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# Impact of Expectations, Experiences, Attributions, and Perceptions on Relationship Satisfaction Across the Transition to Parenthood

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Abstract of the Dissertation

Impact of Expectations, Experiences, Attributions, and Perceptions on Relationship Satisfaction Across the Transition to Parenthood

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This study examined whether violations of partner expectations, and attributions and perceptions of these violations are associated with relationship satisfaction across the transition to parenthood. First-time parents completed mail-in packets during pregnancy (T1; $n$ = 146 males, $n$ = 151 females) and when their babies were 3-5 months (T2; $n$ = 100 males, $n$ = 108 females). Multi-level modeling accounted for non-independence of the dyadic data. Results indicate a significant decrease in relationship satisfaction. A significant interaction between expectations and experiences on T2 relationship satisfaction was found, such that the negative relationship between expectations and relationship satisfaction is worse when experiences are poorer. There was a significant positive relationship between perceptions and T2 relationship satisfaction. A significant interaction between expectations, experiences, and perception on T2 relationship satisfaction was found, indicating crossover effects. When one's high expectations are met with poorer experiences, positive perceptions somewhat buffer the detrimental

impact on relationship satisfaction. Likewise, when one's low expectations are surpassed with positive experiences having a positive perception yields higher relationship satisfaction than having a more negative perception of the same circumstances. A significant positive relationship between benign attributions and T2 relationship satisfaction was also found. Clinical and research implications are discussed.

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# Introduction

Approximately ninety percent of all married couples (Cowan & Cowan, 1995; Feldman, 1997) and many other cohabitating couples and single people eventually have a child, making the transition to parenthood a highly common experience (Glade, Bean, & Vira, 2005). The birth of a first child, although commonly thought of as a joyous event, represents for most couples a major transition, both for the members of the couple individually and for the dyad as a unit. Among the many changes documented in couples is a decline in relationship satisfaction after the birth of the first child (e.g., Cowan et al., 1985; Van Egeren, 2004). This decrease in relationship satisfaction across the transition to parenthood is, on average, small and statistically significant, but does not appear to be statistically different from that in non-parents over a similar period of time (Mitnick, Heyman & Slep, 2009). Still, a variety of relationship satisfaction trajectories are evident across the transition to parenthood. For example, in their study of new parents, Cowan and Cowan (1995) found that 45% of the men and 58% of the women in their sample experienced a decrease in relationship satisfaction, but 18% of the participants experienced an increase in satisfaction, and the remainder demonstrated stable levels of satisfaction. Because the transition to parenthood does not appear to be a monolithic challenge that causes universal decreases in relationship satisfaction, it is important to understand for whom the negative impact exists and what processes might contribute to that impact.

Relationship satisfaction has far-reaching implications for individuals and families. Relationship problems are predictive of depression (e.g., Beach, Katz, Kim, & Brody, 2003), and poor relationship quality is predictive of poorer physical health

trajectories over time (Umberson & Williams, 2005) and is associated with higher mortality in those with serious illness, even after controlling for disease-specific variables (Coyne et al., 2001; Kimmel et al., 2000) and with lower immune function (Kiecolt-Glaser et al., 1988). It is especially important to consider relationship satisfaction as partners become parents, because parent relationship dissatisfaction has been linked to child anxiety, aggression, internalizing and externalizing behavior problems, insecure parent-child attachment (Gable, Belsky, & Crnic, 1992), and poor parent-child relationship quality (Erel & Burman, 1995).

*Violation of parenthood expectations*

In response to the uncertainty of the upcoming transition, expectant parents develop a variety of expectations, usually optimistic (Belsky, Ward, & Rovine, 1986; Harwood, McLean, & Durkin, 2007) about what parenthood will be like. However, these expectations are not always matched by actual experience (Belsky et al., 1986; Lawrence, Nylen, & Cobb, 2007) and this can contribute to distress. Expectation violation theory posits that violations of expectations—whether positive or negative—cause arousal and focus on the meaning of the violation, and that negative violations produce unfavorable evaluations (Burgoon & Hale, 1988). Accordingly, negatively violated expectations about parenthood, including areas such as physical well-being, maternal competence, and maternal satisfaction, have been linked to poorer adjustment to parenthood (e.g., Kalmuss, Davidson, & Cushman, 1992).

Negatively violated expectations about parenthood have also been linked to relationship dissatisfaction (e.g., Belsky, 1985; Ruble, Fleming, Hackel, & Stangor, 1988; Hackel & Ruble, 1992). Theoretically, negatively violated expectations in the context of

an interpersonal relationship are thought to increase uncertainty about the violator and the relationship, and extended periods of uncertainty have a negative impact on relationship satisfaction and stability (Berger, 1987). Thibaut and Kelley (1959) posit that individuals are satisfied with a life domain only when their expectations for relationships meet or exceed a comparison level of what they believe they could receive in other relationships. Research has supported these hypotheses, finding that negative violations of general domains of expectations, such as those regarding outside support and parenting satisfaction, have been associated with decreases in relationship satisfaction (e.g., Lawrence et al., 2007). Expectations about one's partner likely have the highest impact on relationship satisfaction. Studies of pre-parentood expectations have mostly focused on division of labor and have found that women whose partners do fewer household chores than had been expected are less satisfied with their relationships postpartum (Ruble et al., 1988). However, a deeper picture of partner expectations — including thoughts about partner satisfaction and competence in the parenting role, changes to couple interactions, and partner reactions to parenting (e.g., becoming more caring in general) — has not been explored and could offer a more complete picture of the important domains of partner expectations that impact this transition. This study tests whether these violated partner expectations are associated with decreases in relationship satisfaction.

Research on expectations suggests that there are a variety of ways discrepancies between expectations and experiences might be cognitively processed, and these factors could affect a distal outcome such as satisfaction (Hackel & Ruble, 1992). It is possible, then, that it is how a person reacts to or processes the expectation violation that affects

relationship satisfaction. The current study focuses on the cognitive moderators of the association between expectancy disconfirmation and relationship dissatisfaction. In other words, it will examine whether the way one perceives one's experiences to match prior expectations, as well as the causes to which one attributes the experience-expectation discrepancy, affect relationship satisfaction.

*Perception of the expectation violation*

One cognitive phenomenon that likely plays a role is perceptual confirmation, the likelihood that an expectancy about a person or interaction will bias the consequent evaluation to be expectation-consistent (Darley & Fazio, 1980; Jones, 1986). Simply having the expectation can cause the target's behavior to be selectively attended to, interpreted, or remembered in a fashion that is consistent with the expectation (Darley & Fazio, 1980; Darley & Gross, 1983). There is evidence that perceptual confirmation biases exist on a large scale even in the face of strong disconfirming evidence. For example, Traut-Mattausch, Schulz-Hardt, Greitemeyer, & Frey (2004) had participants compare an old menu with German Mark prices and a new one with Euro prices, and found that expectations of price increases predicted biased price trend estimation; participants were more likely to interpret old and new menu prices as demonstrating rising prices — despite no actual difference — when that was congruent with their expectation about the Euro. In an observational study of 82 newlywed couples, McNulty and Karney (2002) found that expectations about the upcoming couple interaction predicted appraisals of that interaction, independently of objective behaviors observed during the conversation. Therefore, it seems possible that some new parents might be inclined to view their experiences as more consistent with their expectations simply due

to perceptual confirmation biases. This study will test for the presence of this cognitive process and whether it moderates the relationship between expectation disconfirmation and relationship satisfaction. It is hypothesized that those who perceive their experiences to match or exceed their expectations, regardless of actual expectancy/experience discrepancies, will demonstrate greater relationship satisfaction, despite possible expectancy violation.

*Attributions about expectation violation*

Another cognitive process that can moderate the link between expectancy disconfirmation and relationship satisfaction is how that expectancy disconfirmation is attributed. The concept of attributions describes the attributor's conclusion about the cause of an event. Central to couple relationships is the extent to which a person attributes negative intent or blameworthiness to his/her partner for a negative event, in this case a violation of an expectation (Bradbury & Fincham, 1990; Fincham & Bradbury, 1992). Hostile attributions regarding one's partner's behavior have been linked to poorer concurrent and later relationship satisfaction (Bradbury & Fincham, 1990). It seems plausible that attributions might play a crucial role in how expectancy disconfirmations are interpreted and how this impacts consequent relationship satisfaction. McNulty and Karney (2004) found that when partners displayed a positive attributional style at the start of marriage, positive expectations about the marriage were associated with stable satisfaction, but when partners had a negative attributional style, positive expectations were associated with declines in relationship satisfaction. However, the confirmation or disconfirmation of the expectations was not measured, and the attributional style was only assessed early in marriage. I hypothesize that attributions

about expectancy disconfirmation across the transition to parenthood will moderate the relationship between expectation disconfirmation and relationship satisfaction.

In summary, partner expectation disconfirmation across the transition to parenthood is hypothesized to be associated with decreases in relationship satisfaction. Furthermore, how this expectation disconfirmation is cognitively processed is hypothesized to predict relationship satisfaction. Perceptual confirmation of the expectations, despite behavioral disconfirmation, is predicted to moderate the relationship between expectation disconfirmation and relationship satisfaction; in other words, despite differences between actual experiences and previous expectations, those who perceive their expectations to have been met or exceeded will experience greater relationship satisfaction than those who perceive that their expectations have not been met. In addition, more benign attributions are predicted to moderate the relationship between expectancy disconfirmation and relationship satisfaction; in other words, when actual experience and prior expectations do not match, those who attribute that discrepancy to benign causes will preserve relationship satisfaction more so than those who make more hostile attributions.

## Method

### *Participants*

*Recruitment.* The participants were expectant first-time parents who were married or living with a partner, were at least 18 years old and could speak and read English. Recruitment was done through three methods: in-person recruitment in Obstetrics/Gynecology offices within a 20-mile radius of Stony Brook University and in

prenatal classes through those offices, brochures in the waiting rooms of those offices, and through word-of-mouth referrals.

For in-person recruitment, graduate student and undergraduate research assistant recruiters visited OB/GYN offices approximately 3-5 times per week. In the waiting room, recruiters approached expectant parents to tell them about the research project and asked them a few questions to see if they qualified. If eligible and interested, recruiters recorded potential participants' contact information, and gave them a packet for themselves and their partners. Mothers-to-be were asked for potential ways of contacting the fathers, including cell or home phone calls, texting, and emailing. Enclosed in the packets were a cover letter instructing participants to complete the questionnaires privately and independently, a letter of assent (indicating that by returning the completed packets, they assent to participate in the study), the questionnaires, a contact information form, and a self-addressed stamped envelope. When possible, participants completed questionnaires in the waiting room and return to the recruiter. Otherwise, recruiters followed up with participants by calling them 3-4 days later to remind them to return the packets.

Participants who completed Time 1 questionnaires were contacted around the time of their expected due dates, to ascertain when the baby was actually born. Eleven weeks after the birth of the child, the researchers mailed the parent(s) Time 2 packets to complete between the 12$^{th}$ and 16$^{th}$ weeks. Follow-up phone calls were made to remind parents to send the packets back within the time frame.

*Incentives & retention strategy.* After Time 1 packets were completed, couples received a Welcome Baby basket from Babies R Us, including a lullaby CD, baby bottle,

and a Babies R Us coupon. After Time 2 packets were completed, couples chose which 1-2 of a variety of drawings they would like to enter for gift cards from baby stores or local restaurants. In addition, after the baby was born, each couple received a card congratulating them on the birth of the child.

*Time 1 participants.* Time 1 participants included 146 males and 151 females. Of those, there were 144 couples in which both members participated, leaving 2 individual males and 7 individual females who participated. The mean age of female participants was 29.10 (*SD* = 4.72), with a range from 18 to 39, and the mean age of males was 30.84 (*SD* = 5.12), with a range from 19 to 44. Of the males, 82.19 % of participants were married, and 17.81 % were living together but not married. Of the females, 80.79 % of participants were married, and 19.21 % were living together but not married. The mean length of relationship at the couple level was 5.92 years (*SD* = 3.62 years), with a range from 0.83 years to 16.67 years (see Table 1 for further demographic detail).

*Time 2 participants.* Time 2 participants included 100 males and 108 females. Of those, there were 99 couples in which both members participated, leaving 1 individual male and 9 individual females who participated. The average length between completion of T1 assessment and completion of T2 assessment was 21.24 weeks (*SD* = 5.71 weeks). The average age of baby upon T2 completion was 15.08 weeks (*SD* = 4.74).

Among all T1 participants, there were no significant differences between those who participated in T2 and those who did not in terms of T1 relationship satisfaction. However, in terms of age, those who participated in the T2 assessment (*M* = 30.57, *SD* = 4.66) were significantly older than those who did not (*M* = 28.53, *SD* = 5.47, *t*(290) = -

3.23, $p = .001$). Furthermore, those who participated in the T2 assessment were more likely to be married than those who did not ($\chi^2(1) = 29.01$, $p = .00$).

*Measures*

*Couple Satisfaction Index-32* (Funk & Rogge, 2007). The CSI-32 is a 32-item measure that assesses relationship satisfaction. Items are rated on a number of scales: one global item is rated on a 7-point scale ranging from 0 (*extremely unhappy*) to 6 (*perfect*), two items are rated on a 6-point scale ranging from 0 (*always disagree*) to 5 (*always agree*), two items are rated on a 6-point scale ranging from 0 (*never*) to 5 (*all the time*), 12 items are rated on a 6-point scale ranging from 0 (*not at all true*) to 5 (*completely true*), and 4 items are rated on a 6-point scale ranging from 0 (*not at all*) to 5 (*completely*). In addition, 1 item asks participants to rate their relationship on a 6-point scale from 0 (*worse than all others*) to 5 (*better than all others*), 2 items ask participants to rate the frequency of positive behaviors in their relationship on a 6-point scale from 0 (never) to 5 (more often [than once a day]), and 7 items are rated using a semantic differential format, in which respondents rate their relationship on a series of adjective pairs. The scale is scored such that higher values represent more positive ratings of relationship satisfaction (range = 0-161). The CSI-32 was developed through principal components analysis and application of item response theory to a pool of satisfaction items including those on the Marital Adjustment Test (MAT; Locke & Wallace, 1959), Dyadic Adjustment Scale (DAS; Spanier, 1976), Kansas Marital Satisfaction Scale (KMS; Schumm, Nichols, Schectman, & Grinsby, 1983), Quality of Marriage Index (QMI; Norton, 1983), Relationship Assessment Scale (RAS; Hendrick, 1988), Semantic Differential (SMD; Karney & Bradbury, 1997), and Marital Status Inventory (MSI;

Weiss & Cereto, 1980). The results were used to create the 4-, 16-, and 32-item Couples Satisfaction Index scales, which are far more precise at measurement than the MAT and DAS and have greater power to detect differences in satisfaction. In addition, the CSI scales show strong convergent validity with measures of relationship satisfaction, such as the DAS, MAT, QMI, KMS, RAS, and SMD, and are strongly associated with scales that measure conflict, communication, and perceived stress. In this study, this scale showed strong internal consistency at Time 1 ($\alpha = 0.95$) and Time 2 ($\alpha = 0.97$). .

*Partner Expectations Measure*. This 58-item measure, developed for this project, assessed at Time 1 individual predictions of partner's behavior once the baby comes (i.e. how one thinks one's partner will be or behave when the baby is 3-4 months). The items were pooled or adapted from various measures of expectations (i.e. Coleman, Nelson, & Sundre, 1997; Harwood, 2004; Kalmuss et al., 1992) The statements asked about the partner in the relationship (e.g., "My partner is sensitive to my feelings"), the partner as a parent (e.g., "My partner will show too little attention to the baby"), and the partner's reactions to parenthood (e.g., "Being a parent will make my partner feel frustrated"). Items are rated on a 5-point scale ranging from either 0 (*almost never*) to 4 (*almost always*) or from 0 (*strongly disagree*) to 4 (*strongly agree*). The items of this measure were reviewed by experts on children and families for content validity. After data collection, an unrotated factor analysis that specified one factor was conducted, and 5 items whose factor loadings was lower than 0.275 were eliminated; thus the resulting scale comprised 53 items. Items were reverse-scored when appropriate, and items were summed such that the higher scores indicate more positive expectations (range = 0-212). The scale demonstrated strong internal consistency ($\alpha = 0.93$).

*Partner Experiences Measure.* This 53-item measure altered the Partner Expectations Measure to assess experiences during parenthood at Time 2 by rewording all items in the present tense. Items were reverse-scored when appropriate and summed such that higher scores indicate more positive experiences (range = 0-212). The scale demonstrated good internal consistency ($\alpha = 0.82$).

*Perception of expectation confirmation.* This measure, developed for this project, assessed at Time 2 the degree to which individuals perceived their expectations about their partner to have been met. This 53-item measure repeated all items from the *Partner Expectations Measure* and asked participants to think about how their partner's behavior related to the expectations they had during pregnancy. Items were rated on a 5-point scale ranging from 0 (*much worse than I expected*) to 4 (*much better than I expected*), and scores are summed such that higher scores indicate more positive experiences (range = 0 – 212). The scale demonstrated strong internal consistency ($\alpha = 0.98$).

*Partner attributions – Modified* (adapted from O'Leary, Slep, & O'Leary, 2007). The Partner Attributions (PA) measure is a 33-item measure that presents individuals with possible attributions for partners' not meeting their expectations. For each possible attribution, individuals rate how often the reason is true on a 6-point scale from 0 (*always true*) to 5 (*never true*). The statements vary in degree or responsibility and blame attributed to the partner (i.e. how much the partner has control over the behavior, how much the partner is acting with negative intent). Fourteen of the items are partner-responsibility attributions (e.g., "because my partner doesn't like to put his needs aside," "because my partner is lazy"), which are summed to create the Partner Responsibility Attribution subscale. The remaining 19 items are distractor attributions, 7 of which are

partner-situational attributions (e.g., “because my partner is still adjusting to having a baby”), and 12 of which are self-responsibility attributions (e.g. “because I don’t give my partner a chance”). The original scale has strong evidence of reliability and concurrent validity (Foran & Slep, 2007); in the current study, internal consistency was strong ($\alpha$ = 0.92).

*Relationship Attributions Measure – Modified* (adapted from Fincham & Bradbury, 1992). The *Relationship Attributions Measure* (RAM) is a 24-item measure that presents individuals with four negative behaviors or events that are typical in marriage (e.g., “Your partner does not pay attention to what you are saying,” “Your partner is cool and distant”). For each negative event, individuals rate their agreement with 6 attribution statements on a scale from 1 (*strongly agree*) to 6 *(strongly disagree*). Attribution statements are grouped among causal attributions (i.e. locus, globality, and stability of the cause of the behavior) and responsibility attributions (i.e. intentionality, selfish motivation, and blameworthiness of partner). For example, one causal attribution statement is “The reason my partner criticized me is not likely to change,” and one responsibility attribution statement is “My partner’s behavior was motivated by selfish rather than unselfish concerns.” In the current adaptation, the stimulus items (i.e. the negative events) were replaced with a number of sample violated expectations from which participants could choose so that the negative event represented something the individual had experienced (e.g. Your partner is in a good mood less than you expected; your partner does laundry less than you expected). If none of the choices were true for this individual, there was an “other” option that allowed participants to fill in their own violated expectation. The original RAM has demonstrated good internal consistency, with

coefficient α ranging from .62 to .88 for specific attributions (e.g., locus, stability) and from .86 to .93 for causal and responsibility (Fincham & Bradbury, 1992). Composite scores of causal and responsibility attribution have been demonstrated to significantly correlate with marital satisfaction, attributions for marital difficulties, and attributions for actual partner behaviors (Fincham & Bradbury, 1992).

In the current study, attributions about an ambiguous (e.g., "eats less") or positive (e.g, "is in a good mood more") violated expectation were excluded from analysis; rather, attributions included were specifically about negatively violated expectations. The scale demonstrated strong internal consistency (α = 0.91).

*Edinburgh Postnatal Depression Scale* (EPDS; Cox, Holden, & Sagovsky, 1987). This 10-item measure was designed to assess depressive symptoms in women postpartum in the past 7 days. Items (e.g., I have been able to laugh and see the funny side of things) are rated on a 4-point scale (e.g., 0 = As much as I always could, 1 = Not quite so much now, 2 = Definitely not so much now, 3 = Not at all), and summed such that higher scores indicate greater depressive symptoms (range = 0-30). This measure has been demonstrated to be specific and sensitive to changes in depression severity over time (Cox et al., 1987). In this study, the EPDS was used to assess depressive symptoms in females at Times 1 and 2, and demonstrated good internal consistency at Time 1 (α = 0.83) and Time 2 (α = 0.82).

*Beck Depression Inventory* (BDI; Beck, Steer, & Garbin, 1988). This 21-item measure is used to assess depressive symptoms (e.g., mood, sense of failure, appetite, sleeping disturbances, crying) in the past two weeks. Four response options are scored from 0-3. Items are summed such that higher scores indicate greater depressive

symptoms (range = 0-63.). This measure has been used extensively in clinical and research settings, and has demonstrated good content, concurrent, and construct validity (Groth-Marnat, 1990). In this study, the BDI was used to assess depressive symptoms in men at Times 1 and 2, and demonstrated adequate to good internal consistency at Time 1 ($\alpha = 0.78$) and Time 2 ($\alpha = 0.86$).

*Procedure*

Participants were recruited during the third trimester of pregnancy for their first child (Time 1). At this time, participants completed assessments of their expectations, depressive symptoms, and relationship satisfaction. Participants were then recontacted 3-4 months after the birth (Time 2). This time frame was chosen because it is a typical time point used in transition to parenthood studies (e.g., Cordova, 2001; Cox, Paley, Burchinal & Payne, 1999; Hackel, 1990; Wright, Henggeler, & Craig, 1986), and is thought to be short enough after the baby is born to capture transition processes, but long enough to observe the effect of this transition on relationship satisfaction (i.e., all of the above cited studies that use this time frame found significant negative effects on relationship satisfaction). At this time, participants completed assessments of their experiences, perception of their expectation confirmation, attributions about their expectancy disconfirmation, depressive symptoms, and their relationship satisfaction. These assessments were completed through mail-in packets.

## Results

The dataset was examined for completeness, and mean substitution for missing items was used in computing summary scales except when more than 30% of items on a variable were missing. All study variables were examined for normality and transformed

when appropriate. Relationship satisfaction and experiences were transformed to normality through logarithmic transformations, expectations was transformed with a square root transformation, and attributions were transformed to normality through a combination of the two (Tabachnick & Fidell, 2007). In addition, all predictor variables were centered based on the grand mean (Kenny, Kashy & Cook, 2006). Table 2 shows descriptive statistics for the study variables, and Table 3 shows correlations of study variables. The general analytic approach was to use multi-level modeling (MLM) within SPSS version 17.0 (SPSS, 2008) to account for non-independence of the dyadic data, because partners' Time 2 relationship satisfaction scores were not independent ($r = 0.56$, $p < 0.001$). MLM can also make use of data from only one member of the couple and is robust to that. All models specify that individuals are nested within couples and time is a repeated factor across couples. In addition to the key predictor variables, Time 1 relationship satisfaction, and Time 1 and Time 2 depression are included in all analyses to control for the effects of these variables.

*Hypothesis 1: Change in relationship satisfaction from T1 to T2*

To test the hypothesis that relationship satisfaction will significantly decrease over time, relationship satisfaction was predicted in an MLM model, in which the level one variables were time and gender and the level two variable was couple membership. There was a significant decrease in relationship satisfaction from T1 to T2 ($B = -3.00$, $t(109.78) = -4.94$, $p = 0.00$). The effects for both gender and the gender X time interaction were non-significant.

*Hypothesis 2: Expectations, experiences, and T2 relationship satisfaction*

To test hypothesis 2 — that experience-expectation discrepancy is positively associated with Time 2 relationship satisfaction after controlling for T1 satisfaction and T2 depression — a Time 2 relationship satisfaction residualized score was obtained by regressing Time 1 relationship satisfaction and Time 2 depression on T2 relationship satisfaction. The residualized T2 relationship satisfaction score was then predicted in an MLM model, in which the level one variables were gender, expectations, experiences, the expectation X experience interaction, the gender X expectation interaction, the gender X experience interaction, and the gender X expectation X experience interaction, and the level two variable was couple membership. Significant actor ($B$ = -0.05, $t$(172.74) = -4.13, $p$ = 0.00) effects of expectations on relationship satisfaction were found, such that higher expectations were associated with lower relationship satisfaction. Furthermore, significant actor ($B$ = 0.007, $t$(151.79) = 6.97, $p$ = 0.00) and partner ($B$ = 0.003, $t$(150.48) = 3.13, $p$ = 0.002) effects of experiences on relationship satisfaction were found. In other words, one's own and one's partner's experiences are positively associated with one's own relationship satisfaction at Time 2. However, no significant gender differences were found in this domain ($B$ = -0.01, $t$(91.22) = -0.71, $p$ = 0.48) (see Table 4 for full results). Results indicate a significant interaction effect of one's own expectations and one's own experiences ($B$ = 0.001, $t$(143.50) = 3.19, $p$ = 0.002). This interaction indicates that the negative relationship between expectations and relationship satisfaction is worse when experiences are poorer (see Figure 1).

*Hypothesis 3: Perception of experiences and T2 relationship satisfaction*

To test hypothesis 3 — that perception of experiences is positively associated with Time 2 relationship satisfaction after controlling for T2 satisfaction and T2 depression — residualized T2 relationship satisfaction score was predicted in an MLM model, in which the level one variables were gender, the perception score, and the gender X perception interaction, and the level two variable was couple membership. A significant actor effect of perception on relationship satisfaction ($B$ = 0.002, $t$(184.69) = 3.02, $p$ = 0.003) was found. In other words, one's own perception of experience was positively associated with one's own relationship satisfaction at Time 2. However, no significant partner effects ($B$ = 0.001, $t$(186.11) = 1.67, $p$ = 0.10) or gender differences ($B$ = 0.01, $t$(94.54) = 0.41, $p$ = 0.69) were found in this domain (see Table 5 for full results).

*Hypothesis 3a: Perception of experiences moderates relationship between expectations, experiences, and T2 relationship satisfaction*

To test hypothesis 3a — that perception of experiences will moderate the association between expectations, experiences, their interaction, and T2 relationship satisfaction after controlling for T2 satisfaction and T2 depression — residualized T2 relationship satisfaction score was predicted in an MLM model, in which the level one variables were gender, the perception score, expectations, experiences, and all 2-, 3-, and 4-way interactions, and the level two variable was couple membership. Significant actor ($B$ = -0.06, $t$(152.17) = -4.24, $p$ = 0.00) effects of expectations on relationship satisfaction were found, such that one's own higher expectations were associated with one's own lower relationship satisfaction. Furthermore, significant actor ($B$ = 0.007, $t$(152.33) = 5.33, $p$ = 0.00) and partner ($B$ = 0.003, $t$(150.75) = 2.17, $p$ = 0.03) effects of experiences

on relationship satisfaction were found. In other words, one's own and one's partner's experiences are positively associated with one's own relationship satisfaction at Time 2.

Results indicate a significant interaction effect of one's own expectations, experiences, and perception ($B$= 0.000042, $t$(89.06) = 2.135, $p$ = 0.04), indicating crossover effects (see Figure 2). Significant interactions were found between one's own expectations and one's own experiences on relationship satisfaction ($B$ = 0.002, $t$(152.05) = 2.89, $p$ = 0.004), as well as of one's partner's expectations and one's partner's experiences on relationship satisfaction ($B$ = 0.001, $t$(146.48) = 2.13, $p$ = 0.04), and the pattern of relationship was consistent with that of Hypothesis 2 findings (i.e., negative relationship between expectations and relationship satisfaction is worse when experiences are poorer).

No significant gender differences were found on relationship satisfaction ($B$ = -0.02, $t$(84.22) = -1.04, $p$ = 0.30). However, a significant interaction was found such between gender and one's own experiences on relationship satisfaction ($B$ = 0.003, $t$(144.04) = 2.01, $p$ = 0.05), such that the positive relationship between experiences and relationship satisfaction is steeper for males (see Figure 3) (see Table 5 for full results).

*Hypothesis 4: Attributions and T2 relationship satisfaction*

To test hypothesis 4 — that more benign attributions about experiences will be positively associated with Time 2 relationship satisfaction after controlling for T2 satisfaction and T2 depression — an attribution score was calculated. Because the two attribution measures were significantly correlated ($r$ = 0.62, $p$ = 0.00), each scale was standardized and the two were averaged to create a composite attribution score; more positive attribution scores are representative of more benign attributions, and more

negative scores are representative of more hostile attributions. Then the residualized T2 relationship satisfaction score was predicted in an MLM model, in which the level one variables were gender, the composite attribution score, and the gender X attribution interaction, and the level two variable was couple membership. Both significant actor ($B$ = 0.23, $t$(183.21) = 2.67, $p$ = 0.008) and partner ($B$ = 0.20, $t$(183.09) = 2.25, $p$ = 0.03) effects of attributions on relationship satisfaction were found. In other words, one's own and one's partner's attributions were positively associated with one's own relationship satisfaction at Time 2, such that more benign attributions are associated with higher relationship satisfaction. However, no significant gender differences were found in this domain ($B$ = 0.01, $t$(93.86) = 0.38, $p$ = 0.71) (see Table 6 for full results).

*Hypothesis 4a: Attributions moderate relationship between experience-expectation discrepancy and T2 relationship satisfaction*

To test hypothesis 4a — that attributions will moderate the association between experience-expectation discrepancy and T2 relationship satisfaction after controlling for T2 satisfaction and T2 depression — residualized T2 relationship satisfaction score was predicted in an MLM model, in which the level one variables were gender, the attributions score, expectations, experiences, and all 2-, 3-, and 4-way interactions, and the level 2 variable was couple membership.

Significant actor effects of expectations ($B$ = -0.05, $t$(146.27) = -3.30, $p$ = 0.001) and of experiences ($B$ = 0.008, $t$(141.96) = 5.24, $p$ = 0.00) on relationship satisfaction were found, such that higher expectations and lower experiences were associated with lower relationship satisfaction (see Table 6 for full results). No significant interaction effect was found of one's own expectations, experiences, and attributions ($B$ = 0.002,

$t(130.13) = 0.92$, $p = 0.36$). Significant interactions were found between one's own expectations and one's own experiences on relationship satisfaction ($B = 0.002$, $t(145.82) = 3.06$, $p = 0.003$), and the pattern of findings is mostly consistent with those of Hypothesis 2 (i.e., those with better experiences showed virtually no variation in relationship satisfaction based on expectations, whereas those with poorer experiences had a negative relationship between expectations and relationship satisfaction).

## Discussion

As predicted, partner expectation disconfirmation across the transition to parenthood was associated with decreases in relationship satisfaction. How this expectation disconfirmation is cognitively processed was hypothesized to predict relationship satisfaction. As predicted, perceptions of expectation confirmation also moderated the relationship between expectations, experiences, and relationship satisfaction. However, attributions of expectation disconfirmation did not moderate this relationship. The following discussion will further explore these findings and their implications.

This study explored cognitive processes associated with the transition to parenthood and their impact on relationship satisfaction. A significant decrease in relationship satisfaction was found from pregnancy to early parenthood. Although there is evidence that the decrease in satisfaction found during this transition is not necessarily unique to couples having a baby (Mitnick et al., 2009), findings that rates of deterioration in relationship satisfaction increase across the transition to parenthood might suggest that this transition represents a first step in a deteriorating trajectory of relationship quality (Lawrence, Nylen, & Cobb, 2007).

The current study also found that 65 percent of men and 71 percent of women experienced a decrease in relationship satisfaction, although 30 percent of men and 24 percent of women experienced an increase in satisfaction. There was also an increase in the standard deviations of relationship satisfaction at Time 2, although this increase was not significant ($F_{women}(106) = 2.09$, $F_{men}(95) = 1.56$); therefore, participants experience a mean decrease and some increase in variability of relationship satisfaction across this transition. This is consistent with previous research that identifies variability in change direction alongside a mean decrease in relationship satisfaction across the transition to parenthood (Cowan & Cowan, 1995). This highlights the importance of this developmental period. In the context of an average decline in relationship satisfaction, there is a good deal of variability in responses to this transition; thus, this underscores that not all couples are affected in the same way by becoming parents. This suggests that the way this transition is experienced and cognitively processed might differentially affect one's relationship over time. Considering both that this is a common developmental milestone for most couples, and that relationship quality is related to physical and emotional health outcomes for both parents and children, greater insight into what factors might moderate the negative impact on relationship satisfaction, as well as what targets of intervention might be most fruitful, is of great importance.

In this study, higher prenatal expectations were generally associated with lower consequent relationship satisfaction, but better experiences with the partner in early parenthood were associated with higher satisfaction. Expectations about one's partner as a parent and actual experiences interact in their impact on relationship satisfaction. This interaction indicates that when experiences are more positive there is virtually no impact

of prenatal expectation on later relationship satisfaction; however, when experiences are poorer, higher expectations are associated with lower consequent relationship satisfaction. Considering the generally positive nature of the expectations and experiences in this sample, it seems that especially high expectations can leave one vulnerable for disappointment in the relationship if or when experiences do not meet those expectations (Kalmuss et al., 1992). Though past research found similar results with regard to expectations about parenthood, the self, and one's partner's childcare duties (e.g., Kalmuss et al., 1992; Ruble et al., 1988), the current study extends those findings to more comprehensive expectations about one's partner as a co-parent. Further research should explore which components of partner expectations are most prone to violation and which impact relationship satisfaction the most. In addition, future research could also determine the predictors of experience, with the hope of identifying and intervening with couples whose expectations are unlikely to be fulfilled.

Positive perceptions of one's partner were related to higher relationship satisfaction in early parenthood. These perceptions also moderate the relationship between expectations, experiences, and relationship satisfaction. When one's high expectations are met with poorer experiences, positive perceptions somewhat buffer the detrimental impact on relationship satisfaction. Likewise, when one's low expectations are surpassed with positive experiences having a positive perception yields higher relationship satisfaction than having a more negative perception of the same circumstances. Therefore, it seems that perception can serve as a protective or enhancing factor in this process. This is consistent with research on the cognitive correlates of subjective well-being, which finds that happy participants interpret their life

circumstances more positively than unhappy participants (Seidlitz, Wyer, & Diener, 1997). The current study suggests a parallel relationship between interpreting one's partner's behavior as better than one expected and being more satisfied with the relationship. This then raises questions about what individual or relationship factors might contribute to better perception. The literature on negative cognitive bias evidenced in individuals with depression suggests individual correlates such as dysfunctional attitudes and early stressors (Beck, 2008), and this type of cognitive bias has also been related to personality constructs such as neuroticism, extraversion (Hayes & Joseph, 2002), and negative affectivity (Watson & Clark, 1984). Future research should further develop the predictors and correlates of perception that might be relevant to the transition to parenthood, to offer better insight of any malleable clinical targets for prevention or intervention.

In the current study, more benign attributions about negatively violated expectations were associated with higher relationship satisfaction. This is consistent with prior research that correlates less global, stable, and blaming attributions with higher relationship satisfaction (e.g., Bradbury & Fincham, 1990). This indicates that attributions could be a fruitful clinical target, in that they offer a means by which one can influence one's own satisfaction, and that therapeutic efforts to change attributions have evidenced success (e.g., Baucom, Epstein, LaTaillade, & Kirby, 2008; Bugental et al., 2002; Stewart, Latu, Kawakami, & Myers, 2009). Furthermore, because explanatory style for negative events is considered to be relatively stable (Burns & Seligman, 1989), and early attributional styles of newlyweds has been show to predict trajectories of satisfaction over the first several years of marriage (Karney & Bradbury, 2000), perhaps

attributional style could be a target of prevention efforts. This type of attributional retraining component has been incrementally successful when included in programs to prevent child abuse (Bugental et al., 2002). Prevention programs for relationships such as PREP (Prevention and Relationship Enhancement Program; Markman, Stanley, Blumberg, Jenkins, & Whiteley, 2004) do address expectations and attributions (e.g., attributions of problems to communication deficits rather than partner characteristics are encouraged), but "whether the attention to expectations produces attributional changes important to the outcome of prevention programs is unknown" (Kelly & Fincham, 1999, p. 370). Future research could test the efficacy of clinical prevention and intervention efforts for pregnant couples or new parents that specifically target attributions, especially as they involve the partners' changed or unexpected behaviors.

It is of note that when attributions are included in a model with expectations and experiences, attributions no longer significantly predict relationship satisfaction. However, on further investigation, when experiences are excluded from the model, attributions significantly predict relationship satisfaction ($B = .25$, $t(174.23) = 2.43$, $p = 0.02$). It is possible that because of the high correlation between attributions and experiences ($r = 0.68$, $p = 0.00$), much of the variability contributed by attributions was accounted for by experiences, leaving attributions with a non-significant additive contribution. It is noteworthy that attributions and experiences are highly correlated ($r = 0.68$, $p = 0.00$), and this relationship can be interpreted in a number of ways. On the one hand, individuals who generally make more hostile attributions may act in hostile or critical ways that may yield poorer partner behavior, or may simply interpret partner behavior to be more negative. On the other hand, being met with a high frequency of poor

experiences may make it difficult to resist global, stable, and blaming attributions about one's partner (e.g. Gottman, 1994). A future study that could distinguish between these interpretations could assess attributions in pregnancy as well as in early parenthood. Furthermore, the way these constructs were measured (i.e. through retrospective self-report) might cause experiences and attributions to appear more associated than they truly are; use of a daily diary method to measure experiences could mitigate any methodological inflation of the association between experiences and attributions.

There were not many significant gender findings in this study. One interaction between gender and experiences on relationship satisfaction was found, such that the positive slope of the relationship between experiences and relationship satisfaction was steeper for men than women; thus, men's relationship satisfaction was somewhat more reactive to the valence of their experiences. It is noteworthy that no other gender interactions were found. Although we must be tentative in our interpretation of these results awaiting replication, it seems to suggest that these processes are not functioning differently for men and women.

This study possesses a number of strengths. First, multi-level modeling analyses can account for the dyadic nature of the data. Furthermore, the measurement of expectations extends beyond both expectations about the self in parenthood and expectations about how much child care the partner will do. This allows for richer assessment of the many types of expectations one holds for one's partner across this transition that might impact consequent relationship satisfaction. In addition, one of the criticisms of some of the past research on the transition to parenthood (Lawrence, Nylen, & Cobb, 2007) is the lack of attention to fathers (e.g., Harwood, McLean, & Durkin,

2007). Thus the inclusion of nearly equal numbers of men and women in the current study allows for gender comparisons and expansion of theory regarding how mothers and fathers experience this transition.

The study also possesses a number of limitations. First, the sample was highly educated. Similarly, the sample may be older than is typical for the population; the average age of mothers at T1 was 29.10, and the average age of first-time mothers in New York State is estimated to be 26.8 (Mathews & Hamilton, 2009). This may limit the generalizability of the findings; future studies should test whether these results replicate in a more representative sample. There was a 30% attrition rate, and since multi-level modeling excludes participants when explanatory variables are missing, this may have impacted the results; Time 2 participants were found to be significantly more satisfied initially in their relationships than those who dropped out of the study. Furthermore, relationship satisfaction levels were generally fairly high regardless; thus, this study may not reflect the full range of dissatisfied couples. Finally, results may have been shaped by the exclusive use of self-report methods; future studies could use observational methods to ensure that the results are not due largely to shared method variance.

This study suggests a number of important clinical directions that can be achieved either via prevention or intervention to help preserve parents' relationship quality and its consequent trajectory. Prenatal classes or other prevention efforts could expand their focus to help pregnant couples to have realistic expectations of their partners, to communicate those expectations clearly, and to establish less hostile attribution styles. Prenatal prevention programs should address not only expectations about parenthood regarding the self and the baby but also different facets of partner expectations, including

expectations about behavior (e.g., child care duties), reactions to the baby (e.g., tolerance of messiness, lovingness), personal factors (e.g., being in a good mood), and relationship changes (e.g., getting along, disagreeing about baby care, being supportive). This study's findings also offer empirical support for intervention targets after the birth of the child. Interventions in early parenthood can assist individuals in realizing their partners' expectations in actual experience when possible, in viewing the causes for their expectation violations in a more benign light, and even in gaining insight into possible cyclical problematic patterns between partner behavior and individual attributions.

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Appendix

Table 1

*Descriptive Statistics for Demographic Variables*

| | Males | | Females | |
|---|---|---|---|---|
| | T1 | T2 | T1 | T2 |
| *n* | 146 | 100 | 151 | 108 |
| Age - *M* (*SD*) | 30.84 (5.12) | 31.85 (4.72) | 29.10 (4.72) | 30.21 (4.32) |
| % married | 82.19 | 91.00 | 80.79 | 88.00 |
| Ethnicity: % White | 78.10 | 80.80 | 84.00 | 83.30 |
| % African American | 6.20 | 1.00 | 2.70 | 0.90 |
| % Hispanic | 11.60 | 11.10 | 10.00 | 8.30 |
| % Other | 11.70 | 10.10 | 7.30 | 7.40 |
| Occupation: % Full-time | 86.20 | 87.00 | 64.90 | 56.50 |
| % Part-time | 2.80 | 3.00 | 17.20 | 13.90 |
| % Students | 9.00 | 7.00 | 9.30 | 8.30 |
| % Homemakers | 0.00 | 1.00 | 6.00 | 21.30 |
| % Unemployed | 4.80 | 4.00 | 9.30 | 8.30 |
| Education: % < HS | 4.10 | 2.00 | 2.00 | 1.90 |
| % HS graduate | 13.10 | 10.10 | 8.60 | 4.60 |
| % Some college | 21.40 | 18.20 | 15.20 | 12.00 |
| % College graduate | 32.40 | 34.30 | 26.50 | 29.60 |
| % Master’s | 20.70 | 24.20 | 39.70 | 40.70 |
| % Prof/doctoral | 8.30 | 11.10 | 7.90 | 11.10 |

Table 2

*Means and Standard Deviations of Study Variables*

| | Men | | Women | |
|---|---|---|---|---|
| Variable | *M (SD)* | Range | *M (SD)* | Range |
| T1 Couple Satisfaction Scale (CSI) | 143.05 (15.89) | 61.94 – 161.00 | 143.03 (17.46) | 47.00 – 161.00 |
| T2 CSI | 138.82 (20.07) | 33.00 – 161.00 | 136.54 (25.24) | 13.00 – 161.00 |
| T1 Expectation Scale | 177.42 (17.96) | 127.00 – 212.00 | 176.15 (20.00) | 109.00 – 212.00 |
| T2 Experience Scale | 182.77 (18.30) | 135.00 – 211.00 | 174.43 (26.94) | 52.00 – 212.00 |
| T2 Perception Scale | 138.40 (32.31) | 89.00 – 210.00 | 136.38 (34.17) | 27.52 – 212.00 |
| T2 RAM Attributions | 57.32 (19.65) | 24.00 – 126.00 | 66.66 (21.70) | 24.00 – 137.00 |
| T2 Reasons | 56.89 (11.78) | 17.00 – 70.00 | 56.74 (12.67) | 15.00 – 70.00 |

Table 3

Pearson Correlations of Study Variables

| Men | T2 CSI | T1 Expectation | T2 Experience | T2 Perception | T2 Attributions | T1 Depression | T2 Depression |
|---|---|---|---|---|---|---|---|
| T1 Couple Satisfaction Scale (CSI) | 0.76** | 0.65** | 0.51** | 0.13 | 0.47** | -0.24** | -0.16 |
| T2 CSI | | 0.52** | 0.73** | 0.20* | 0.59** | -0.15 | -0.24* |
| T1 Expectation Scale | | | 0.60** | 0.14 | 0.36** | -0.29** | -0.13 |
| T2 Experience Scale | | | | 0.30** | -0.62** | -0.11 | -0.25 |
| T2 Perception Scale | | | | | 0.34** | 0.09 | 0.06 |
| T2 Attributions | | | | | | -0.10 | -0.35 |
| T1 Depression | | | | | | | 0.52** |

*$p$<0.05, **$p$<0.01

| Women | T2 CSI | T1 Expectation | T2 Experience | T2 Perception | T2 Attributions | T1 Depression | T2 Depression |
|---|---|---|---|---|---|---|---|
| T1 Couple Satisfaction Scale (CSI) | 0.71** | 0.61** | 0.59** | 0.35** | 0.49** | -0.28** | -0.27** |
| T2 CSI | | 0.45** | 0.82** | 0.51** | 0.59** | -0.28** | -0.42** |
| T1 Expectation Scale | | | 0.61** | 0.31** | 0.53** | -0.38** | -0.30** |
| T2 Experience Scale | | | | 0.62** | 0.72** | -0.29** | -0.45** |
| T2 Perception Scale | | | | | 0.55** | -0.07 | -0.19 |
| T2 Attributions | | | | | | -0.28* | -0.43** |
| T1 Depression | | | | | | | 0.51** |

*$p$<0.05, **$p$<0.01

Table 4

*Parameter Estimates of Model 2 – Examination of Impact of Expectations and Experiences on Relationship Satisfaction*

| Fixed components | *B* | *df* | *t* |
|---|---|---|---|
| Intercept | -.06 | 91.69 | -2.74** |
| Gender | -.01 | 91.22 | -0.71 |
| A Expectations | -.05 | 172.74 | -4.13*** |
| P Expectations | -.02 | 170.98 | -1.56 |
| A Experiences | .007 | 151.79 | 6.97*** |
| P Experiences | .003 | 150.48 | 3.13** |
| A Expectations x A Experiences | .001 | 143.50 | 3.19** |
| P Expectations x P Experiences | .001 | 139.96 | 1.91 |
| Gender x A Expectations | -.01 | 161.77 | -0.78 |
| Gender x P Expectations | -.01 | 160.67 | -0.36 |
| Gender x A Experiences | .002 | 141.84 | 1.80 |
| Gender x P Experiences | -.001 | 139.90 | -1.04 |
| Gender x A Expectations x A Experiences | .001 | 140.89 | 1.82 |
| Gender x P Expectations x P Experiences | -.001 | 137.76 | -1.72 |

A = Actor; P = Partner

*$p < 0.05$; **$p < 0.01$; ***$p < 0.001$

Table 5

*Parameter Estimates of Models 3 and 3a*

| | Model 3 | | | Model 3a | | |
|---|---|---|---|---|---|---|
| Fixed components | *B* | *df* | *t* | *B* | *df* | *t* |
| Intercept | .002 | 96.35 | 0.08 | -.08 | 84.55 | -3.06** |
| Gender | .006 | 94.54 | 0.41 | -.02 | 84.22 | -1.04 |
| A Expectations | | | | -.06 | 152.17 | -4.24*** |
| P Expectations | | | | -.02 | 146.57 | -1.44 |
| A Experiences | | | | .01 | 152.33 | 5.33*** |
| P Experiences | | | | .003 | 150.75 | 2.17* |
| A Perception | .002 | 184.69 | 3.02** | -.0004 | 155.83 | -0.44 |
| P Perception | .001 | 186.11 | 1.67 | .001 | 154.04 | -.89 |
| A Expectations x A Experiences | | | | .002 | 152.05 | 2.89** |
| P Expectations x P Experiences | | | | .001 | 146.48 | 2.13* |
| A Expectations x A Perception | | | | -.00002 | 133.54 | -0.03 |
| P Expectations x P Perception | | | | -.0004 | 129.22 | -0.68 |
| A Experiences x A Perception | | | | -.000001 | 112.90 | -0.04 |
| P Experiences x P Perception | | | | .00001 | 109.36 | 0.33 |
| A Expectations x A Experiences x A Perception | | | | .00004 | 89.06 | 2.14* |
| P Expectations x P Experiences x P Perception | | | | .00001 | 90.27 | 0.50 |
| Gender x A Expectations | | | | -.02 | 146.06 | -1.63 |
| Gender x P Expectations | | | | -.002 | 141.04 | -0.16 |
| Gender x A Experiences | | | | .003 | 144.04 | 2.01* |
| Gender x P Experiences | | | | -.001 | 141.13 | -0.99 |
| Gender x A Perception | -.001 | 150.47 | -1.13 | -.0005 | 148.45 | -0.55 |
| Gender x P Perception | .001 | 150.72 | 0.89 | .0002 | 145.81 | 0.18 |
| Gender x A Expectations x A Experiences | | | | .001 | 146.16 | 1.81 |
| Gender x P Expectations x P Experiences | | | | -.0005 | 141.17 | -0.66 |
| Gender x A Expectations x A Perception | | | | -.0005 | 129.67 | -0.84 |
| Gender x P Expectations x P Perception | | | | -.0003 | 125.25 | -0.63 |
| Gender x A Experiences x A Perception | | | | .00002 | 112.96 | 0.54 |
| Gender x P Experiences x P Perception | | | | .000005 | 109.42 | 0.15 |
| Gender x A Expectations x A Experiences x A Perception | | | | .00004 | 89.05 | 1.97 |
| Gender x P Expectations x P Experiences x P Perception | | | | -.000004 | 90.25 | -0.18 |

A = Actor; P = Partner; $^{*}p < 0.05$; $^{**}p < 0.01$; $^{***}p < 0.001$

Table 6

*Parameter Estimates of Models 4 and 4a*

| | Model 4 | | | Model 4a | | |
|---|---|---|---|---|---|---|
| Fixed components | *B* | *df* | *t* | *B* | *df* | *t* |
| Intercept | -.01 | 95.62 | -0.37 | -.05 | 83.74 | -1.79 |
| Gender | .01 | 93.86 | 0.38 | -.03 | 83.35 | -1.25 |
| A Expectations | | | | -.05 | 146.27 | -3.30*** |
| P Expectations | | | | -.01 | 151.12 | -0.62 |
| A Experiences | | | | .01 | 141.96 | 5.24*** |
| P Experiences | | | | .003 | 147.91 | 1.89 |
| A Attributions | .23 | 183.21 | 2.67** | -.22 | 153.31 | -1.67 |
| P Attributions | .20 | 183.09 | 2.25* | -.02 | 156.59 | -0.17 |
| A Expectations x A Experiences | | | | .003 | 145.82 | 3.06** |
| P Expectations x P Experiences | | | | .001 | 150.72 | 0.66 |
| A Expectations x A Attributions | | | | -.09 | 140.37 | -1.03 |
| P Expectations x P Attributions | | | | .08 | 147.44 | 0.89 |
| A Experiences x A Attributions | | | | -.0003 | 127.48 | -0.06 |
| P Experiences x P Attributions | | | | -.008 | 132.80 | -1.36 |
| A Expectations x A Experiences x A Attributions | | | | .002 | 130.13 | 0.92 |
| P Expectations x P Experiences x P Attributions | | | | -.001 | 135.58 | -0.52 |
| Gender x A Expectations | | | | -.01 | 145.26 | -0.72 |
| Gender x P Expectations | | | | -.01 | 149.78 | -0.92 |
| Gender x A Experiences | | | | .003 | 139.17 | 1.62 |
| Gender x P Experiences | | | | .0004 | 143.68 | 0.25 |
| Gender x A Attributions | .10 | 139.16 | 1.04 | .03 | 152.79 | 0.21 |
| Gender x P Attributions | -.14 | 140.18 | -1.43 | -.17 | 155.90 | -1.37 |
| Gender x A Expectations x A Experiences | | | | .0001 | 144.16 | 0.71 |
| Gender x P Expectations x P Experiences | | | | -.0005 | 148.39 | -0.55 |
| Gender x A Expectations x A Attributions | | | | .01 | 135.38 | 0.12 |
| Gender x P Expectations x P Attributions | | | | -.07 | 140.27 | -0.78 |
| Gender x A Experiences x A Attributions | | | | -.0001 | 126.49 | -0.12 |
| Gender x P Experiences x P Attributions | | | | .009 | 131.34 | 1.52 |
| Gender x A Expectations x A Experiences x A Attributions | | | | -.001 | 129.76 | -0.75 |
| Gender x P Expectations x P Experiences x P Attributions | | | | .001 | 135.03 | 0.62 |

A = Actor; P = Partner; $^{*}p < 0.05$; $^{**}p < 0.01$; $^{***}p < 0.001$

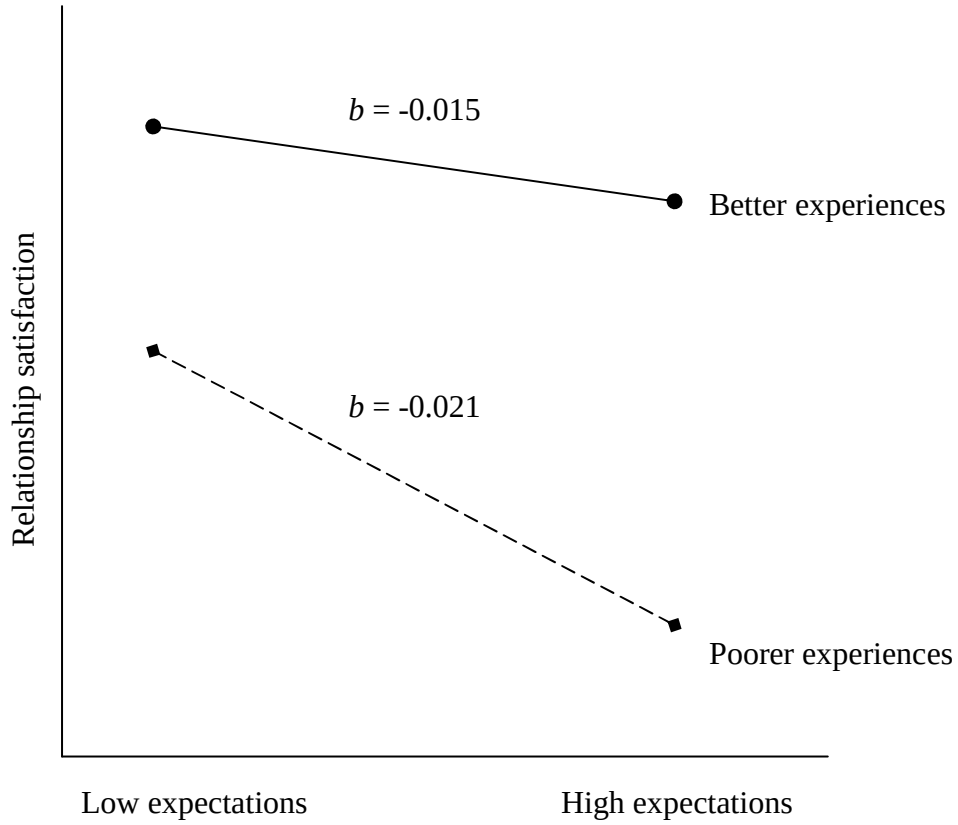


*Figure 1.* Interaction effect of expectations and experiences on relationship satisfaction in Hypothesis 2 model. *b* = unstandardized regression coefficient (i.e., simple slope).

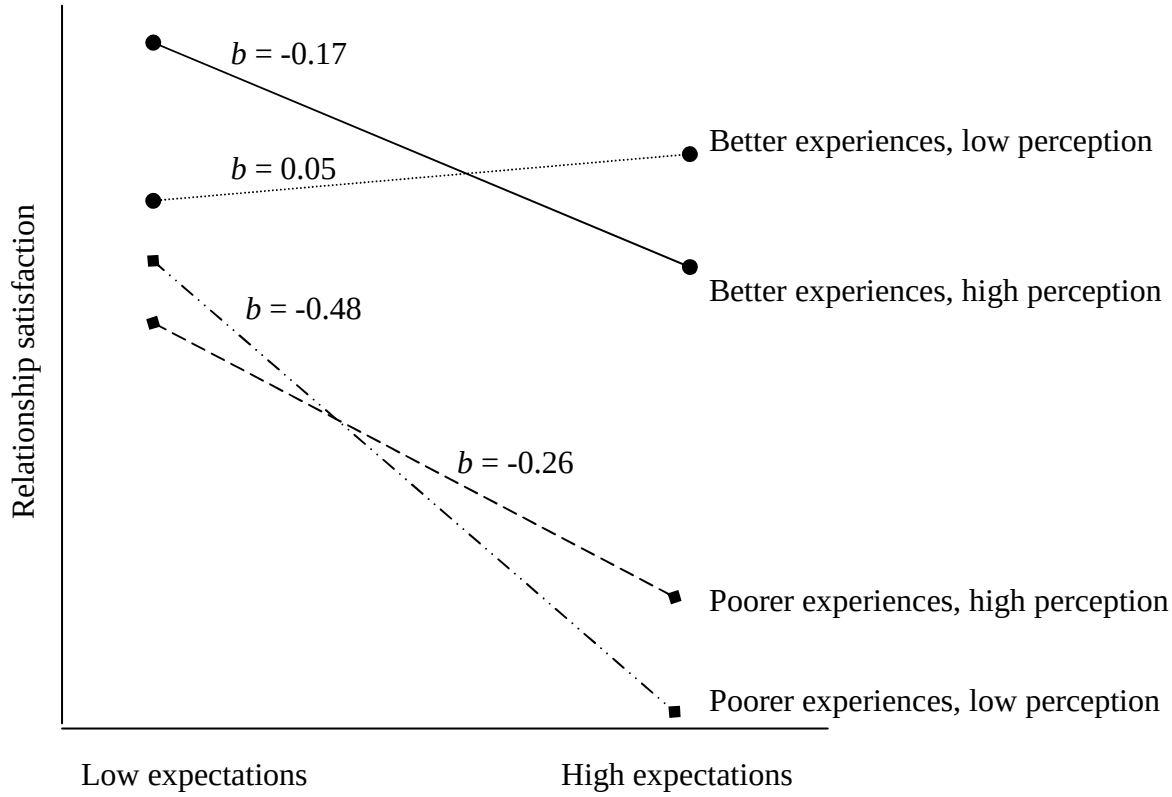


*Figure 2.* Interaction effect of expectations, experiences, and perception on relationship satisfaction in Hypothesis 3a model. *b* = unstandardized regression coefficient (i.e., simple slope).

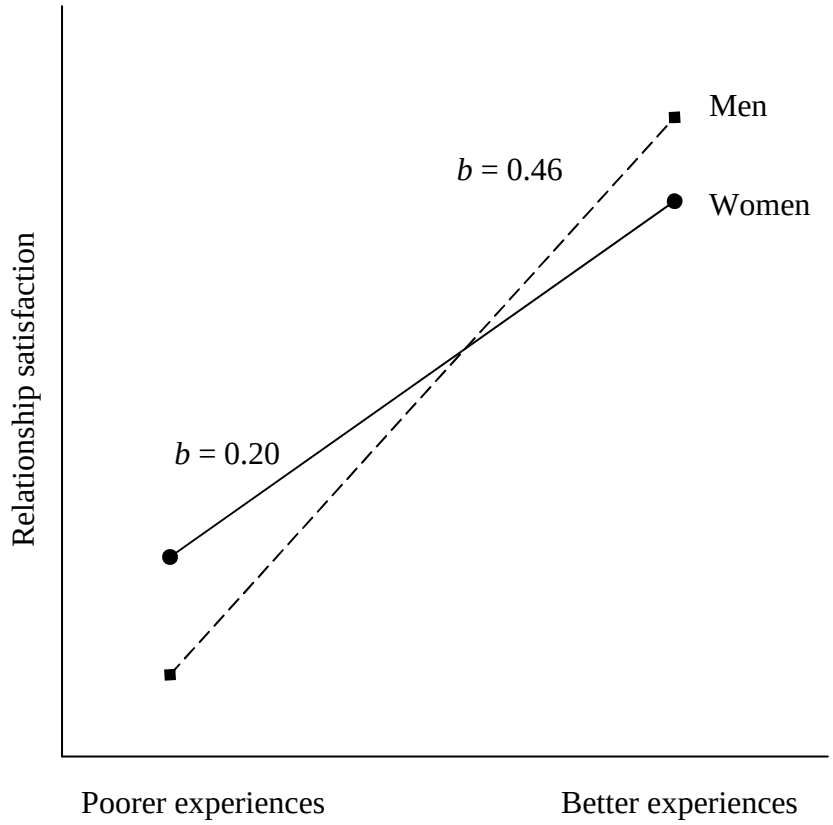


*Figure 3.* Interaction effect of gender and experiences on relationship satisfaction in Hypothesis 3a model. *b* = unstandardized regression coefficient (i.e., simple slope).