequate support or as behaving negatively toward them. I also

expected more dissatisfaction when highly anxious individuals perceived their baby as interfering with the marital relationship.

Relationship threat cues may be strengthened or dismissed based on perceptions of a partner's willingness or ability to provide support. In this way, support plays a strong role in marital satisfaction. Support may be relevant to all individuals, regardless of attachment style (McGonagle, Kessler, & Schilling, 1992; Piña & Bengston, 1993). However, felt support should be particularly important to highly anxious individuals. One study showed, for example, that during the transition to parenthood, more anxious wives were more satisfied with their marriages at 6 months postpartum, but only if they perceived their partners as more supportive (Rholes et al., 2001). Interestingly, Rholes et al. found other benefits for highly anxious women who perceived high levels of support prenatally. At 6 months postpartum, these women had husbands who reported more satisfaction, less anger, and more supportive behavior, compared to husbands of more anxious women who perceived less support. In fact, these husbands were also more satisfied, less angry, and more supportive than the husbands of less anxious women. Thus, high levels of support actually enhanced relationship quality in highly anxious women and their husbands. If husbands provide more support before birth, this may spark a cycle of improvement in relationship functioning. Perceiving more support from partners may protect highly anxious individuals from steep declines in marital satisfaction. Conversely, perceiving less support may signal a threat to the attachment system, intensifying the negative impact of anxiety on satisfaction.

Negative relationship interactions (e.g., arguing, yelling, putting down, or ignoring one's partner) also represent a potential threat to partner availability. A partner's negative behaviors should exert a strong influence on marital satisfaction, particularly for highly anxious individuals. When their partners behave negatively, highly anxious people feel more distressed (Feeney, 2004). Further, anxious individuals are more likely to believe their partners hurt them intentionally (Sümer & Cozzarelli, 2004). These negative partner attributions predicted lower relationship satisfaction. A partner's negative behaviors also affect how anxious people respond to relationship conflict. Simpson, Rholes, and Phillips (1996) found that highly anxious individuals expressed more hostility toward their partners while discussing a relationship conflict. Additionally, the discussion led them to perceive the relationship more negatively. This suggests that relationship satisfaction is particularly fragile in more anxious individuals.

More anxious people are also less likely to forgive their partners' transgressions (Kachadourian, Fincham, & Davila, 2004). They also respond to conflict in destructive ways that escalate anger and negativity (Creasey, Kershaw, & Boston, 1999). Their unwillingness to forgive and tendency to escalate conflict may be particularly harmful during the transition to parenthood. In new parents, negative behaviors could stem from a number of sources, including fatigue and work-related stress. However, highly anxious individuals may misattribute their partners' negativity to relationship troubles, rather than transitory, situational stress. Their working models suggest that abandonment is very possible. Thus, negative exchanges present a clear threat to the relationship.

Particularly with the added stress of parenthood, these feelings of vulnerability should lead more anxious individuals to become less satisfied over time.

The baby's addition to the family may also restrict the perceived availability of attachment figures. New parents often devote more time to child care, devoting less time to maintaining the marriage (Kurdek, 1993; MacDermid, Huston, & McHale, 1990). Because highly anxious people emphasize the goal of increasing proximity to close others, they should feel threatened by the sudden drop in shared activities that follows the baby's arrival. Of particular importance to anxious individuals, postpartum healing and child care may limit sexual intimacy with a romantic partner (Condon, Boyce, & Corkindale, 2004). For highly anxious individuals, high levels of sexual satisfaction can prevent dissatisfaction with the overall relationship (Butzer & Campbell, 2008; Little, McNulty, & Russell, 2010). Little et al. (2010) found that sex helped to maintain marital satisfaction by increasing expectations of partner availability. However, anxious individuals undergoing the transition to parenthood may be unable to seek proximity through sex. Without the reassurance gained through physical affection, highly anxious people may feel threatened by their partners' attention to and interactions with the baby. The negative models of the self held by anxious individuals portray the self as unworthy of love (Bartholomew & Horowitz, 1991). In romantic situations, this felt inferiority increases jealousy toward perceived rivals (Guerrero, 1998; Rydell, McConnell, & Bringle, 2004; Sharpsteen & Kirkpatrick, 1997). Similarly, more anxious people may begin to view their babies as rivals for their partners' attention and affection.

There is another path through which anxious individuals may develop perceptions that their baby is interfering with their romantic relationship. Van Egeren (2004) found that couples became less satisfied with their marriage during the transition but more satisfied with their coparenting relationship. Successful coparenting requires partners to cooperatively make childrearing decisions, to support one another's parenting, and not to undermine one another (Van Egeren, 2004). The inverse relationship between marital and coparenting experiences suggests a trade-off, at least for new parents. However, coparenting makes the child the focus of attention in the family. Highly anxious individuals should find this shift in focus from the marriage to parenting to be distressing. Because they have unmet attachment needs, their attachment system remains activated, preventing strong activation of the caregiving system (Kunce & Shaver, 1994). As such, they may find it difficult to balance their roles as romantic partners with their roles as coparents. Highly anxious people may continue to view their spouse primarily as a romantic partner (attachment focus), not as a coparent (caregiving focus). The baby may be perceived as competition for a partner's romantic attention.

Attachment avoidance. For highly avoidant people, marital satisfaction should be most affected by factors that reduce their feelings of independence, autonomy, or control. I expected more avoidant people to be less satisfied, particularly when they perceived a loss of independence. Caregiving represents one threat to autonomy which is particularly relevant during the transition to parenthood. More avoidant individuals find almost all forms of caregiving to be stressful and may resent the individuals for whom they must care (Bowlby, 1979). They should do so, according to Bowlby, because

caregiving works against their ability to maintain emotional distance, which is an important part of the process through which they achieve autonomy-related goals. This discomfort with caregiving is readily apparent in the literature on attachment avoidance and parenting attitudes. Highly avoidant individuals report less interest in being parents, find parenting more stressful and less rewarding, and provide less support to their children (Edelstein et al., 2004; Rholes, Simpson, & Blakely, 1995; Rholes, Simpson, Blakely, Lanigan, & Allen, 1997; Rholes, Simpson, & Friedman, 2006). Highly avoidant parents should become less satisfied in their relationships when they feel less able to pursue their goals of autonomy and emotional detachment because of the demands of family life. The present study tested three potential moderators of the relationship between attachment avoidance and marital satisfaction: perceptions of the baby's interference in outside activities, work-family conflict, and family demand. I expected dissatisfaction to be higher among highly avoidant individuals, particularly if they perceived their baby as an obstacle to their autonomy—that is, if they experienced conflict between their work and family responsibilities, if they perceived their families as placing excessive demands on them, or if they perceived their outside activities to be limited by family responsibilities.

Avoidant individuals who feel a lack of independence, autonomy, or control in a relationship should seek to withdraw from that relationship (Overall & Sibley, 2009). This defensive detachment is one way to deactivate the attachment system. However, this deactivating strategy is likely to be ineffective in couples with infants, who require a great deal of care. As a result, more avoidant parents may come to view their baby as an

obstacle to their happiness. Because activities outside the family (e.g., leisure activities and alone time) would help them feel more autonomous, they may resent their partners or children for interfering. Additionally, they may have more difficulty regulating their negative affect without time away from family (Berant, Mikulincer, & Florian, 2003; Berant, Mikulincer, & Florian, 2001). Feeling restricted by the baby should cause avoidant individuals to become less satisfied in their romantic relationships.

Conflict between work and family roles should also reduce feelings of autonomy. More avoidant individuals emphasize achievement goals, which are focused on the self (Feeney, 2008). They also view career involvement as a way to avoid intimacy with their families (Hazan & Shaver, 1990). Thus, work-family conflict may result in perceptions among avoidant people that their autonomy is restricted by their families. High work-family conflict could lead to withdrawal from more intimate relationships and possibly resentment of one's spouse.

Similar to work-family conflict, more avoidant individuals should become less satisfied when they feel their families are more demanding. Family demand encompasses not only the amount of responsibility individuals have in the family, but also the degree to which they feel these responsibilities are tiring or difficult to manage. Family demands could also lead to perceptions of reduced independence, autonomy, or control and thereby reduce marital satisfaction.

Gender Differences in Marital Satisfaction

According to Schumm, Webb, and Bollman (1998), women are generally less satisfied in their marriages than men (but, see Shapiro et al., 2000). However, the

findings are inconsistent when it comes to gender differences in marital satisfaction trajectories across the transition to parenthood. Some researchers have found that wives experience a sudden, dramatic decrease in satisfaction after birth, whereas husbands decline more gradually (Belsky & Hsieh, 1998; Grote & Clark, 2001). Additionally, husbands' satisfaction does not begin to decline until later in the transition. Doss et al. (2009) showed that both partners experienced steep declines in satisfaction immediately after birth, but wives declined more. Wives also became less confident in their relationship and reported more intense problems. While husbands experienced the same changes, they did so at a more gradual rate. Similarly, Lawrence et al. (2007) found that only wives became less satisfied over time.

Within the context of attachment research, there is no theoretical reason to expect gender by attachment style interactions. However, the transition to parenthood clearly presents different challenges to men and women. Women experience more physical issues, from childbirth recovery to the hormonal changes associated with the postpartum period. Additionally, women typically perform the bulk of childcare and household responsibilities. Thus, their needs may be different from those of their male partners. For these reasons, much research on the transition to parenthood has focused on women. This study investigated change in satisfaction trajectories separately for men and women. Although attachment theory does not suggest specific gender differences, it seems reasonable that any differences between women and men should be stronger immediately after childbirth, when the roles of mothers and fathers are most different.

Present Study

In this study, I investigated changes in marital satisfaction in couples during the first two years of their transition to parenthood. Data were collected in five assessment waves, starting approximately 6 weeks before the birth of their first child. The four postnatal waves occurred at 6, 12, 18, and 24 months. At each phase, couples completed self-report measures of attachment orientations, perceptions of spousal support, work-family conflict, family demand, and reports of negative social exchanges involving partners. Couples also completed measures of the degree to which children appeared to interfere with: 1) outside activities, or 2) the parents' relationships with one another. Using these measures, I tested the following hypotheses.

Attachment anxiety-related hypotheses. Highly anxious individuals should report feeling less satisfied in their romantic relationships, and their satisfaction should decline across the transition to parenthood. However, the anxiety-satisfaction relationship should be moderated by perceived social support, negative social exchange, and perceptions of the baby's interference in the romantic relationship.

Hypothesis 1. Relationship satisfaction should be lower (and should decline over time) when individuals perceive their partners as less supportive, particularly when they are highly anxious.

Hypothesis 2. Relationship satisfaction should be lower (and should decline over time) for individuals who perceive their partners as exhibiting more negative behaviors toward them, with highly anxious individuals declining more steeply.

Hypothesis 3. Relationship satisfaction should be lower (and should decline over time) when individuals perceive that their children are interfering with their romantic relationships, particularly when they are highly anxious.

Attachment avoidance-related hypotheses. Highly avoidant individuals should report feeling less satisfied in their romantic relationships, and their satisfaction should decline across the transition to parenthood. However, the avoidance-satisfaction relationship should be moderated by perceptions of the baby's interference in outside activities, work-family conflict, and family demand.

Hypothesis 4. Relationship satisfaction should be lower (and should decline over time) in individuals who perceive that their children are interfering with their participation in outside activities, particularly when they are highly avoidant.

Hypothesis 5. Relationship satisfaction should be lower (and should decline over time) when individuals experience more work-family conflict, with highly avoidant individuals reporting steeper declines.

Hypothesis 6. Relationship satisfaction should be lower (and should decline over time) for individuals who perceive their family responsibilities as more demanding, particularly when they are highly avoidant.

METHOD*

Participants

At Time 1, participants included 192 couples (194 women and 193 men) who lived in a southwestern U.S. city (i.e., there were 192 couples where both the husband and wife participated, 2 couples where only the wife participated, and 1 couple where only the husband participated). Both partners were living together and expecting their first child. There were 165 couples (169 women and 168 men) at Time 2, 153 couples (157 women and 153 men) at Time 3, 151 couples (154 women and 151 men) at Time 4, and 137 couples (144 women and 137 men) at Time 5. Overall, 55 couples dropped out during the study.

Couples were recruited from childbirth preparation classes offered by a local hospital. Approximately 45% of the couples that were initially approached agreed to participate. Ethnic backgrounds were Caucasian (82 %), Asian (9%), and Hispanic (9%). All but 6% (4% women) of participants had at least some college education. Many participants had a bachelor's degree (45% overall, 24% women), and an additional 25% (12% women) had a post-baccalaureate degree. Household income was moderate; 16% of the sample earned an annual household income under \$25,000, 46% earned \$25,000-\$55,000 per year, 38% earned more than \$55,000 annually, and 6% earned over \$100,000 a year. At Time 1, the mean ages of women and men were 26.7 ($SD = 4.1$) and

*Portions of this section are from Rholes, W. S., Simpson, J. A., Kohn, J. L., Wilson, C. L., Martin, A. M., III, Tran, S., & Kashy, D. A. (in press). Attachment orientations and depression: A longitudinal study of new parents. *Journal of Personality and Social Psychology*. Draft Manuscript pages only. This manuscript is the copyrighted property of the American Psychological Association. Reproduced with permission. No further reproduction or distribution is permitted without written permission from the American Psychological Association.

28.4 ($SD = 4.4$) years, respectively. At Time 1, 5% of couples were living together but not married. Unmarried couples had been cohabiting for a mean of 1.85 years ($SD = 2.19$), and married couples had been married for a mean of 3.3 years ($SD = 2.6$).

Procedures

Couples were recruited from childbirth classes at local hospitals and through the distribution of fliers at hospitals. At an early meeting of the childbirth classes, an experimenter explained the study, and couples were enlisted. In order to participate, couples had to be married or living together with their partner, and both partners had to be expecting their first child. Approximately 6 weeks prior to their expected due date (Time 1), each partner was mailed a set of self-report measures in a separate envelope to complete privately and independently. Partners then returned their completed questionnaires in separate envelopes addressed to the study coordinator (i.e., women's and men's packets were returned separately). Each partner received the postnatal self-report measures at approximately 6 months (Time 2), 12 months (Time 3), 18 months (Time 4), and 24 months (Time 5) after the baby's birth date.¹ At 6 months postpartum (Time 2), both partners received the questionnaires after a laboratory session during which they participated in discussion tasks (these behavioral data are not discussed here). For all other assessment waves, an experimenter mailed the questionnaires to each partner. During each wave, partners were instructed to complete their questionnaires privately and independently and returned their completed packets to the experimenter in

¹ A short questionnaire was also administered to participants two weeks after the child's birth. It assessed various aspects of the labor and delivery experience. These data have already been discussed elsewhere (see Wilson, Rholes, Simpson, & Tran, 2007) and are not relevant to the current investigation.

separate envelopes. Participants were explicitly instructed not to talk to or consult with their partners when completing the surveys. Couples were paid \$50 for completing each of the Time 1, Time 2, and Time 3 questionnaires. To minimize attrition, payment was increased to \$75 per couple for completing the Time 4 and Time 5 questionnaires. Couples in which both partners completed and returned their questionnaires from each phase of the study were then entered into a random drawing for two \$500 cash rewards.

Measures

All participants completed the following measures at each assessment wave.

Relationship satisfaction. The 10-item satisfaction subscale of the Dyadic Adjustment Scale (Spanier, 1976) was used to assess relationship satisfaction. Participants rated how frequently they have various feelings related to satisfaction in their relationship. Most items were rated on a 6-point scale, from 1 (*never*) to 6 (*all the time*). Sample items included, “In general, how often do you think that things between you and your partner/spouse are going well?”, “How often do you and your partner/spouse quarrel?” (reverse-scored). Among other items, participants also rated on a 7-point scale their overall happiness in their relationship, from 0 (*extremely unhappy*) to 6 (*perfect*). Cronbach’s alphas at each phase ranged from .83 to .89 for men and from .81 to .89 for women. With a possible summed score of 58, higher scores indicated greater relationship satisfaction.

Attachment orientations. Attachment avoidance and anxiety were measured using the Experience in Close Relationships Scale (ECR; Brennan, Clark, & Shaver, 1998). The 36-item scale asked participants to rate how well each item described their

feelings toward romantic partners/relationships in general. Each item was answered on a 7-point scale, from 1 (*strongly disagree*) to 7 (*strongly agree*). Eighteen items assessed avoidance (e.g., “I prefer not to show partners how I feel deep down”), and 18 items assessed anxiety (e.g., “My desire to be very close sometimes scares people away”). For avoidance, Cronbach’s alphas at each phase ranged from .84 to .94 for men and from .87 to .96 for women. For anxiety, alphas ranged from .89 to .92 for men and from .84 to .94 for women. For both dimensions, higher scores indicated greater attachment-related avoidance or anxiety.

Perceived social support available from partner. The Social Support Questionnaire (SSQ; Sarason, Levine, Basham, & Sarason, 1983) measured perceptions of the amount of social support that was available from one’s partner. The scale contains 7 items (e.g., “How much can you count on your partner/spouse to make you feel more relaxed when you are under pressure?”). Items were answered on a 7-point scale, from 1 (*not at all*) to 7 (*very much*). Cronbach’s alphas ranged from .91 to .94 for men and from .90 to .95 for women. Mean scores were computed across items, with higher scores indicating that more social support was perceived to be available.

Negative social exchange received. The Test of Negative Social Exchange (Finch, Okun, Pool, & Ruehlman, 1999) assesses perceptions of the frequency with which one’s partner has acted negatively toward the self within the past month. This 24-item scale asks about a variety of negative behaviors, including “put me down”, “lost his/her temper with me”, “seemed bored with me”, and “acted as if I was foolish.” Items were answered on a 9-point scale, from 1 (*not at all*) to 9 (*frequently*). Cronbach’s alphas

ranged from .96 to .98 for men and from .95 to .96 for women. Mean scores were computed such that higher scores indicated perceptions of having received a greater variety and frequency of negative behaviors from the partner.

Baby's interference in the romantic relationship (BIRR). A 5-item scale measured perceptions that the baby was interfering with their romantic relationship. In particular, it assessed perceived competition with the baby for the romantic partner's time, attention, and affection. At Time 1, the scale assessed prenatal expectations of interference, while the postnatal scale assessed perceptions of actual interference. Sample items included, "It is unfair when my baby often receives more attention from my partner than I do," "I resent it when my partner is more affectionate with our baby than s/he is with me," "My partner thinks I am just as important, if not more important, than our baby" (reverse-scored), and "Because of our baby, I get less of my partner's time and attention than I deserve." Participants answered each item on a 7-point scale, from 1 (*not at all like me*) to 7 (*very much like me*). Cronbach's alphas ranged from .81 to .88 for men and from .66 to .82 for women. Mean scores were computed such that higher scores denoted more interference by the baby in the romantic relationship.

Baby's interference in outside activities (BIOA). A 10-item scale was developed for this study to assess the degree to which partners felt bothered or upset that their baby was interfering with their participation in different activities. Activities included hobbies, social life, leisure/recreational activities, free time, and going out. Interference with each activity was rated on a 7-point scale, from 1 (*not at all*) to 7 (*a great deal*). At Time 1, the scale assessed prenatal expectations of interference in outside

activities. Cronbach's alphas ranged from .93 to .95 for men and from .91 to .94 for women. Mean scores were computed such that higher scores indicated feeling more upset at the baby's interference with various activities.

Family demand and work-family conflict. Family demand and work-family conflict were assessed with a scale developed by Yang, Chen, Choi, and Zou (2000). *Family demand* assessed perceptions that family responsibilities were overwhelming, time consuming, or difficult to fulfill. Sample items included, "How often do family duties and responsibilities make you feel tired out?", and "How difficult is it for you to do everything that you should as a family member?" Cronbach's alphas ranged from .72 to .80 for men and from .74 to .80 for women. Higher scores indicated perceptions that the family placed more demands on the individual. *Work-family conflict* assessed perceptions of conflict and interference between job and family responsibilities. The 3 items were: "How much conflict do you feel there is between the demands of your job and your family life?", "How much does your job situation interfere with your family life?", and "How much does your family situation interfere with your job?". They were answered on 7-point scale, from 1 (*not at all/never*) to 7 (*a lot/often*). Cronbach's alphas ranged from .77 to .82 for men and from .81 to .81 for women. Higher scores indicated greater perceptions of work-family conflict.

Data Structure

Dyadic growth curve models were tested using multilevel modeling (MLM; Kashy & Donnellan, 2008). In these analyses, dyadic interdependence was modeled in two ways: as similarity on the outcome at birth (i.e., by including a correlation between

the spouses' intercepts), and as unique similarity at the specific time-points (i.e., by including a correlation between the spouses' time-specific residuals).

In this data set, I defined time zero as the date of birth, and our Time variable was scored in months since the child's birth. Although the study had five assessment waves, the exact timing of each assessment varied across couples. Standard deviations for Time within each assessment wave ranged from .36 months to 1.23 months. Because time zero was set at the child's birth, the intercept indicates marital satisfaction at birth, and the slope for time represents the degree to which satisfaction changes each month. Gender was coded as -1 for women and 1 for men. All continuous predictor variables were centered on the grand mean.

Data Analytic Models

Growth curve models estimated initial levels and change trajectories of marital satisfaction over the first two years of the transition to parenthood. Moderated growth models of marital satisfaction were examined in two steps—first with, then without, the nonlinear (quadratic) fixed effects of time. These models included fixed effects for attachment (anxiety or avoidance), gender, and the hypothesized moderator (e.g., perceived social support or baby's interference). All interactions were included, resulting in a possible four-way interaction between time, gender, attachment, and the moderator. Initial analyses tested for both linear and nonlinear effects of time, including interactions for each of these two measures of time with other predictor variables. If there were no significant quadratic time effects, quadratic terms were removed from the model. Further analyses were conducted which included only linear effects of time and their

corresponding interaction terms. Only models with significant (and attachment-relevant) interactions are presented (i.e., the nonlinear model is only presented when it contains significant interaction effects). Significant interactions are graphed and interpreted, using 1 *SD* above and below the grand mean as high and low values for continuous predictors (Aiken & West, 1991).

RESULTS

Preliminary Analyses

Table 1 presents grand means and standard deviations for the study variables, averaging across all five waves, separately for men and women. Table 2 presents correlations between the variables assessed at Time 1. Of particular interest is the correlation between husbands' and wives' marital satisfaction. This strong correlation provides evidence of nonindependence between dyad members. As such, it is necessary to control for this in the multilevel models.

Table 1

Means and Standard Deviations for Study Variables by Gender

Variable	Men		Women	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Marital satisfaction	41.77	6.08	42.36	5.40
Attachment anxiety	2.59	0.91	3.15	1.12
Attachment avoidance	2.37	0.89	2.30	1.01
Perceived social support	5.88	0.96	6.04	0.92
Negative social exchange	2.66	1.52	2.22	1.22
BIRR	2.05	1.06	1.74	0.95
BIOA	3.10	1.41	2.95	1.41
Work-family conflict	3.57	1.34	2.82	1.61
Family demand	4.30	1.27	4.73	1.36

Note. BIRR = perceptions of the baby's interference in the romantic relationship; BIOA = perceptions of the baby's interference in outside activities.

First, analyses were conducted to test whether participants who completed the study were different from those who dropped out. Participants were considered dropouts if they did not complete the final assessment wave (Time 5), regardless of when they

Table 2

Correlations for Study Variables at Time 1 for Men and Women

Variable	1	2	3	4	5	6	7	8	9
1. Marital satisfaction	(.57)	-.28	-.34	.58	-.67	-.12	-.11	-.18	-.10
2. Anxiety	-.07	(.24)	.18	-.33	.40	.28	.16	.15	.18
3. Avoidance	-.33	.26	(.18)	-.27	.29	.002	.10	.004	.09
4. Perceived support	.41	-.27	-.53	(.23)	-.65	-.08	-.01	-.16	-.10
5. Negative exchange	-.52	.25	.33	-.45	(.47)	.19	.18	.22	.14
6. BIRR	-.11	.31	.05	-.14	.25	(.22)	.34	.11	.13
7. BIOA	-.03	.14	.23	-.14	.15	.29	(.19)	.15	-.001
8. Work-family conflict	-.09	.25	.19	-.21	.31	.23	.23	(.07)	.49
9. Family demand	-.06	.22	.15	-.09	.29	.28	.21	.42	(.26)

Note. Correlations among variables collected from men (husbands) appear below the diagonal; correlations among variables collected from women (wives) appear above the diagonal. The values on the diagonal (in parentheses) are the correlations between measures collected from each partner (e.g., the correlation between husbands' and wives' perceived social support). Significant correlations are larger than .14 ($p < .05$), .19 ($p < .01$), and .24 ($p < .001$). BIRR = perceptions of the baby's interference in the romantic relationship; BIOA = perceptions of the baby's interference in outside activities (adapted from Rholes et al., in press).

actually dropped out. Because data may not be missing at random, it is important to note how these individuals differed from our final sample. Independent-samples *t* tests were conducted using Time 1 variables (see Table 3). Dropouts reported significantly more negative exchange than those who completed the study. Prior to childbirth, dropouts had also been married for a shorter length of time. They were also younger, less educated, and reported less household income. But importantly, the groups did not differ on marital satisfaction, attachment anxiety, or attachment avoidance.

Table 3

Differences between Completers and Dropouts on Phase 1 Study Variables

Variable	Completers		Dropouts		<i>t</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Marital satisfaction	42.96	4.24	41.79	6.95	1.62
Attachment anxiety	3.02	1.02	3.11	1.08	0.80
Attachment avoidance	2.39	0.93	2.50	0.91	1.03
Perceived social support	6.12	0.78	6.01	0.97	1.11
Negative social exchange	2.20	1.12	2.57	1.60	2.54*
BIRR	2.40	1.08	2.16	1.19	1.92
BIOA	3.52	1.38	3.36	1.46	0.99
Work-family conflict	3.05	1.30	3.20	1.53	0.85
Family demand	4.02	1.22	4.23	1.30	1.44
Marriage length (years)	3.45	2.55	2.73	2.73	2.32*
Age	28.09	4.21	26.11	4.27	4.09***
Level of education	4.96	1.16	4.10	1.53	5.92***
Household income	3.41	1.67	2.82	1.46	3.18**

Note. BIRR = perceptions of the baby's interference in the romantic relationship; BIOA = perceptions of the baby's interference in outside activities. Level of education was rated on the following 7-point scale: 1 (*no high school diploma or GED*), 2 (*high school diploma or GED*), 3 (*some college or technical school, but no degree*), 4 (*2-year degree*), 5 (*4-year degree*), 6 (*master's degree*), or 7 (*doctoral degree*).

Household income was rated on the following 7-point scale: 1 (*under \$25,000*), 2 (*\$25,000 to \$39,999*), 3 (*\$40,000 to \$54,999*), 4 (*\$55,000 to \$69,999*), 5 (*\$70,000 to \$84,999*), 6 (*\$85,000 to \$99,999*), or 7 (*over \$100,000*) (adapted from Rholes et al., in press).

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

Attachment Anxiety

Anxiety base model. In this model, I examined linear changes in marital satisfaction over time, as moderated by gender and anxiety. As shown in Table 4, there was a significant main effect for time. After controlling for anxiety, the interaction between gender and time was significant.

Consistent with the hypothesis, there was also an interaction between anxiety and time. This interaction occurred within the context of a significant three-way interaction between gender, anxiety, and time (see Table 5 for simple slopes and Figure 1 for an illustration). When anxiety was high, men and women reported the same level of satisfaction at birth. Although satisfaction declined for all highly anxious individuals, the decline was much steeper for highly anxious men. In contrast, for less anxious people, men did not significantly change, while women reported a small, gradual decline.

Table 4

Marital Satisfaction as a Function of Attachment Anxiety or Avoidance

Fixed effects	Attachment dimension			
	Anxiety		Avoidance	
	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>
Intercept	42.685	134.85***	42.646	143.88***
Gender	-0.187	1.12	-0.031	0.21
Time	-0.083	5.24***	-0.069	4.42***
Attachment	-0.162	0.85	-1.381	7.30***
Gender × Time	-0.028	2.43*	-0.023	2.29*
Gender × Attachment	0.227	1.28	-0.213	1.20
Time × Attachment	-0.032	2.49*	-0.030	2.46*
Gender × Time × Attachment	-0.039	3.20**	-0.035	2.99**

Note. For gender, 1 = men, -1 = women.

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

Table 5

Simple Slopes for Three-Way Interactions between Gender, Time, and Attachment Anxiety or Avoidance

	Attachment anxiety			
	Low anxiety		High anxiety	
	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>
Men				
Intercept	42.428	92.71***	42.568	80.69***
Slope for Time	-0.037	-1.37	-0.186	-5.43***
Women				
Intercept	43.284	95.79***	42.459	118.87***
Slope for Time	-0.063	-2.52*	-0.048	-2.38*
	Attachment avoidance			
	Low avoidance		High avoidance	
	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>
Men				
Intercept	44.132	96.06***	41.099	97.68***
Slope for Time	-0.030	-1.07	-0.153	-5.91***
Women				
Intercept	43.788	115.24***	41.566	108.17***
Slope for Time	-0.051	-2.34*	-0.041	-1.87

Note. For gender, 1 = men, -1 = women.

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

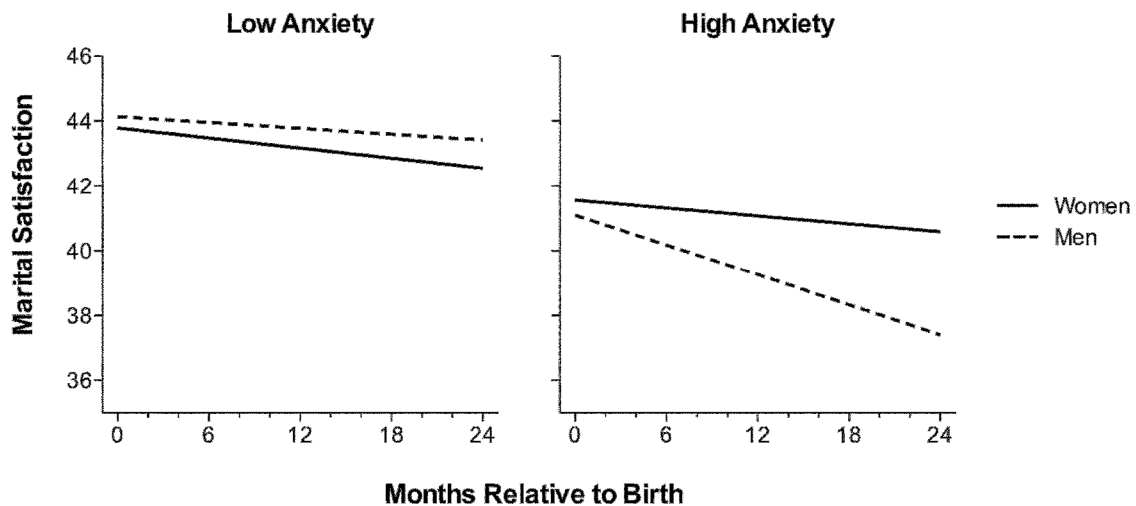


Figure 1. Linear changes in satisfaction over time by gender and attachment anxiety.

Perceived social support (Hypothesis 1). This model predicted marital satisfaction using gender, time, attachment anxiety, and perceived social support, including all interaction terms. As presented in Table 6, the main effects for time and perceived support were significant. There was a significant two-way interaction between time and perceived support.

However, these effects occurred within the context of a significant four-way interaction. Figure 2 illustrates this interaction (see Table 7 for the simple slopes). When participants perceived less support, they were less satisfied at birth. Under low support, highly anxious men declined steeply, while women remained stable throughout the transition. For less anxious individuals who perceived less support, men remained stable in their satisfaction, and women became less satisfied over time. In contrast, all individuals experienced stable, high levels of satisfaction when they perceived more support from their partners, regardless of anxiety level or gender.

Negative social exchange received (Hypothesis 2). This model predicted marital satisfaction using gender, time, attachment anxiety, and negative social exchange received, including all interaction terms. As shown in Table 6, the main effects of time and negative social exchange were significant. There was also a significant two-way interaction between gender and time. Further, there were two significant three-way interactions with gender and anxiety: one involving time and another involving negative social exchange.

Table 6

Marital Satisfaction as a Function of Anxiety, Moderated by Perceived Social Support, Negative Social Exchange, and Work-Family Conflict

Fixed effects	Moderator					
	Perceived social support		Negative exchange		Work-family conflict	
	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>
Intercept	42.501	160.22***	42.435	169.48***	42.593	133.58***
Gender	-0.122	-0.74	0.301	1.75	-0.121	-0.68
Time	-0.039	-2.65**	-0.045	-2.90**	-0.065	-3.86***
Anxiety	-0.010	-0.05	0.153	0.85	-0.191	-0.97
Moderator	1.807	8.30***	-1.699	-10.73***	-0.325	-2.42*
Gender × Time	-0.003	-0.25	-0.024	-2.08*	-0.009	-0.73
Gender × Anxiety	0.285	1.66	0.168	0.98	0.177	0.96
Gender × Moderator	0.235	1.15	0.142	0.98	0.049	0.36
Time × Anxiety	-0.005	-0.44	-0.019	-1.57	-0.016	-1.22
Time × Moderator	0.044	3.27***	-0.012	-1.19	-0.020	-2.19*
Anxiety × Moderator	0.178	1.12	0.047	0.39	0.131	1.06
Gender × Time × Anxiety	-0.021	-1.75	-0.029	-2.44*	-0.024	-1.85
Gender × Time × Moderator	0.016	1.23	-0.012	-1.30	-0.016	-1.75
Gender × Anxiety × Moderator	-0.280	-1.75	0.346	3.10**	0.225	1.84
Time × Anxiety × Moderator	-0.0005	-0.05	-0.005	-0.66	-0.014	-1.64
Gender × Time × Anxiety × Moderator	0.021	2.03*	-0.018	-2.46*	-0.019	-2.27*

Note. For gender, 1 = men, -1 = women.

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

Table 7

Simple Slopes for Four-Way Interactions with Anxiety and Perceived Social Support, with Anxiety and Negative Social Exchange, and with Anxiety and Work-Family Conflict

	Low anxiety				High anxiety			
	Low perceived support		High perceived support		Low perceived support		High perceived support	
	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>
Men								
Intercept	40.065	68.36***	44.110	89.05***	40.851	78.06***	44.492	68.96***
Slope for Time	-0.050	-1.32	0.022	0.70	-0.147	-4.54***	0.008	0.17
Women								
Intercept	41.913	57.03***	43.958	91.99***	40.374	98.87***	44.249	111.13***
Slope for Time	-0.101	-2.48*	-0.003	-0.11	-0.025	-1.01	-0.015	-0.57
	Low negative exchange		High negative exchange		Low negative exchange		High negative exchange	
	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>
Men								
Intercept	45.153	90.13***	39.637	73.63***	44.673	63.38***	41.483	82.39***
Slope for Time	-0.018	-0.54	-0.017	-0.49	-0.053	-1.06	-0.186	-5.65***
Women								
Intercept	44.280	96.23***	40.020	49.10***	45.135	119.81***	39.101	94.64***
Slope for Time	-0.012	-0.39	-0.050	-1.07	-0.029	-1.12	0.008	0.31
	Low work-family conflict		High work-family conflict		Low work-family conflict		High work-family conflict	
	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>
Men								
Intercept	43.486	69.96***	41.486	68.08***	42.302	46.86***	42.613	69.34***
Slope for Time	-0.027	-0.71	-0.034	-0.93	-0.008	-0.12	-0.225	-5.82***
Women								
Intercept	43.522	85.89***	42.685	63.51***	43.047	104.06***	41.600	91.55***
Slope for Time	-0.049	-1.65	-0.079	-1.91	-0.049	-1.96	-0.045	-1.61

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

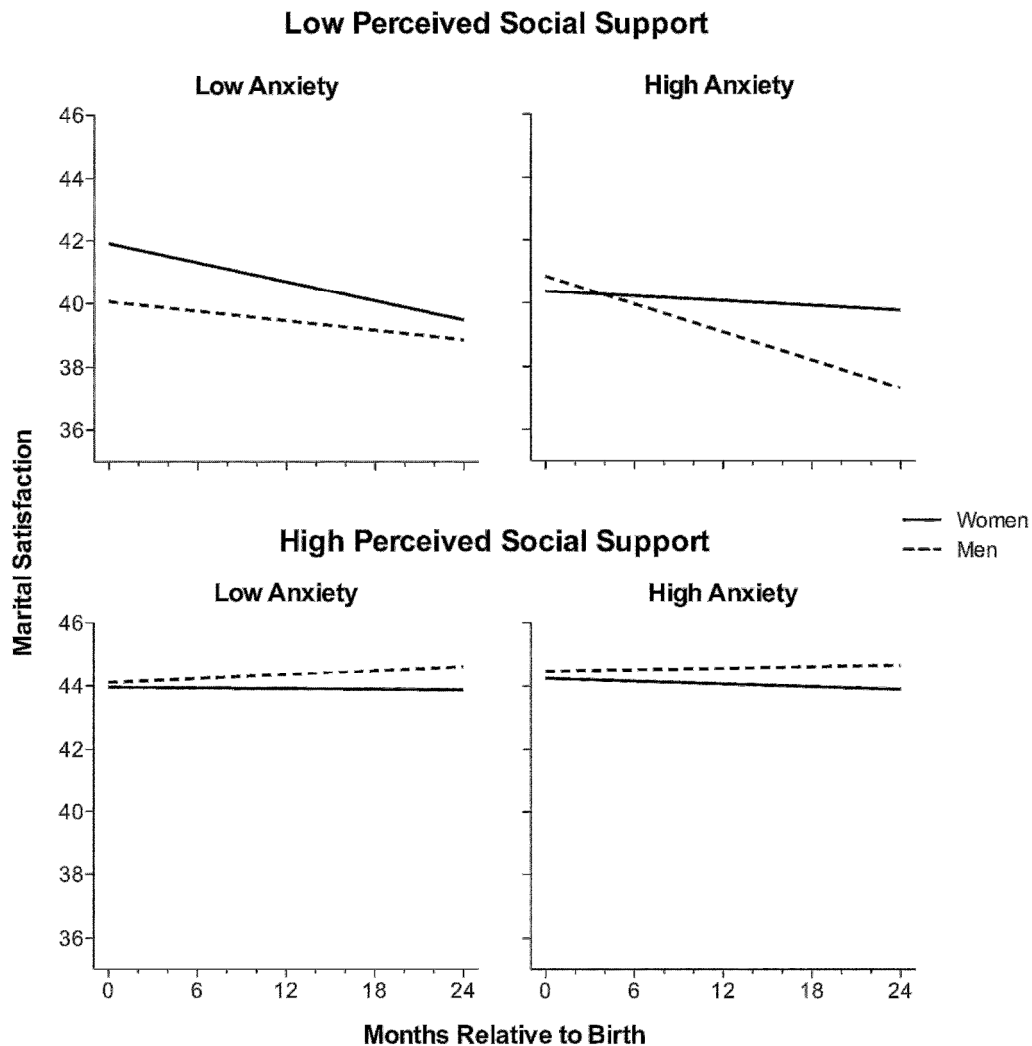


Figure 2. Linear changes in satisfaction over time by gender, anxiety, and perceived social support.

However, these effects occurred within the context of a significant four-way interaction. Figure 3 illustrates this interaction (see Table 7 for the simple slopes). When new parents reported more negative social exchange from their partners, they were less satisfied at birth and throughout the transition. Highly anxious men were an exception to this. Although they were somewhat more satisfied at birth, they experienced a steep decline in satisfaction across the transition. In contrast, for individuals who reported less

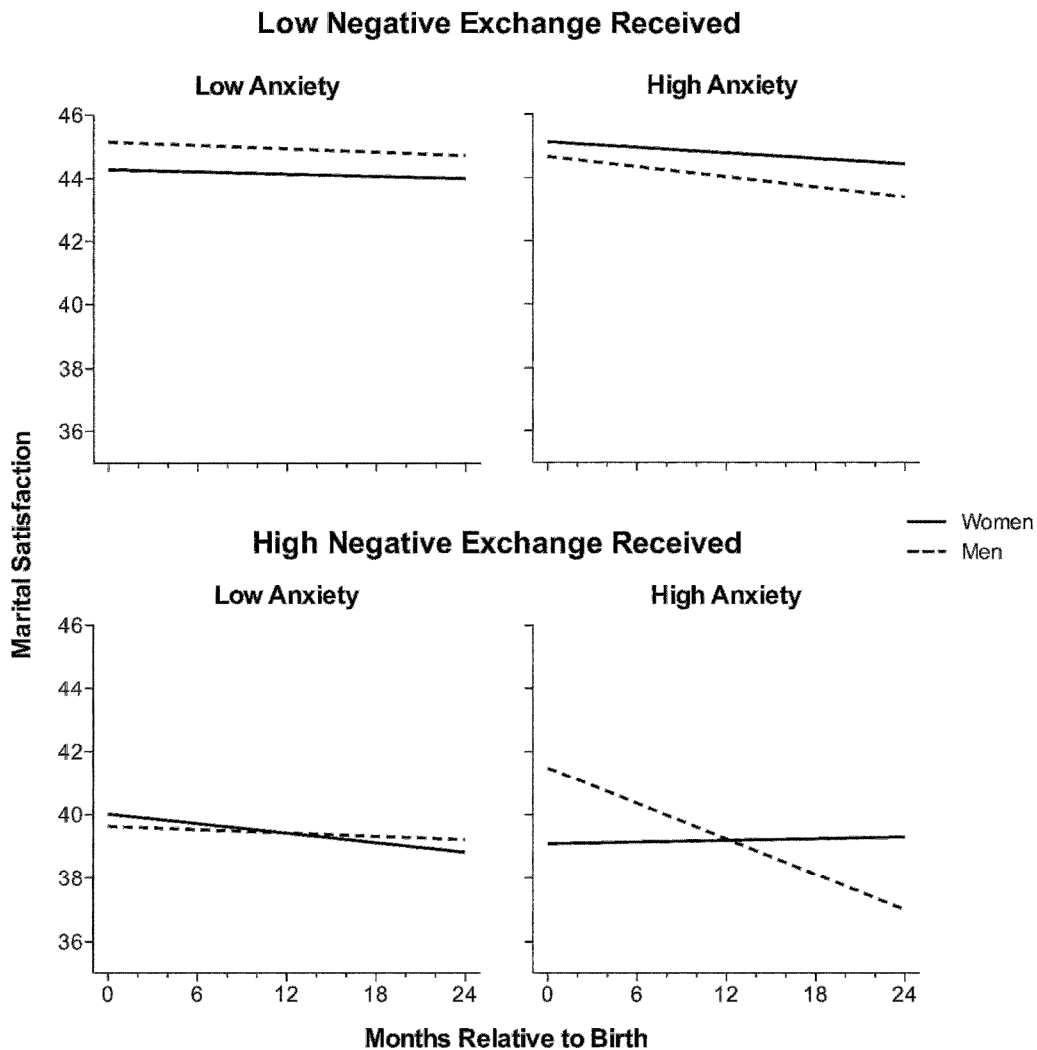


Figure 3. Linear changes in satisfaction over time by gender, anxiety, and negative social exchange.

negative exchange from their partners, satisfaction was higher at birth and remained stable across the transition, regardless of anxiety level or gender.

Baby's interference in the romantic relationship (Hypothesis 3). This model used gender, anxiety, and BIRR to predict changes in marital satisfaction over time (see Table 8). There was a significant main effect for time, as well as a significant two-way

interaction between time and BIRR. Satisfaction declined over time for all individuals, but the decline was steeper for individuals high in BIRR ($b = -0.11$, $t(429) = -5.32$, $p < .001$) than individuals low in BIRR ($b = -0.06$, $t(472) = -2.51$, $p = .01$).

Additionally, there was a three-way interaction between gender, anxiety, and BIRR (see Figure 4, with simple slopes in Table 8). For highly anxious individuals, men were less satisfied at all levels of BIRR. Highly anxious women were significantly less satisfied when they perceived more BIRR. For less anxious individuals, men were highly

Table 8

Marital Satisfaction as Moderated by Anxiety and Baby's Interference in the Romantic Relationship

Fixed effects	<i>b</i>	<i>t</i>
Intercept	42.729	133.60***
Gender	-0.275	-1.52
Time	-0.085	-5.03***
Anxiety	-0.184	-0.90
BIRR	-0.241	-1.37
Gender × Time	-0.011	-0.82
Gender × Anxiety	0.154	0.79
Gender × BIRR	-0.133	-0.78
Time × Anxiety	-0.021	-1.47
Time × BIRR	-0.028	-2.10*
Anxiety × BIRR	0.048	0.30
Gender × Time × Anxiety	-0.024	-1.73
Gender × Time × BIRR	0.001	0.08
Gender × Anxiety × BIRR	0.355	2.34*
Time × Anxiety × BIRR	-0.012	-1.00
Gender × Time × Anxiety × BIRR	-0.013	-1.09
Simple slopes for BIRR	<i>b</i>	<i>t</i>
Low anxiety		
Men	-0.802	-2.10*
Women	0.218	0.62
High anxiety		
Men	0.053	0.14
Women	-0.435	-2.04*

Note. BIRR = perceptions of the baby's interference in the romantic relationship.

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

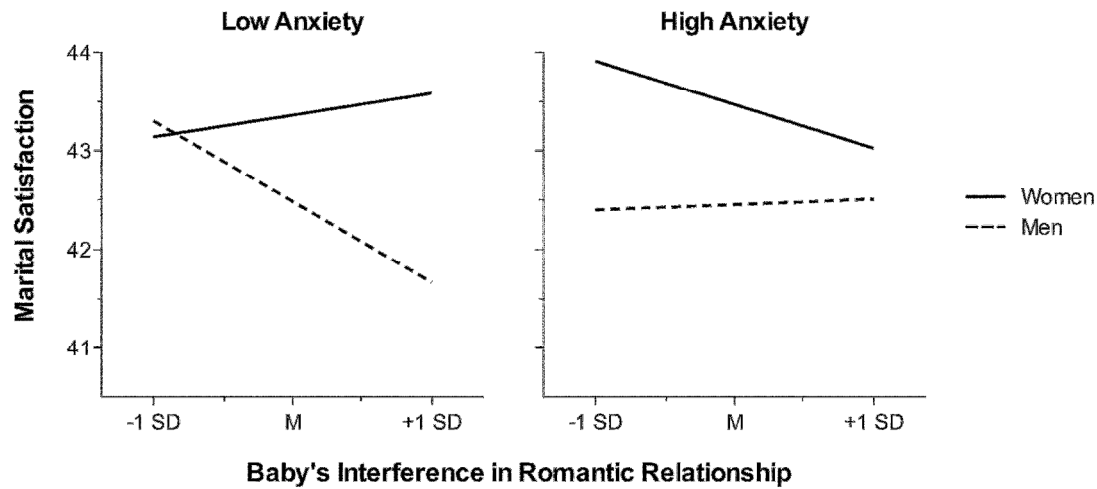


Figure 4. Marital satisfaction, moderated by gender, anxiety, and BIRR.

satisfied at low levels of BIRR and much less satisfied at high levels of BIRR. Less anxious women were more satisfied, regardless of how much BIRR they perceived.²

Attachment Avoidance

Avoidance base model. As with anxiety, I tested for a three-way interaction between gender, avoidance, and time (linear only). As shown in Table 4, marital satisfaction significantly declined over time and was significantly lower in more avoidant individuals. When controlling for avoidance, the interaction between gender and time was significant.

Consistent with the hypothesis, there was also a significant interaction between avoidance and time. This interaction occurred within the context of a significant three-

² Because the four-way interaction with time was not significant, I also tested a model that removed all time-related terms. In this model, the three-way interaction was still significant, $b = 0.24$, $t(1316) = 2.20$, $p = .03$. The interaction for the reduced model was identical, with one exception: Highly anxious men were less satisfied when they felt that their babies interfered more with the romantic relationship. However, this model did not account for the main effect of time or the interaction between time and BIRR. Because of these significant effects, the interaction from the full model was reported.

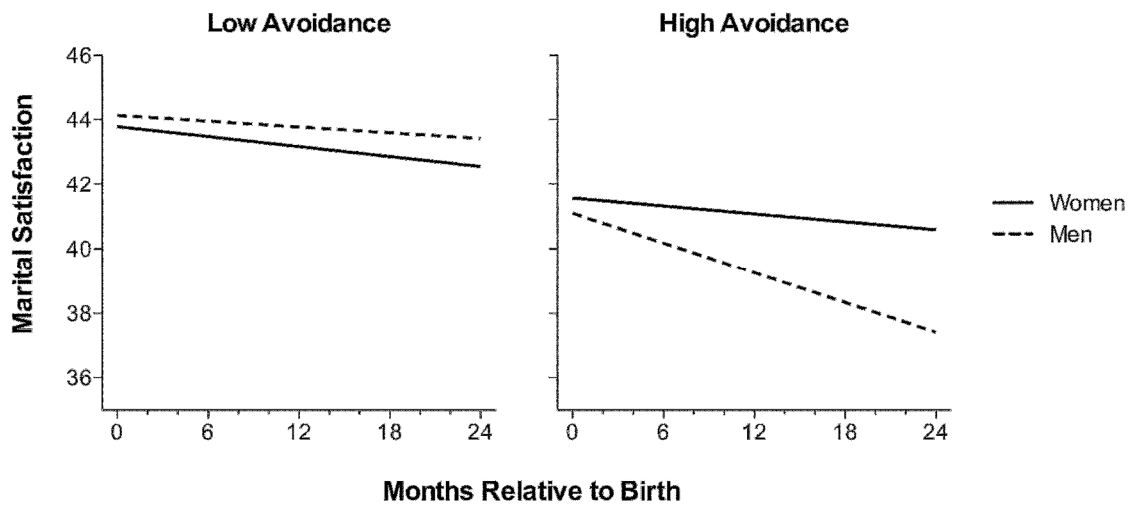


Figure 5. Linear changes in satisfaction over time by gender and attachment avoidance.

way interaction between gender, avoidance, and time. This interaction is illustrated in Figure 5, with simple slopes in Table 5. Highly avoidant individuals reported lower levels of satisfaction at birth. While highly avoidant women remained stable across the transition, highly avoidant men reported a steep decline. In contrast, less avoidant individuals were more satisfied at birth. Men did not change significantly, and women reported a small, gradual decline.

Baby's interference in outside activities (Hypothesis 4). This model predicted marital satisfaction using gender, time, attachment avoidance, and BIOA, including all interaction terms (see Table 9). There were significant main effects for time and avoidance. There was also a significant two-way interaction between time and BIOA. Further, there were two significant three-way interactions with gender and avoidance: one involving time and another involving BIOA.

Table 9

Marital Satisfaction as a Function of Avoidance, Moderated by Baby's Interference in Outside Activities, Work-Family Conflict, and Negative Social Exchange

Fixed effects	Moderator					
	BIOA		Work-family conflict		Negative exchange	
	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>
Intercept	42.671	143.07***	42.555	143.65***	42.497	181.20***
Gender	-0.083	-0.56	0.054	0.36	0.405	2.70**
Time	-0.071	-4.53***	-0.055	-3.50***	-0.038	-2.57*
Avoidance	-1.365	-6.91***	-1.453	-7.40***	-0.917	-4.93***
Moderator	-0.163	-1.35	-0.325	-2.72**	-1.589	-11.18***
Gender × Time	-0.016	-1.60	-0.011	-1.03	-0.021	-2.09*
Gender × Avoidance	-0.294	-1.58	-0.217	-1.17	-0.127	-0.70
Gender × Moderator	0.080	0.71	0.116	0.97	0.288	2.29*
Time × Avoidance	-0.024	-1.89	-0.006	-0.46	-0.013	-1.02
Time × Moderator	-0.019	-2.31*	-0.012	-1.42	0.004	0.37
Avoidance × Moderator	-0.073	-0.61	0.071	0.56	-0.246	-1.93
Gender × Time × Avoidance	-0.026	-2.16*	-0.019	-1.49	-0.021	-1.72
Gender × Time × Moderator	-0.006	-0.77	-0.014	-1.70	-0.009	-1.05
Gender × Avoidance × Moderator	0.293	2.42*	0.230	1.84	0.047	0.38
Time × Avoidance × Moderator	-0.010	-1.26	-0.021	-2.60**	0.002	0.20
Gender × Time × Avoidance × Moderator	-0.024	-3.08**	-0.028	-3.50***	-0.017	-2.03*

Note. BIOA = perceptions of the baby's interference in outside activities. For gender, 1 = men, -1 = women.

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

Table 10

Simple Slopes for Four-Way Interactions with Avoidance and Baby's Interference in Outside Activities, with Avoidance and Work-Family Conflict, and with Avoidance and Negative Social Exchange

	Low avoidance				High avoidance			
	Low BIOA		High BIOA		Low BIOA		High BIOA	
	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>
Men								
Intercept	44.578	74.86***	43.754	76.87***	40.832	59.51***	41.187	93.35***
Slope for Time	-0.050	-1.39	-0.029	-0.75	-0.053	-1.28	-0.216	-7.39***
Women								
Intercept	43.624	90.78***	43.922	95.50***	42.569	79.20***	40.903	90.68***
Slope for Time	-0.019	-0.67	-0.095	-3.24**	-0.052	-1.68	-0.052	-1.79
	Low work-family conflict		High work-family conflict		Low work-family conflict		High work-family conflict	
	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>
Men								
Intercept	44.957	69.28***	43.440	71.75***	40.902	58.44***	41.137	83.69***
Slope for Time	-0.074	-1.78	-0.010	-0.28	0.020	0.43	-0.198	-6.60***
Women								
Intercept	44.120	103.31***	43.234	81.14***	42.231	95.64***	40.420	74.35***
Slope for Time	-0.049	-1.93	-0.063	-1.86	-0.045	-1.71	-0.018	-0.59
	Low negative exchange		High negative exchange		Low negative exchange		High negative exchange	
	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>
Men								
Intercept	45.449	85.52***	42.341	71.85***	43.990	75.10***	39.826	102.43***
Slope for Time	-0.040	-1.14	-0.015	-0.37	-0.064	-1.59	-0.119	-4.63***
Women								
Intercept	45.078	112.08***	40.610	60.82***	44.354	100.79***	38.326	85.73***
Slope for Time	-0.018	-0.70	-0.032	-0.77	-0.051	-1.80	0.032	1.13

Note. BIOA = perceptions of the baby's interference in outside activities.

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

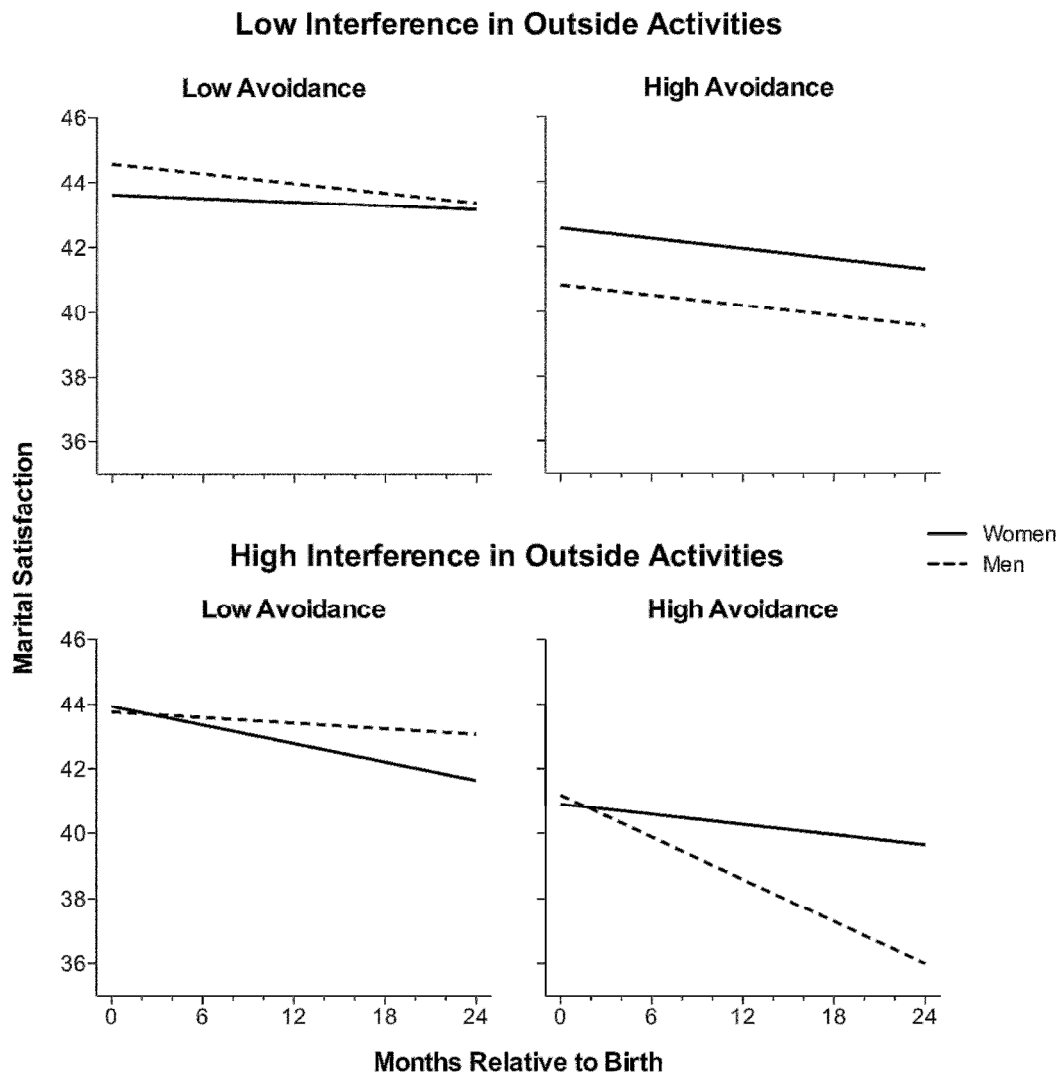


Figure 6. Linear changes in satisfaction over time by gender, avoidance, and baby's interference in outside activities.

These effects occurred within the context of a significant four-way interaction. Figure 6 illustrates this interaction (see Table 10 for the simple slopes). At high levels of avoidance and BIOA, new parents were moderately satisfied at the child's birth. Although men became significantly less satisfied over time, women's satisfaction level did not change. When less avoidant individuals reported greater BIOA, they were more

satisfied at birth. Men's satisfaction was stable over time, while women became somewhat less satisfied. In contrast, when BIOA was low, highly avoidant individuals were moderately satisfied at birth and across the transition, with men being somewhat less satisfied than women. At low levels of avoidance and BIOA, men and women reported stable, high levels of satisfaction.

Work-family conflict (Hypothesis 5). This model used gender, avoidance, and work-family conflict to predict changes in marital satisfaction over time, including all interaction terms. As shown in Table 9, there were significant main effects for time, avoidance, and work-family conflict. There was also a significant three-way interaction between time, avoidance, and work-family conflict.

However, these effects occurred within the context of a significant four-way interaction (see Figure 7, with simple slopes in Table 10). At high levels of work-family conflict, highly avoidant men were less satisfied at birth and declined steeply over time. When highly avoidant women experienced more work-family conflict, they reported less satisfaction at birth but remained stable over time. In contrast, when less avoidant individuals experienced more work-family conflict, they reported greater satisfaction at birth and did not significantly change over time. When work-family conflict was low, highly avoidant individuals reported somewhat higher satisfaction, which remained stable throughout the transition. For individuals low in avoidance and low in work-family conflict, satisfaction was higher at birth. While men reported a gradual decline in satisfaction, women remained stable.

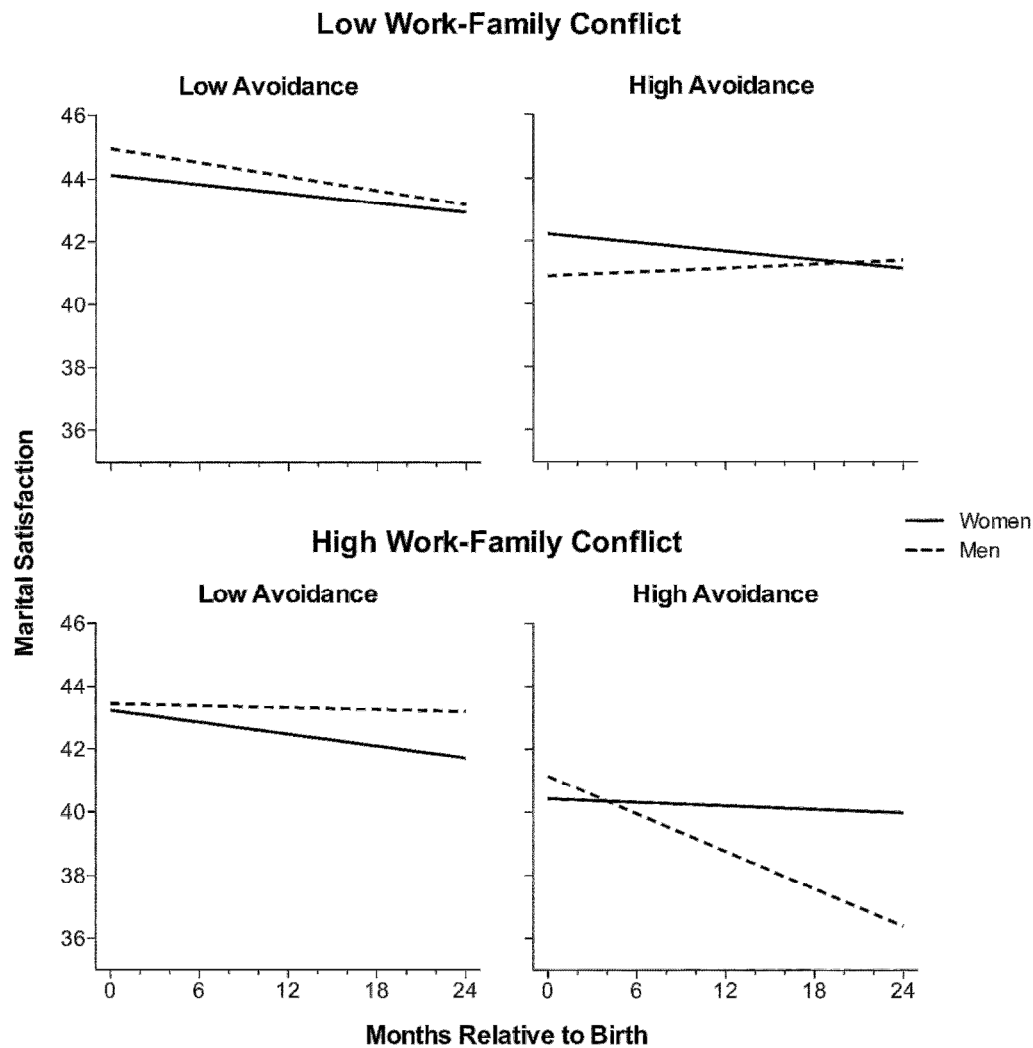


Figure 7. Linear changes in satisfaction over time by gender, avoidance, and work-family conflict.

Family demand (Hypothesis 6). This model used gender, avoidance, and family demand to predict nonlinear changes in marital satisfaction over time (see Table 11). Significant main effects emerged for avoidance and the linear effect of time. There were five significant two-way interactions. There was a significant interaction between gender and time. Additionally, family demand interacted with gender, avoidance, and both the linear and nonlinear effects of time. There were three significant three-way interactions.

There was a significant interaction between gender, time, and avoidance. Avoidance and family demand also significantly interacted with the linear and nonlinear effects of time.

There also were two significant four-way interactions involving gender, avoidance, family demand, and time (linear and nonlinear terms). The nonlinear interaction is illustrated in Figure 8 (see Table 12 for tests of simple slopes). When

Table 11

Marital Satisfaction as a Function of Attachment Avoidance Moderated by Family Demand and Perceived Social Support

Fixed effects	Moderator			
	Family demand		Perceived support	
	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>
Intercept	42.826	144.27***	42.394	156.13***
Gender	0.064	0.37	-0.0009	-0.01
Time	-0.091	-2.67**	-0.020	-0.60
Time ²	0.001	0.81	-0.0004	-0.29
Avoidance	-1.480	-7.09***	-0.963	-4.50***
Moderator	-0.094	-0.64	1.729	6.79***
Gender × Time	-0.067	-2.02*	0.024	0.74
Gender × Time ²	0.002	1.16	-0.001	-1.05
Gender × Avoidance	-0.149	-0.75	-0.058	-0.28
Gender × Moderator	0.280	2.02*	-0.219	-0.93
Time × Avoidance	-0.011	-0.32	-0.041	-1.07
Time × Moderator	-0.066	-2.50*	-0.029	-0.69
Time ² × Avoidance	-0.0004	-0.29	0.002	1.22
Time ² × Moderator	0.002	2.04*	0.002	1.45
Avoidance × Moderator	-0.518	-3.38***	0.064	0.32
Gender × Time × Avoidance	-0.078	-2.21*	-0.071	-1.86
Gender × Time × Moderator	-0.027	-1.06	0.030	0.72
Gender × Time ² × Avoidance	0.002	1.29	0.003	1.75
Gender × Time ² × Moderator	0.0005	0.52	-0.0004	-0.26
Gender × Avoidance × Moderator	0.016	0.11	-0.251	-1.25
Time × Avoidance × Moderator	0.081	2.91**	0.039	1.10
Time ² × Avoidance × Moderator	-0.003	-3.04**	-0.0009	-0.68
Gender × Time × Avoidance × Moderator	0.063	2.26*	0.139	3.92***
Gender × Time ² × Avoidance × Moderator	-0.003	-3.00**	-0.005	-3.89***

Note. For gender, 1 = men, -1 = women.

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

Table 12

Simple Slopes for Four-Way Interactions with Avoidance and Family Demand and with Avoidance and Perceived Social Support

	Low avoidance				High avoidance			
	Low family demand		High family demand		Low family demand		High family demand	
	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>
Men								
Intercept	43.554	80.23***	45.326	59.29***	41.730	77.52***	40.950	66.08***
Slope for Time	0.234	2.63**	-0.381	-3.02**	-0.302	-2.81**	-0.184	-1.71
Slope for Time ²	-0.011	-3.05**	0.013	2.66**	0.009	1.92	-0.0009	-0.20
Women								
Intercept	43.849	97.54***	44.207	73.05***	42.674	85.10***	40.318	68.15***
Slope for Time	-0.012	-0.17	-0.162	-1.85	0.066	0.71	0.011	0.14
Slope for Time ²	-0.0006	-0.20	0.004	1.23	-0.005	-1.20	-0.0005	-0.19
	Low perceived support		High perceived support		Low perceived support		High perceived support	
	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>
	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>	<i>b</i>	<i>t</i>
Men								
Intercept	41.777	51.34***	44.953	79.27***	40.168	89.54***	42.676	67.189***
Slope for Time	0.268	1.88	-0.048	-0.51	-0.262	-3.65***	0.058	0.48
Slope for Time ²	-0.013	-2.39*	0.001	0.34	0.006	2.23*	-0.001	-0.24
Women								
Intercept	41.705	57.55***	44.807	97.47***	39.420	78.96***	43.650	84.33***
Slope for Time	-0.108	-0.97	-0.038	-0.55	0.128	1.73	-0.160	-1.87
Slope for Time ²	0.003	0.77	0.0004	0.17	-0.006	-2.22*	0.007	2.01*

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

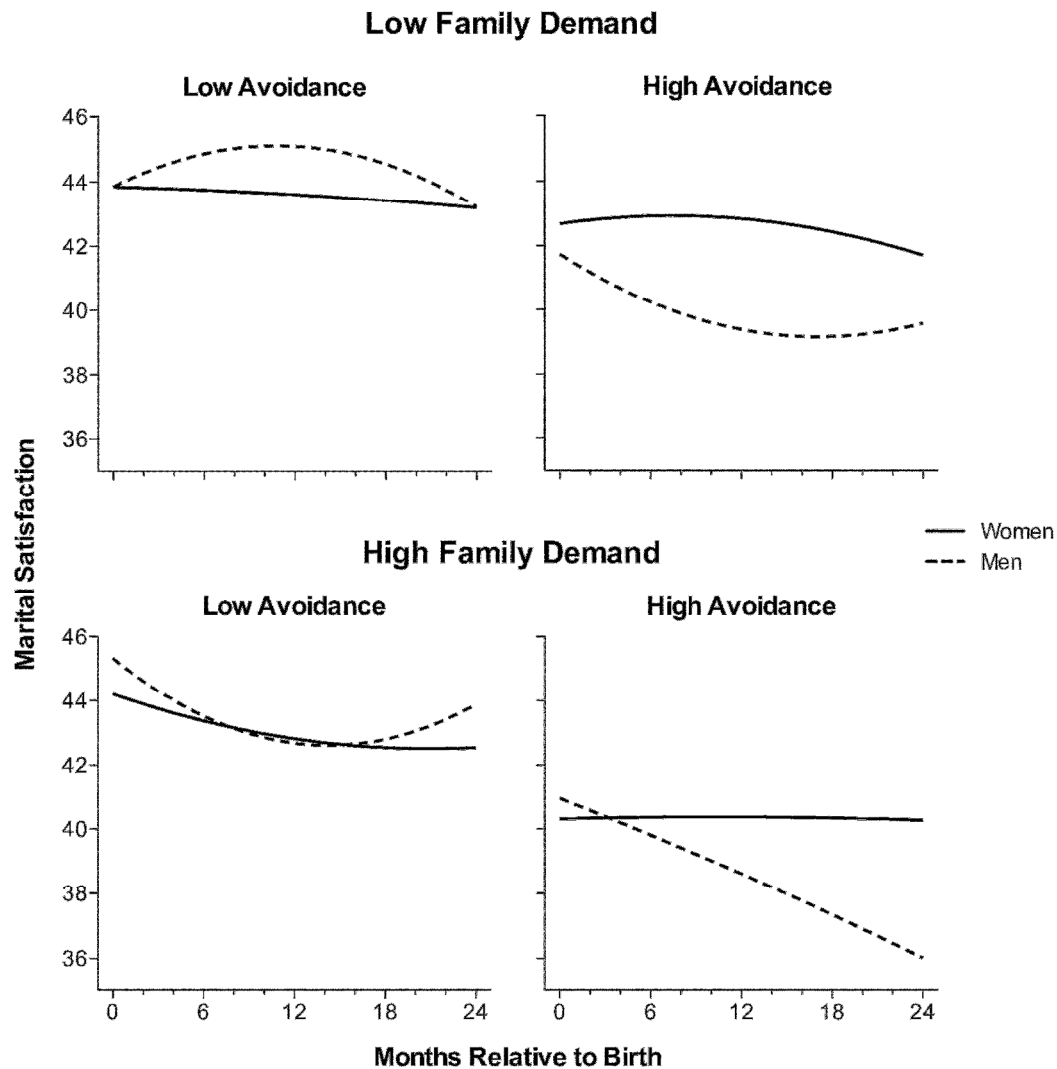


Figure 8. Nonlinear changes in satisfaction over time by gender, avoidance, and family demand.

highly avoidant individuals reported more family demand, they were moderately satisfied at birth. Men declined in their marital satisfaction (though not significantly), while women remained stable over time. For less avoidant people who reported more family demand, satisfaction was relatively high across the transition. However, men experienced a decline in satisfaction during the first year and a rebound in the second

year. Women did not change over time. At low levels of family demand, highly avoidant men declined steeply during the first year and stabilized during the second year. Highly avoidant women were more satisfied across the transition. When avoidance and family demand were both low, individuals were highly satisfied at birth. Men became slightly more satisfied during the first year but declined during the second year. Women remained more satisfied across the transition.

Exploratory Analyses

Although the hypothesized findings present part of the story, it was important to determine which moderators are unique to anxiety or avoidance. As such, I tested growth models that paired each moderator with the other attachment style. Specifically, I conducted analyses of interactions between attachment anxiety and variables hypothesized to moderate the avoidance-satisfaction relationship (BIOA, work-family conflict, and family demand), as well as analyses of interactions between avoidance and variables hypothesized to moderate the anxiety-satisfaction relationship (perceived support, negative social exchange, and BIRR). From these 6 models of alternate attachment effects, three models produced significant interactions involving attachment and the moderator.

Anxiety and work-family conflict. This model predicted marital satisfaction using gender, time, attachment anxiety, and work-family conflict, including all interaction terms (see Table 6). Significant main effects emerged for time and work-family conflict. There was also a significant two-way interaction between time and work-family conflict.

However, these effects occurred within the context of a significant four-way interaction. Figure 9 illustrates this interaction, and simple slopes are presented in Table 7. When anxiety and work-family conflict were both high, men were more satisfied at birth but declined steeply across the transition. Women were moderately satisfied at birth and remained stable over time. At high levels of work-family conflict, less anxious individuals were more satisfied at birth and did not significantly change over time. At

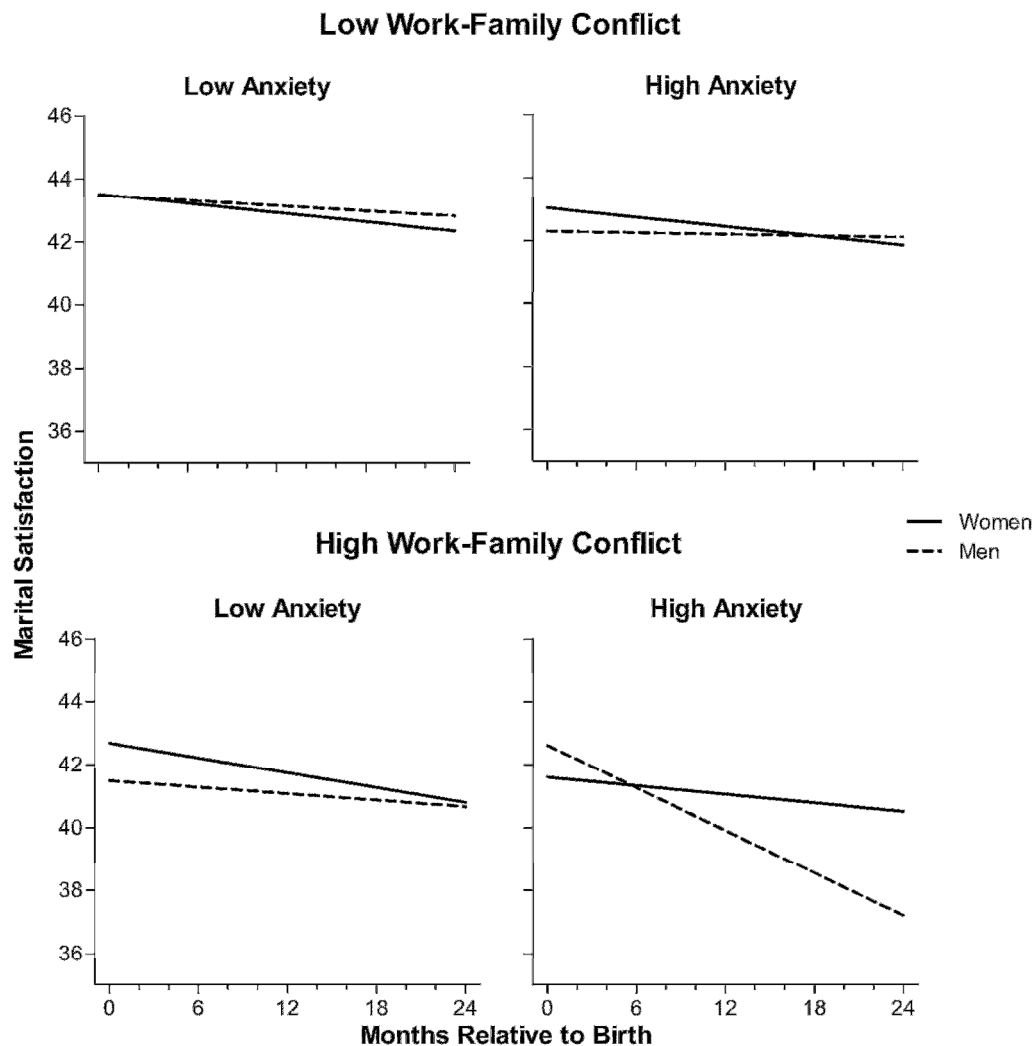


Figure 9. Linear changes in satisfaction over time by gender, anxiety, and work-family conflict.

low levels of work-family conflict, individuals were highly satisfied, regardless of anxiety level or gender.

Avoidance and perceived social support. This model predicted marital satisfaction using gender, time, attachment avoidance, and perceived support. As shown in Table 11, there were significant main effects for avoidance and perceived support.

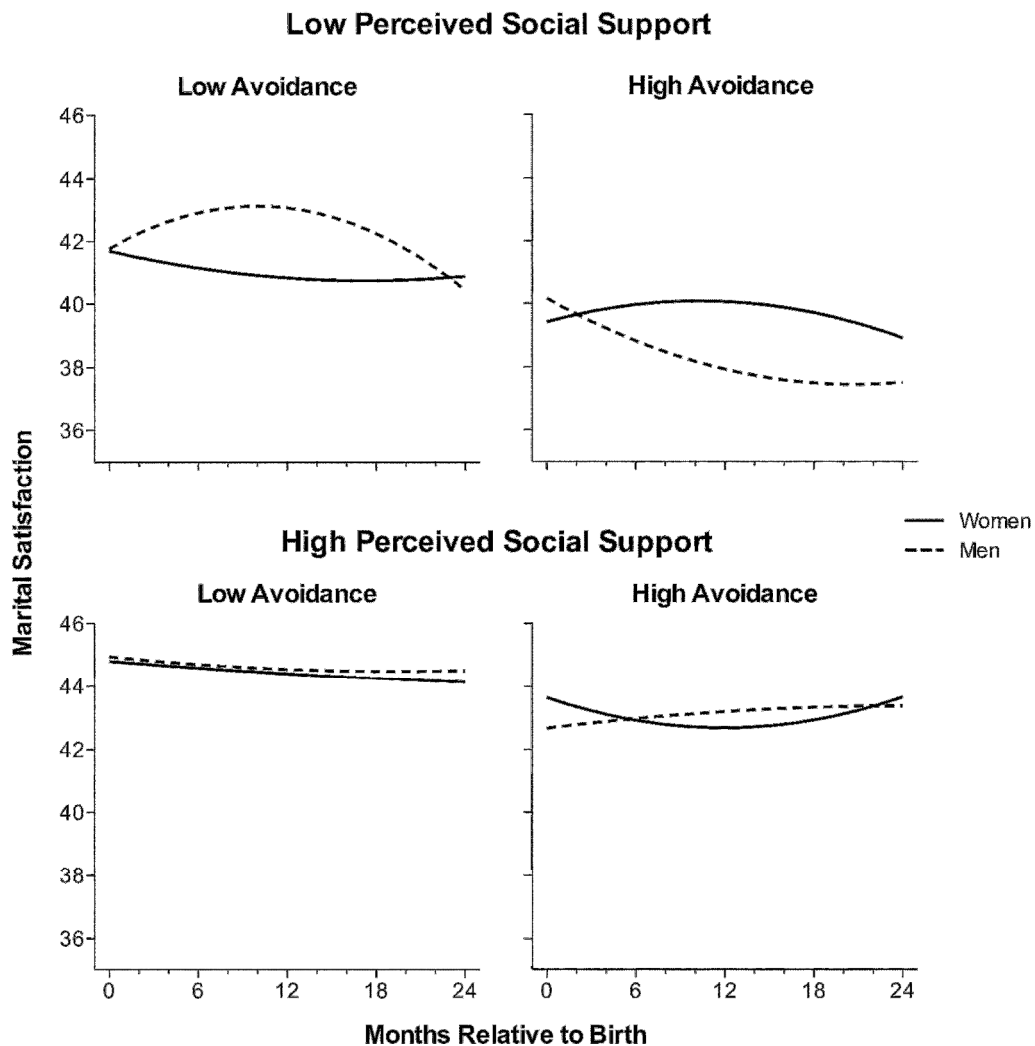


Figure 10. Nonlinear changes in satisfaction over time by gender, avoidance, and perceived social support.

There also were two significant four-way interactions involving gender, avoidance, perceived support, and time (linear and nonlinear terms). The nonlinear interaction is illustrated in Figure 10 (see Table 12 for tests of simple slopes). When new parents perceived their partners as less supportive, highly avoidant individuals were less satisfied across the transition. Men declined steeply during the first year, reaching a stable low level of satisfaction during the second year. Women, on the other hand, became slightly more satisfied during the first year but declined to prebirth satisfaction levels during the second year. When less avoidant individuals perceived less support available from their partners, they were moderately satisfied at birth. Men reported increased satisfaction in the first year but declined steeply in the second year. Women remained at a stable level of satisfaction across the transition. In contrast, when new parents perceived their partners as more supportive, they reported more satisfaction at birth and across the transition, regardless of gender or avoidance level. Although highly avoidant men declined slightly during the first year, they improved to prebirth satisfaction levels during the second year. At high levels of support, highly avoidant women remained more satisfied throughout the transition. Less avoidant men and women also reported stable, high satisfaction levels when perceiving their partners as able or willing to provide more support.

Avoidance and negative social exchange received. This model used gender, time, attachment avoidance, and negative social exchange to predict changes in marital satisfaction over time. As shown in Table 9, there were significant main effects for

gender, time, avoidance, and negative social exchange. There were two significant two-way interactions: one involving time and another involving negative social exchange.

These effects occurred within the context of a significant four-way interaction. This interaction is illustrated in Figure 11, with simple slopes in Table 10. When new parents reported more negative social exchange from their partners, they were less

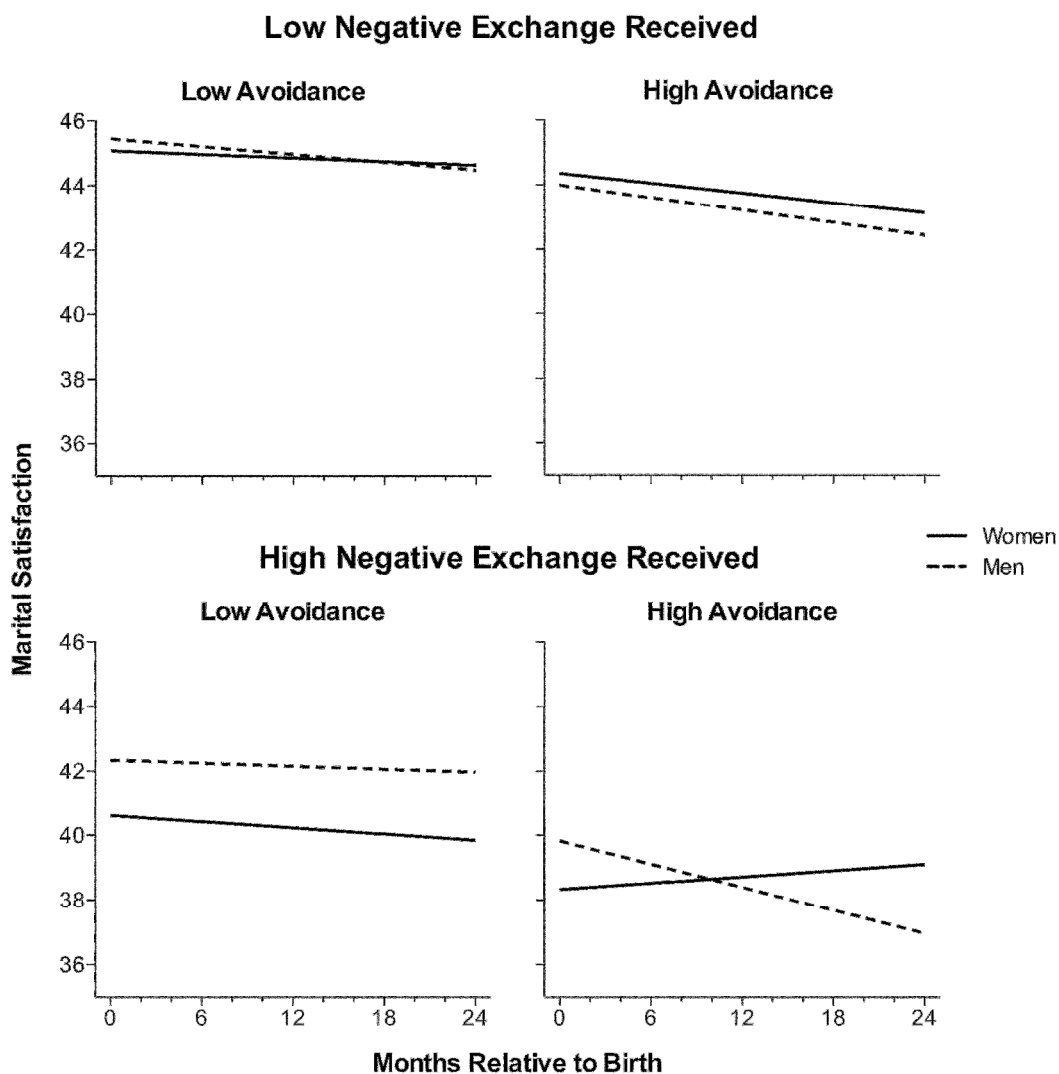


Figure 11. Linear changes in satisfaction over time by gender, avoidance, and negative social exchange.

satisfied at birth and throughout the transition. Highly avoidant men declined steeply across the transition, while women did not significantly change. For less avoidant individuals, men were more satisfied than women at birth. Further, both men and women remained stable over time. In contrast, for individuals who reported less negative exchange from their partners, satisfaction was higher at birth and remained stable across the transition, regardless of avoidance level or gender.

DISCUSSION

In the present study, I examined trajectories of change in marital satisfaction across the first 2 years of parenthood. This investigation focused specifically on anxious and avoidant attachment, as well as situational stressors that may influence satisfaction in insecurely attached individuals. The study revealed three important results. First, anxiously attached individuals reported lower marital satisfaction primarily when they perceived threats to their romantic relationship. Second, avoidantly attached individuals were less satisfied primarily when they perceived threats to independence or autonomy. Third, analyses revealed an unexpected pattern of gender differences, which showed that, under some circumstances, satisfaction was lower or declined more in men than in women.

For this study, the hypotheses were primarily focused on satisfaction trajectories in more insecurely attached (i.e., highly anxious or avoidant) people who reported less adaptive experiences (e.g., less social support, more family demand, greater perceptions of the baby's interference). These individuals are in the worst-case scenario, with negative attachment histories and negative relationship experiences. For this group, there were consistent patterns supporting the hypotheses. As predicted, anxious men showed a pattern of declining marital satisfaction when they perceived their partners as less supportive or more negative toward them. In contrast, anxious women reported lower satisfaction under these conditions but did not show declines. Avoidant men, like anxious men, showed a pattern of declining satisfaction over time. They did so under three conditions: 1) greater perception that their babies interfered in activities outside the

family, 2) more work-family conflict, or 3) more family demand. These conditions were not associated with declines for avoidant women. Unlike other findings, perceptions of the baby's interference in the romantic relationship were not associated with change in satisfaction over time. For both anxious men and women, satisfaction was lower when they perceived their babies as interfering more in the romantic relationship.

Findings Associated with Anxious Attachment

For highly anxious individuals, change in relationship satisfaction should be linked to relationship variables that trigger or calm fears of being rejected or abandoned by an attachment figure. This study investigated three potential moderators of the anxiety-satisfaction relationship: perceptions of support available from the partner, perceived negative exchange with the partner, and perceptions that the baby interfered with their romantic relationship. While less anxious individuals expect close others to be willing and able to provide support, highly anxious individuals expect attachment figures to be unreliable and inconsistently available. As a result, they strive to increase physical and psychological closeness with attachment figures. If any obstacles hinder this proximity-seeking strategy, fears of rejection or abandonment may intensify. These fears may lead anxious people to doubt their partner's love or commitment to the relationship.

During the transition to parenthood, rapid and drastic life changes may reduce feelings of closeness for romantic partners. As a result, anxious individuals may feel that their relationships are at risk. That perception should be exacerbated for people whose partners seem less supportive or behave more negatively. When partners provide high levels of support, anxious individuals receive constant reassurance of their partner's

commitment to the relationship. For new parents, the added responsibilities of parenthood may lead them to need more support or to provide less support to partners. Anxious individuals may perceive the resulting support deficit as a sign of their partner's withdrawal from the relationship. Similarly, highly anxious people should be particularly vulnerable to an increase (real or imagined) in negative interactions with their partner. Although this negativity may stem from fatigue or role strain, anxious partners should perceive it as a sign of their partner's waning love or commitment. Further, anxious individuals should be less satisfied in their relationship when they feel the baby is coming between them and their partner. Highly anxious partners should be particularly distressed at sharing their partner's attention and affection with the baby. They may resent their partners for being unable to maintain the amount of attention they received before the baby's arrival. Additionally, anxious individuals may feel their partner prefers the baby over them, leading to doubts about their partner's commitment.

Their fears of abandonment lead anxious individuals to continually search for possible signs of their partner's unavailability. When found, these signs (e.g., deficient support, increased negativity, and too much focus on the baby) may be seen as confirmation of attachment-related fears. Because anxious people focus primarily on fulfilling attachment needs through relationships, they should be dissatisfied with partners that fail to provide adequate security. For anxious partners who are under the stress of early parenthood, these moderators should amplify fears of abandonment and therefore relationship dissatisfaction.

Hypothesized findings. As predicted, perceived support moderated the relationship between anxiety and satisfaction. Highly anxious people were less satisfied at the child's birth and across the transition, but only when they perceived their partners as less supportive. A different pattern emerged in highly anxious individuals who perceived more support to be available from their partners. Those men and women reported high levels of satisfaction, equal to those reported by less anxious individuals. Thus, highly supportive partners seem to diminish the adverse effect of attachment anxiety on the relationship satisfaction of new parents.

Similarly, the anxiety-satisfaction relationship was moderated by perceptions of negative exchange from the partner, consistent with the hypothesis. Anxious partners reported less satisfaction at the child's birth and across the transition, but only when they perceived their partners as behaving more negatively toward them. At high levels of negative exchange, anxious men were more satisfied at birth than anxious women, but they declined steeply across the transition. In contrast, satisfaction remained high for all individuals who perceived less negative exchange from their partners, including highly anxious partners.

The results for anxious attachment and both social support and negative exchange are largely consistent with the literature. Rholes et al. (2001) found that anxious wives remained highly satisfied in the first 6 months of parenthood if they felt their husbands were more supportive. The present study showed that high levels of support benefitted anxious men as well as women, and that this protective effect extended far beyond the first 6 months. Anxious individuals also benefitted from

perceiving their partners as less negative. Thus, these healthy relationship interactions seem to help anxious partners keep the attachment system deactivated.

Two paths may allow this to happen. First, based on Karney and Bradbury's (1995) vulnerability-stress-adaptation (VSA) model, insecure attachment may represent an enduring vulnerability, which hinders the ability to cope with stressful events. Insecure individuals demonstrate less cognitive flexibility in problem solving and decision-making tasks, signaling poorer adaptability (Mikulincer & Shaver, 2007, p. 229; Mikulincer & Sheffi, 2000). However, the presence of adaptive processes (e.g., higher support, lower negativity) may reduce the role of enduring vulnerabilities. So, healthy relationship patterns may bypass their attachment insecurities in times of stress. Second, these positive experiences may lead anxious people to develop more secure attachment bonds with their partners, even if their general attachment orientation does not change (Treboux, Crowell, & Waters, 2004). Consistent with this notion, the formation and maintenance of a satisfying relationship can increase attachment security (Feeney & Noller, 1992; Hammond & Fletcher, 1991). In particular, security seems to increase when people have positive interactions with their partner or when they are repeatedly primed with thoughts of their partner as available and responsive to their needs (Davila & Sargent, 2003; Gillath, Selcuk, & Shaver, 2008). For anxious parents, positive relationship experiences may contribute to satisfaction by buffering against insecure attachment or by changing attachment patterns within the relationship.

The analysis of baby's interference in the romantic relationship revealed partial support for the hypothesis. Anxious women reported less satisfaction across the

transition when they felt their baby interfered with their relationship. Anxious men, on the other hand, were less satisfied, regardless of their perceptions of interference. Unexpectedly, this effect did not interact with time.

Two possibilities may explain why perceptions of BIRR were related to satisfaction for anxious women, but not for anxious men. First, women are typically the primary caregivers for newborns. Although anxious men may expect some degree of relationship interference due to their wives' childcare responsibilities, anxious women may not feel the same way. That is, anxious women may feel their husbands are deliberately choosing to spend time with the baby over them, rather than doing so out of necessity. Second, because of the physical changes accompanying pregnancy and childbirth, women may worry that their husbands are no longer sexually attracted to them. For anxious women, this may be particularly distressing when they feel their husbands are more affectionate with the baby than them.

Inconsistent with the hypothesis, satisfaction was lowest in less anxious men who perceived that the baby interfered more with their romantic relationship. It is puzzling that BIRR would play a stronger role in satisfaction for men who report low anxiety than those who report high anxiety. It will be important to replicate this unexpected finding before fully addressing its implications.

Exploratory findings. Exploratory analyses were conducted to determine whether moderators interacted with one attachment dimension or with both anxiety and avoidance. Results showed that work-family conflict also moderated the anxiety-satisfaction relationship. Consistent with the results for perceived support and negative

exchange, satisfaction remained high across the study for all participants, except those who were highly anxious and perceived more conflict between their work and family responsibilities. Highly anxious men reported a severe drop in satisfaction when they perceived more work-family conflict, while highly anxious women experienced a stable, moderate level of satisfaction across the transition.

Although work-family conflict was hypothesized to represent a lack of autonomy for avoidant individuals, it may also serve as a general measure of life stress. Also, it is possible that anxious and avoidant individuals perceive this conflict differently.

Avoidant individuals may feel their family interferes with their ability to pursue career-related goals, which improve feelings of autonomy and self-worth. In contrast, anxious individuals may feel their work responsibilities interfere with their desire for constant involvement with their partner and child. Supporting this, highly anxious individuals are more likely to report that family concerns negatively spill over into their work life (Sumer & Knight, 2001). While at work, anxious people are preoccupied with thinking about their home life. This may be particularly true for highly anxious men. Work-family conflict may have a stronger impact on men because women may not have been working full-time after giving birth. Further, men are traditionally viewed as the breadwinners, even in dual-earner couples. For highly anxious men, work-family conflict may create emotional distance in the relationship, leading to rumination and dissatisfaction.

With the addition of work-family conflict, these four moderators suggest that the anxiety-satisfaction link is strongest when highly anxious individuals perceive threats to

their romantic relationship. These threats exacerbate fears of abandonment and perceptions of partners as unwilling or unable to provide a sense of security. However, highly anxious individuals can maintain high levels of satisfaction if they perceive their partners as fulfilling their attachment needs.

Findings Associated with Avoidant Attachment

While the anxiety-satisfaction relationship was moderated by factors that limited proximity to romantic partners, the same should not be true for highly avoidant individuals. To resolve attachment-related concerns, avoidant individuals primarily pursue deactivating strategies. This includes withdrawing from interpersonal or emotional situations, as well as focusing on the pursuit of independence and autonomy. In contrast to highly anxious people, highly avoidant people should be dissatisfied in their relationships because they are unable to maintain enough emotional and physical distance from their partners. Deactivating strategies should be particularly ineffective during the transition to parenthood, when partners experience increased stress levels and often need more support.

Because avoidant individuals prioritize self-reliance and autonomy-related goals, their relationship satisfaction should be linked to factors that help or hinder pursuit of this goal. This study investigated three potential moderators of the avoidance-satisfaction relationship: perceptions that the baby interfered with participation in activities outside the family, conflict between work and family responsibilities, and perceptions of the family as more demanding. During the transition to parenthood, stress and increased family responsibilities should intensify avoidant partners' fears of and discomfort with

becoming caregivers (Bowlby, 1979). In times of stress, avoidant individuals often distance themselves from close relationships. However, childcare and other family obligations may make this strategy ineffective. When distancing strategies fail, highly avoidant individuals should begin to resent their partners, view them more negatively, and become less satisfied.

Hypothesized findings. The relationship between avoidance and satisfaction was moderated by perceptions of the baby's interference in outside activities, such as hobbies, going out, and free time. These activities should help avoidant individuals to feel independent and autonomous, allowing them to keep the attachment system deactivated. Highly avoidant partners reported less satisfaction at birth and across the transition. However, satisfaction only declined for highly avoidant men (but not women) who felt their baby interfered with their ability to pursue outside activities. In contrast, less avoidant individuals remained highly satisfied, regardless of whether they perceived their baby to be interfering with their leisure activities.

The analysis for work-family conflict revealed a similar pattern. Compared to their less avoidant counterparts, highly avoidant people reported lower satisfaction at birth. When avoidant individuals reported relatively little work-family conflict, their satisfaction remained stable at pre-birth levels. Under high work-family conflict, satisfaction declined steeply across the transition, but only for avoidant men. As predicted, less avoidant individuals were more satisfied throughout the transition, even when they reported more conflict between their work and family responsibilities.

The avoidance-satisfaction relationship was also moderated by family demand, as predicted. Highly avoidant individuals were less satisfied at birth, but only when they felt their families were too demanding. For this group, avoidant men became less satisfied across the study. Compared to those reporting high demand, avoidant individuals were more satisfied at birth when they perceived less family demand. However, avoidant men still experienced a slight decline during the first year.

Consistent with the hypotheses, highly avoidant individuals were less satisfied when they were unable to pursue autonomy, independence, and control. During the transition to parenthood, partners often experience a loss of personal control due to the family's rapidly growing needs. Importantly, these new family responsibilities push avoidant partners into caregiving roles. For avoidant individuals, this lack of independence can lead to relationship dissatisfaction. Overall and Sibley (2009) found that, when highly avoidant people feel their partners exert a strong impact on their thoughts and actions, they viewed the relationship more negatively and made less effort to maintain closeness with their partner. Thus, avoidant individuals may be content with some closeness as long as they control it (i.e., intimacy only occurs on their terms). However, when avoidant people feel obligated to care for others, this loss of personal control may trigger a withdrawal from the relationship.

These three moderators suggest that the avoidance-satisfaction link is strongest when highly avoidant individuals perceive threats to their independence and self-reliance. These threats stem from situations that make it difficult to keep the attachment system deactivated (e.g., child care). As a result, avoidant people may increase

psychological distance in the relationship by viewing their partners more negatively or feeling greater dissatisfaction. However, the current findings suggest that highly avoidant individuals can maintain high levels of satisfaction if they feel able to pursue autonomy-related goals.

Exploratory findings. Exploratory analyses pointed to two additional moderators of the avoidance-satisfaction relationship: perceived social support and negative social exchange. These patterns mirror the effects seen for attachment anxiety. Satisfaction was lowest (and declined) for highly avoidant individuals who reported less support from their partners. When highly avoidant people felt their partners were more supportive, they maintained high levels of satisfaction across the transition. For negative social exchange, all participants were less satisfied across the transition when they perceived their partners as behaving more negatively toward them. However, satisfaction plummeted in highly avoidant men who perceived more negative exchange. When highly avoidant individuals reported relatively little negativity from their partners, they maintained high levels of satisfaction across the transition.

Although these moderation effects were not anticipated, there are several reasons why they may influence satisfaction in avoidant individuals. First, some research shows that avoidant individuals do benefit from receiving support—the right kind of support (Simpson et al., 1992; Simpson, Winterheld, Rholes, & Oriña, 2007). Avoidant individuals react more positively to instrumental caregiving than emotional caregiving, especially when they are under stress. Importantly, the present study did not distinguish between these types of support. Through instrumental caregiving, highly avoidant people

can receive help while avoiding the intimacy that might come with emotional caregiving. This does not suggest that highly avoidant individuals seek more support. But with rapidly changing roles and responsibilities, avoidant people may be more likely to recognize and accept their partners' support. If partners are willing and able to provide support, this may help avoidant individuals to remain satisfied despite decreases in their independence.

Second, highly avoidant individuals may be troubled by high negative social exchange because it prevents them from maintaining distance from their partner. According to Pietromonaco and Barret (1997), avoidant people are averse to conflict because it forces them to respond to their partners' needs or concerns. Conflict often results in self-disclosure, which avoidant individuals perceive as clashing with their goals of independence and self-reliance. In the absence of negative interactions with their partner, they may adopt a "no news is good news" perspective on the relationship. For avoidant individuals, a happy relationship is one that requires little maintenance and allows them to remain relatively autonomous. Under high negative exchange, relationships suddenly become high maintenance, leading avoidant people to become less satisfied.

Gender Differences in Satisfaction Trajectories

Throughout the analyses described above, results revealed a consistent—and unexpected—pattern of gender differences. This gender difference occurred predominantly for more insecure individuals in maladaptive situations (e.g., low support, high negative exchange, high work-family conflict). For example, the pattern emerges in

highly anxious people who perceive less support and in highly avoidant people who perceive more BIOA. For women in these groups, they are not high in satisfaction; however, they remain stable at a moderate level of satisfaction throughout the transition. In contrast, men in these groups often experience steep declines in satisfaction, reporting substantially less satisfaction than women by 2 years postbirth. Thus, results suggest that attachment insecurities and maladaptive circumstances represent greater vulnerabilities to relationship quality for men than for women. This pattern seems inconsistent with much of the literature on the transition to parenthood (Belsky & Hsieh, 1998; Doss et al., 2009; Grote & Clark, 2001; Lawrence et al., 2007). Then again, it is important to remember that none of these studies focused on the role of attachment insecurities. Further, studies examining the role of attachment have been limited to the first 6 months of parenthood and have focused primarily on wives' satisfaction (Rholes et al., 2001; Simpson & Rholes, 2002). At present, there appears to be no relevant literature to serve as a comparison. Within the present study, the gender difference forms a remarkably consistent pattern across all analyses. Although it is inconsistent with my initial expectations, it merits serious consideration. Three possible explanations may be offered.

First, women may receive more support from sources outside the relationship (i.e., from family or friends), which may buffer against unhealthy dynamics within the relationship. Indeed, Feeney, Hohaus, Noller, and Alexander (2001) found that, after the birth of their first child, new parents decreased use of their spouse as an attachment figure, instead choosing to use their parents (as cited in Mikulincer & Shaver, 2007, p.

60). Although attachment hierarchies shifted for both partners, it was more pronounced in wives. In Lee and Duxbury's study of work-family conflict (1998), women reported having more friends who can relate to the competing demands of work and home life. These friends often provided instrumental and emotional support, particularly for women. These external sources of support may buffer women against negative relationship experiences and stabilize their relationship satisfaction. Without the same level of external support, men may be more vulnerable to negative relationship experiences. However, this gender difference in support networks remains unclear (Gameiro, Boivin, Canavarro, Moura-Ramos, & Soares, 2010), as does its effect on marital satisfaction.

Second, some researchers have suggested that traditional sex roles may lead women to adopt a relationship-protecting focus, which may override attachment dynamics (Gallo & Smith, 2001; Simpson, Rholes, & Phillips, 1996). This may be particularly true during the transition to parenthood. Women experience pregnancy and childbirth and subsequently do much of the childcare. These more traditional sex roles may lead insecure women to adopt more relationship-promotive attributions. Although this relationship-protecting focus would be unlikely to improve relationship quality, it may prevent decline. In this way, insecure wives may try to "keep the peace." Without this protection focus, insecure men feel more deeply the negative impact of their situation and become less satisfied as a result.

Third, women may be more realistic about what life will be like after the baby is born. The physical experience of pregnancy (e.g., exhaustion, discomfort) may make

women more realistic about the demands of parenthood. Men, on the other hand, may experience unrealistic optimism about the transition to parenthood, particularly if they are insecure. When these hopes are not realized, insecure men may become more dissatisfied. For highly anxious men, they may expect the baby to bring them closer to their partner. For highly avoidant men, they may expect the baby to fulfill some of their partner's attachment needs, reducing their obligation to fulfill those needs. Because avoidant individuals typically experience less desire to have children (Rholes et al., 1997), they may have agreed to have the baby to appease their partner. As a result of their acquiescence, they may expect the relationship to improve. However, when these men find that it is more difficult to increase proximity (for anxiety) or autonomy (for avoidance), their satisfaction may decline. If women hold more realistic expectations for the postbirth romantic relationship, this may explain why their satisfaction remains stable while it plummets for men.

Limitations

Although the findings present a clear pattern of effects for satisfaction in anxious and avoidant individuals, there are some limitations with the study design. First, the data rely on self-report questionnaires and are correlational. Despite a strong longitudinal focus, the time element does not indicate causation. Second, participants in the study were highly educated and had only modest ethnic diversity. As the study progressed, the sample became less diverse. This may limit the populations to which these results may be generalized.

Third, this study did not include any time points before pregnancy. Some researchers have voiced a concern that transition to parenthood studies typically start in late pregnancy. If couples experience a spike in marital satisfaction during pregnancy, then postbirth declines in marital satisfaction may simply represent a return to baseline. However, in studies that included pre-pregnancy time points, there is no evidence that satisfaction spikes during pregnancy (Doss et al., 2009; Lawrence et al., 2008). As such, it is reasonable to view the declines in satisfaction as a genuine and meaningful change from prebirth satisfaction levels.

SUMMARY

The present study investigated change in marital satisfaction across the first 2 years of the transition to parenthood, focusing on the role attachment insecurities play in declining satisfaction. Further, this research explored situational factors that may interact with attachment to prevent or augment declines. It was hypothesized that highly anxious individuals would be less satisfied when they perceived threats to the romantic relationship, while highly avoidant individuals would be less satisfied when they perceived threats to their autonomy. Results suggest that attachment insecurities are risk factors for marital dissatisfaction in new parents, but primarily in conjunction with maladaptive situations.

Through hypothesized and exploratory analyses, this study identified risk factors specific to anxious or avoidant attachment, as well as those related to both insecure attachment styles. Three factors moderated both the anxiety-satisfaction relationship and the avoidance-satisfaction relationship: work-family conflict, perceived availability of social support, and perceptions of a partner's negative behavior. For anxious attachment, effects on satisfaction were moderated specifically by perceptions of the baby's interference in the romantic relationship. In contrast, the avoidance-satisfaction link was moderated specifically by perceptions of the baby's interference in activities outside the family and perceptions of family demand. These specific moderators provide clear support for the importance of attachment goals in marital satisfaction. Although the three overlapping moderators were not predicted for both attachment dimensions, it is unclear whether both moderation effects occur through the same path. However, it is possible to

see how these moderators fit with the goals and expectations of both insecure attachment styles. Further investigation will be needed to determine the mechanisms through which these factors relate to anxiety, avoidance, and satisfaction.

This study contributes several key findings to the literature on marital satisfaction during the transition to parenthood. First, it demonstrates that declines in marital satisfaction are less pervasive than previous studies suggest. Most partners maintained high satisfaction levels across the transition. Second, it confirms that attachment insecurities represent a strong risk factor for declining satisfaction, particularly in situations that clash with their attachment-related goals (e.g., hyperactivating or deactivating strategies). Finally, this research shows that, under some circumstances, satisfaction continues to decline for at least 2 years after the birth of the first child. For insecurely attached individuals, the transition to parenthood represents a critical period during which perceptions and interpersonal communication can make or break marital satisfaction. Once set into motion, these negative patterns may cause severe and lasting damage to marital functioning.

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Conference Presentations:

Rentfro, J. L., Rholes, W. S., Simpson, J. A., Martin, A. M., III, Tran, S., & Wilson, C. L. (2011, January). *Attachment avoidance and marital satisfaction in new parents: The role of perceived autonomy*. Poster presented at the annual meeting of the Society for Personality and Social Psychology, San Antonio, TX.

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