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Daily Parenting Engagement among New Mothers and Fathers: The Role of Romantic Attachment in Dual-Earner Families

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Abstract

We investigated the association of prenatal assessments of mothers' and fathers' self-reported romantic attachment anxiety and avoidance with the time mothers and fathers reported in proximity-focused and exploration-focused engagement with their infants at nine months postpartum. Our sample of 136 dual-earner couples came from a larger longitudinal study of the transition to parenthood. Time in proximity-focused (interactions that emphasize physical or emotional connection) and exploration-focused (activities that stimulate and build knowledge of the world) engagement on work and nonworkdays were measured using time diaries. Using Actor-Partner Interdependence Models, we found significant across partner associations between romantic attachment and parental engagement. In particular, analyses revealed interesting interactions: fathers higher in avoidance spent more time in exploration-focused engagement on workdays when mothers were more anxious, whereas mothers higher in anxiety spent more time in proximity-focused engagement on nonworkdays when fathers were more avoidant. Moreover, fathers demonstrated a compensatory pattern of engagement in response to mother's greater attachment anxiety or avoidance. Findings support the utility of studying romantic attachment within a family system and extend the literature on correlates of early parental engagement.

Keywords: self-reported romantic attachment, parent engagement, time diaries, transition to parenthood, family systems

INTRODUCTION

Parenting behavior has been consistently linked to children's adjustment (e.g., Cox, Owen, Henderson, & Margand, 1992; Sarkadi, Kristiansson, Oberklaid, & Bremberg, 2008). Although the quality of parenting behavior is important, some scholars have suggested that the amount of time parents spend in developmentally appropriate engagement activities may be just as consequential for child adjustment (e.g., Cox et al., 1992; Pleck, 1997; 2007). Moreover, parenting quality is most typically measured using brief behavioral observations of parents and children, which may or may not reflect the day-to-day patterning of parental behavior.

Belsky's process model (1984) of parenting claims that parental characteristics, e.g., parents' personalities or family of origin histories, are important determinants of parenting behavior, and research has supported this assertion (Davies, Sturge-Apple, Woitach, & Cummings, 2009; Edelstein et al., 2004; Selcuk et al., 2010). However, comparatively little research has focused on determinants of the types of activities that parents engage in with

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their infants and the amount of time they devote to these activities (e.g., Brown, McBride, Shin & Bost, 2007). Although a few studies have linked self-reported attachment to the quality of parenting behavior (Davies et al., 2009; Edelstein et al., 2004; Selcuk et al., 2010), it is not yet known whether parents' self-reported romantic attachment is associated with actual or perceived quantities of parental engagement. Using novel time-diary methods, our study sought to expand understanding of links between self-reported romantic attachment and parenting by examining how expectant parents' levels of attachment anxiety and avoidance shape the time they report spending in proximity-focused (interactions that emphasize physical or emotional connection) and exploration-focused (activities that stimulate and build knowledge of the world) engagement with their new infants.

Further, attachment functions within a family system (Cohn, Cowan, Cowan, & Pearson, 1992; Cowan, 1997); family members are interdependent and their behaviors cannot be adequately understood by analyzing the individual, or even a single dyad in isolation (Minuchin, 1985). Although in 1997, Cowan made a plea to researchers to explore the direct and indirect ways in which attachment may function in a family system, few studies have attempted this (for notable exceptions see Cowan, Cowan & Mehta, 2009; Mikulincer, Florian, Cowan & Cowan, 2002). Parents' romantic attachment may interact to influence mothers' and fathers' parenting, and one parent's attachment may impact the other partner's parenting behaviors. The current study expands the literature by exploring these associations using data from the New Parents Project, a longitudinal study of different-sex, dual-earner, married and cohabiting first-time parents in a large Midwestern city in the United States.

Attachment Theory and Parenting

Attachment theory (Bowlby, 1969; 1973) has helped us understand how our interactions in key relationships, particularly those with our primary caregivers, inform our concepts of love and closeness, and how these concepts help guide our future behavior. Based upon differential experiences in their families of origin, people develop both conscious and sub-conscious understandings about love/closeness, which help guide their future expectations and actions in other close bonds, e.g., with romantic partners (Pietromonaco & Barrett, 2000). Researchers have developed self-report measures to assess individuals' "here and now" conscious perceptions of how they feel and interact in their close adult relationships, often focusing on romantic relationships (Roisman et al., 2007). Parents' general romantic attachment may ultimately impact how parents choose to spend their time, and hence their beliefs and expectations about close relationships may not only influence their interactions with their partners, but also how and how often they engage with their children.

A growing body of research has found associations between self-reported romantic attachment and parenting (e.g., Davies et al., 2009; Edelstein et al., 2004; Selcuk et al., 2010). For example, Selcuk et al. (2010) found that mothers higher in romantic attachment avoidance demonstrated lower maternal sensitivity, and that anxiety and avoidance were associated with specific maternal behaviors. For instance, maternal avoidance was negatively associated with a mother's ability to build on her child's focus of attention and notice his/her smiles and vocalizations (among other things), but positively associated with behaviors such as using verbal prohibitions toward the child. Although maternal anxiety was associated with some of these same behaviors, it was uniquely associated with others; e.g., anxiety was positively correlated with apprehension about the child's exploration of the environment. Hence, the dimensions of romantic attachment may have implications for the ways parents engage with their children.

Traditionally, maternal parenting behavior has been measured using discrete, observational assessments of mothers' interactions with their children (e.g., Edelstein et al., 2004; for an exception, see McBride & Mills, 1993). However, the kinds of behaviors that both parents

engage in with their young children on a daily basis and the amount of time they invest in these behaviors may also be of importance. For example, within research on fathering, there has been a stronger emphasis on assessing the impact of involvement, with involvement often defined as the time fathers are directly engaged with their children (Brown et al., 2007; Lamb, Pleck, Charnov & Levine, 1985). Associations have been found between parental involvement and child attachment, such that fathers and mothers who reported more time available to their infants were more likely to have infants classified as secure in their respective relationships (Cox et al., 1992). Although some researchers have attempted to more clearly define and investigate facets of parental involvement, e.g., by exploring parental interaction, accessibility, and responsibility (e.g., McBride & Mills, 1993), few have examined the different types of engagement parents enact in their daily interactions with their children.

Our research takes the concept of involvement a step further, by defining particular types of engagement, as opposed to capturing the total amount of time a parent is involved with his/her infant. In particular, we focused on the amount of time parents reported in proximity-focused and exploration-focused engagement. Proximity-focused engagement was conceptualized as the time parents spent in interactions that emphasized direct physical or emotional connection, e.g., time spent soothing and talking with the infant. In contrast, exploration-focused engagement was conceptualized as time parents spent in activities that could build the child's knowledge of his/her surrounding world and stimulate him/her, e.g., time spent playing or reading with the infant. Both of these aspects of parenting are common and important to children's development (Bornstein & Putnick, 2012; author citation), and parents low on both attachment anxiety and avoidance may offer their older infant a healthy balance of both types of engagement. However, parents higher in attachment anxiety or attachment avoidance may demonstrate a bias towards time spent in proximity-focused or exploration-focused engagement, respectively, as this type of interaction may best align with their expectations and beliefs about close relationships.

Attachment within a Family System

The body of research on associations self-reported romantic attachment and parenting is relatively small, but the body of literature investigating how adult attachment, more broadly defined, may function within a family system is even smaller (Cowan, 1997). Cohn, Cowan, Cowan and Pearson (1992) found when both parents had insecure models of attachment as measured by the Adult Attachment Interview (Main & Goldwyn, 1998), mothers displayed less competent parenting toward their preschool aged children, compared to mothers in couples with other attachment compositions (e.g., couples with insecure mothers and secure fathers).

To our knowledge, there is no research that has investigated the interaction of parents' self-reported romantic attachment anxiety or avoidance and how this may be associated with each partner's parental engagement. However, if - as family systems theory suggests - the actions of one parent cannot be properly understood by investigating his/her characteristics in isolation, parents may consciously or subconsciously adjust their parenting based on their partners' attributes and behaviors. In this respect, to more accurately understand the complexity of associations within the family system, it is important to investigate how each parent's attributes, such as their attachment anxiety and avoidance, may be associated with their partner's engagement with the infant, and may interact to predict how each parent spends his/her time.

The Present Study

In the current study, we investigated the associations between self-reported romantic attachment and parental engagement in a sample of dual-earner couples during their transition to parenthood from the third trimester of pregnancy through nine months postpartum. This can be a stressful time for couples (Belsky & Pensky, 1988), particularly for dual-earner couples (Vasquez, Durik, & Hyde, 2002), as they adjust to their new roles as parents and the ways in which their couple relationship has changed. As such, the transition to parenthood is the kind of stressor that activates attachment strengths and vulnerabilities within the parent that in turn may affect the development of parenting behaviors (Wilson, Rhoads, Simpson, & Tran, 2007), and is thus an ideal time period in which to examine associations between romantic attachment and parental engagement. Our research utilized time diary methods to investigate how parents reported spending their time on both a work and nonworkday. Time diaries may provide a more accurate account of individuals' time use when compared to questionnaires or surveys that ask people to recall how often or how much they engage in certain activities (Press & Townsley, 1998). At the same time, however, time diaries still represent each parent's perception of his/her time use, including his/her perception of their primary focus when multi-tasking (e.g., talking with the child and doing the dishes).

The context of work may influence parental engagement (McBride & Mills, 1993), and working parents' adult attachment styles have been associated with their functioning in family and work life (Vasquez et al., 2002); thus we investigated the associations between self-reported romantic attachment and mothers' and fathers' engagement on both a work and nonworkday. Hazan and Shaver (1990) have argued that work, for adults, is theoretically akin to infant exploration; hence, individuals' attachment beliefs and expectations influence the comfort and success they feel within work settings and the balance, or lack thereof, with which they approach the love and work dimensions of their lives. In fact, their research demonstrated that compared with more secure individuals, anxious participants had a preoccupation with love concerns that interfered with their work, and avoidant participants used work to avoid close social interactions. Although we do not yet know how parents' self-reported romantic attachment may be associated with their engagement with their infants on nonworkdays (when family and household demands likely take precedence), versus workdays (when work demands may take precedence and constrain time use), in accordance with the ideas of Hazan and Shaver (1990) we examined associations between self-reported romantic attachment and parent engagement separately on work and nonworkdays.

Given previous research, we hypothesized that parents scoring higher on attachment avoidance would spend less time in proximity-focused engagement with their new infants and more time in exploration-focused engagement, relative to parents with lower attachment avoidance. In our sample of dual-earner, predominantly middle-class families, we did not anticipate that parents with higher attachment avoidance would demonstrate complete disengagement, as previous research has demonstrated a culture of highly involved parenting among middle-class parents (Lareau, 2011) and full-time working mothers (Johnston & Swanson, 2006), which would likely preclude withdrawal from engagement. Hence, we hypothesized that parents with greater attachment avoidance would spend less time in engagement that was about close physical or emotional bonding. This expectation was drawn from Selcuk et al. (2010), who showed that avoidant mothers showed uneasiness with contact and a failure to respond appropriately to child signals. Moreover, Wilson et al. (2007) found that avoidant mothers felt less emotionally close to their newborns. In addition, we expected to see more associations of avoidance with engagement on nonworkdays, as prior research has indicated that more avoidant individuals use work to avoid social interaction (Hazan & Shaffer, 1990). On nonworkdays, when more avoidant individuals

have fewer opportunities to escape close interactions, the stress of family responsibilities and pleas for closeness from family members may further activate their attachment beliefs, impacting their engagement patterns with their infants.

In contrast, we hypothesized that parents' anxiety would be positively associated with time spent in proximity-focused engagement and negatively associated with time spent in exploration-focused engagement as more anxious adults typically prefer closeness, and more anxious mothers are more apprehensive with regard to their young children's environmental exploration (Selcuk et al., 2010). Hence, compared to time spent in exploration-focused engagement, parents with higher anxiety would spend more time soothing/holding their infants. In addition, we anticipated that associations of anxiety with engagement would be more evident on workdays, as prior research has indicated that more anxious individuals are often preoccupied with love concerns while at work (Hazan & Shaffer, 1990). On workdays, more anxious individuals have to contend with being away from their attachment figures for an extended period of time, and this stress may further activate their beliefs and expectations about relationships, thereby altering their engagement patterns with their infants.

Using an Actor-Partner Interdependence Model (APIM; Cook & Kenny, 2005), we also explored how each parent's self-reported romantic attachment predicted his/her partner's parental engagement, controlling for the associations within each actor. In addition, we examined the interaction of each parent's level of anxiety and avoidance with the anxiety and avoidance of their partner, and how these combinations of romantic attachment within the couple were associated with the time they and their partners spent in proximity-focused and exploration-focused engagement. Given that previous research (e.g., Kirkpatrick & Davis, 1994) has found that individuals who are preoccupied (higher in attachment anxiety) are more likely to be in long-term relationships with individuals who are dismissing (higher in attachment avoidance), we wanted to investigate how anxious X avoidant attachment pairings within the couple may be associated with parental engagement. Prior theory and research has demonstrated different insecure attachment patterns for males and females (Del Giudice, 2009), hence we anticipated that when a mother with higher attachment anxiety was coupled with a father with greater attachment avoidance, her proximity-focused engagement with the infant would be greater, as her desire for closeness may not be adequately met within the couple relationship, and hence she may engage in more physical and emotional bonding activities with the infant. In contrast, we anticipated that when fathers higher in attachment avoidance were coupled with mothers higher in attachment anxiety, they would engage in greater exploration-focused engagement with their infants. When their partner has high attachment anxiety, fathers with greater attachment avoidance may wish to evade their partner's pleas for closeness, and "retreat" to playing and reading with their infant to align with their beliefs and expectations about close relationships.

METHOD

Participants

Drawn from a larger longitudinal study ($N = 182$) investigating the transition to parenthood for dual-earner, different-sex couples, our sample consisted of 136 couples in which both partners were working at nine months postpartum. Expectant parents were recruited through a variety of means in a large Midwestern city and surrounding area, but mainly through childbirth education classes and newspaper advertisements. All couples were married (86%) or cohabiting (14%). Couples were expecting their first child, of which they were the biological parents. In addition, all participants were over the age of 18, working full time at the point of recruitment, and indicated they expected to return to work after their infant was born. In our subsample, mothers ranged in age from 19 to 42 ($M = 28.8$, $SD = 3.84$) and fathers from 19 to 48 ($M = 30.6$, $SD = 4.57$). The majority of fathers and mothers had at

least some college education (90.4% and 96.3% respectively). The majority of the fathers identified themselves as Caucasian (86%, African-American 6%, Asian 2%, or other 6%). The majority of the mothers also identified themselves as Caucasian (83%, African-American 6%, Asian 2%, or other 9%). Median household income was \$80,000. There were no significant differences in demographic characteristics, or parents' self-reported attachment anxiety and avoidance, between the full sample and our subsample.

Procedure

As part of a larger battery of assessments, expectant parents completed questionnaires measuring their self-reported romantic attachment during the third trimester of pregnancy. At three, six and nine months postpartum, parents independently completed time diaries about their daily activities. Blank paper time diaries, along with an example time diary, were mailed to the participants and each member of the couple was asked to record how they spent each minute in a recent twenty-four hour workday and nonworkday, recording their activities as they progressed through the day from four a.m. on the target day to four a.m. on the following day. In addition to reporting their primary activity, participants also indicated where they were, who was present, who the activity was for, and any simultaneous activities. During home visits research staff conducted an audio recorded interview with each partner, discussing each activity in the paper time diary to clarify any uncertain or overlapping activities. Participants were compensated with cash and gifts at all phases. The ethical standards of the American Psychological Association and the Society for Research in Child Development were followed in the conduct of this study and approval from the Institutional Review Board was attained prior to data collection. Written consent from participants was obtained for each phase of the study.

Measures

Romantic attachment—Expectant parents completed the Experiences in Close Relationships questionnaire (ECR; Brennan, Clark & Shaver, 1998), a 36-item self-report measure designed to assess one's level of anxiety (i.e., fear of rejection and/or abandonment) and avoidance (i.e., discomfort with closeness and relying on others) in close relationships in general. Participants indicated on a seven-point scale their level of agreement with statements about closeness; e.g., "I worry a lot about my relationship" (anxiety), and "I get uncomfortable when a romantic partner wants to be very close" (avoidance). Higher scores on either dimension indicated greater feelings of anxiety and/or avoidance. Cronbach's alphas for anxiety and avoidance were .90 and .92 for mothers, respectively, and .90 and .88 for fathers, respectively. Previous research (e.g., Crowell, Fraley, & Shaver, 1999) has demonstrated the relative stability of self-reported romantic attachment over time.

Time diary assessments—The time diaries tapped what the participants did with their time; they served as a detailed account of the participants' daily activities, albeit from the participant's perspective. When entering the time diary data, researchers used both the paper time diaries and audio files to ascertain the participant's activities that day. Parents' activities were categorized into major categories, modeled after the American Time Use Survey (US Bureau of Labor Statistics, 2006), such as *caring for and helping child*, and *activities related to child*. These broader categories were further divided into subcategories. For example, the *caring for and helping child* category included activities such as playing with the child (which included behaviors such as tickling, entertaining, or dancing with the baby), soothing/holding him/her (which included behaviors such as carrying, swaddling, rocking, and cuddling the baby), and reading to him/her. Records were double checked by a second research assistant for accuracy with regards to the amount of time individuals engaged in certain behaviors.

For the present study, the amount of time mothers and fathers reported particular kinds of parenting engagement with their infants at nine months postpartum on both work and nonworkdays was examined. We utilized parents' time diary reports at nine months to capture the greatest variation in parental behaviors; this developmental time period within the larger study allowed parents to display the most diversity in what they did with their infants, both theoretically (e.g., with more wakeful periods for the infant and greater infant motor control) and practically (the other data points had a greater proportion of parents reporting zero minutes in the engagement variables of interest)¹. While participants sometimes reported doing multiple activities at once, for the purposes of our study we utilized their primary activity only, as this captured each parent's interpretation of the most salient activity in which they were engaged.

Parental engagement behaviors were grouped into two main categories: proximity-focused and exploration-focused. Proximity-focused engagement behaviors were those that included not only close physical contact, but actions thought to build or maintain an emotional connection between parent and child (i.e., amount of time soothing, holding, putting child to bed, talking and listening to the infant). Exploration-focused behaviors were those that involved helping the child build knowledge of the world and stimulated him/her (i.e., amount of time playing and reading with the infant).

RESULTS

Preliminary Analyses

Table 1 provides descriptive statistics for our variables of interest. The means for mothers' and fathers' anxiety and avoidance indicated the sample was fairly low in attachment insecurity, which would be expected given that the participants were all in couple relationships and volunteered to participate in research about their transition to parenthood. However, the standard deviations and ranges for both maternal and paternal attachment avoidance and anxiety indicated reasonable variability. In our sample, consistent with previous research (Del Giudice, 2009), mothers were significantly higher in attachment anxiety than fathers, and fathers were significantly higher in attachment avoidance than mothers. On average, parents spent more time in exploration-focused than in proximity-focused engagement. Mothers spent significantly more time in exploration-focused engagement on nonworkdays, and marginally more time in proximity-focused engagement on workdays ($p = .053$) as compared to fathers. There were no significant associations between parents' proximity-focused or exploration-focused engagement and demographic factors, i.e., maternal or paternal education, income, or self-identified race.

Correlations among the romantic attachment and engagement variables are presented in Table 2. Within parents, although fathers' proximity-focused engagement was marginally ($p = .097$) associated with his exploration-focused engagement on nonworkdays, these variables were not correlated on his workdays, nor were they correlated for mothers. In addition, mothers' proximity-focused engagement on work and nonworkdays were significantly correlated, and the same significant pattern was present for her exploration-focused engagement. Fathers' proximity-focused engagement on work and nonworkdays was also correlated; however, there was not a significant association between fathers'

¹We chose the 9-month data point for four reasons: 1) it offered, practically, the greatest variability with regards to how parents were engaging with their infants, 2) it is theoretically a developmental time point that supports greater parental engagement, 3) the 3 and 6 month time points had more parents reporting 0 minutes in the different forms of engagement which significantly skewed our variables of interest (this was particularly true for fathers, e.g., with 54.7% of fathers reporting 0 minutes in proximity-focused engagement at 3 months), and 4) we had significantly fewer completed time diaries from parents at the 6-month postpartum data collection.

exploration-focused engagement on work and nonworkdays. Across parents, we found when mothers engaged in more exploration-focused engagement on nonworkdays, fathers also did. With regard to attachment, anxiety and avoidance were significantly correlated within partners; there were no significant across-parent associations.

The correlations between attachment anxiety, avoidance and the parental engagement variables provided some preliminary, trend-level ($p < .10$), support for some of our within-parent hypotheses, but also two contradictory findings. The most intriguing findings within our preliminary analyses were the significant across-parent associations. As the correlations represent preliminary analyses, these associations will be discussed further in the context of the APIMs.

Actor-Partner Interdependence Model Using Structural Equation Modeling

To assess how parents' attachment avoidance and anxiety were associated with their own or their partner's parenting engagement, while accounting for the non-independence among couples, we utilized AMOS (Arbuckle, 2006) to test a set of Actor-Partner Independence Models (APIMs). Following Cook and Kenny's (2005) suggestions for testing dyadic relationships within longitudinal data, we first created two models, one for work and nonworkdays, respectively, which included mothers' and fathers' pre-birth attachment anxiety and avoidance and examined how each partner's self-reported romantic attachment predicted each partner's proximity- and exploration-focused engagement at 9 months postpartum (see solid lines for the main effects in Figure 1). Note, due to constraints imposed by the sample size and the number of parameters each model could accommodate, we controlled for most, but not all, of the possible correlations among the exogenous variables. For each model, we used several indices to assess model fit, including the χ^2 fit statistic, comparative fit index (CFI; Bentler, 1990) and root mean square error of approximation (RMSEA; Steiger, 1990); note that CFI values above .90 and RMSEA values below .05 are indicative of good model fit. The Full Information Maximum Likelihood (FIML) estimation function in AMOS was used to handle missing data, as FIML has been identified as a "best practice" for handling missing data (Johnson & Young, 2011).

Next, we tested whether one partner's attachment anxiety/avoidance could moderate the association between the other partner's attachment anxiety/avoidance and his/her engagement by testing two additional models, for work and nonworkdays, respectively, which included interaction terms between mothers and fathers (see dotted lines in Figure 1). Prior to conducting all analyses, all attachment variables were mean-centered. To aid interpretation, when a significant interaction was found it was graphed and simple slopes analysis was conducted using an SPSS macro created by Hayes and Matthes (2009). Significant slopes indicate that the independent variable (one parent's attachment) is associated with the dependent variable (his/her parental engagement) at a particular value ($-1SD$, M , $+1SD$) of the moderator (the other parent's attachment).

The initial models examining the within-parent and across-parent effects for work and nonworkdays demonstrated excellent model fit: $\chi^2(4) = 1.54$, $p = .82$; CFI = 1.00; RMSEA = 0.00 for workdays, and $\chi^2(4) = 1.37$, $p = .85$; CFI = 1.00; RMSEA = 0.00 for nonworkdays. The subsequent models which included the interaction terms indicated marginal fit: $\chi^2(9) = 34.34$, $p < 0.01$; CFI = 0.97; RMSEA = 0.14, and $\chi^2(9) = 33.04$, $p < 0.01$; CFI = 0.97; RMSEA = 0.14 for workdays and nonworkdays, respectively. However, the main purpose of these models was to test the significance of the paths between the independent and dependent variables of interest. Path estimates for all models are reported in Table 3.

Within-parent effects—First, there was some marginal support for our initial hypotheses regarding how one parent's self-reported attachment would affect his/her engagement,

particularly within fathers. On nonworkdays, fathers with great attachment anxiety reported less time in exploration-focused engagement ($b = -16.56, p = .059$). In addition, on workdays, fathers with greater attachment avoidance reported more time in exploration-focused engagement ($b = 10.45, p = .087$), and mothers with greater attachment anxiety reported less time in exploration-focused engagement ($b = -7.73, p = .099$). However, contrary to our hypotheses, fathers with greater attachment anxiety reported less time in proximity-focused engagement on nonworkdays ($b = -4.94, p = .063$). Contrary to our expectations, we did not find more associations of avoidance with engagement on nonworkdays and of anxiety with engagement on workdays.

Across-parent effects—Interestingly, there were a greater number of significant across-parent effects compared to within-parent effects. On nonworkdays, great maternal attachment anxiety was associated with more paternal proximity-focused engagement ($b = 7.36$), and greater maternal attachment avoidance was associated with more paternal exploration-focused engagement ($b = 21.66$). However, on workdays, greater maternal attachment anxiety was associated with more paternal exploration-focused engagement ($b = 11.07$), and greater paternal anxiety was associated with less maternal proximity-focused engagement ($b = -3.67$).

Interaction effects—Lastly, we tested the APIMs on work and nonworkdays with the interaction variables included (again, see dotted figures and lines in Figure 1). Two significant associations emerged. On nonworkdays, maternal attachment anxiety X father attachment avoidance was associated with mothers spending more time in proximity-focused engagement. Simple slopes analysis revealed support for another of our hypotheses; as Figure 2(a) depicts, only when fathers were high in attachment avoidance was maternal attachment anxiety associated with greater time spent in proximity-focused engagement on nonworkdays, and in contrast, when fathers were low in attachment avoidance, maternal attachment anxiety was associated with significantly less time in this form of engagement. On workdays, we found maternal attachment anxiety X paternal attachment avoidance was associated with fathers reporting more time in exploration-focused engagement. Again, after simple slopes analysis, we found greater paternal avoidance was only associated with more time in exploration-focused engagement on workdays when maternal anxiety was high (see Figure 2, b).

DISCUSSION

Our study has expanded understanding of associations between self-reported romantic attachment and parenting by examining how expectant parents' romantic attachment may help shape the amount of time they spend in proximity-focused (interactions that emphasize physical or emotional connection) and exploration-focused (activities that stimulate and build knowledge of the world) engagement with their new infants. Our findings provide support for the importance of examining the implications of romantic attachment from a family systems perspective. Individual parents' daily engagement patterns may be associated with both parents' romantic attachment, which interact to impact each other's behavior; thus, examining mothers or fathers in isolation from each other may not provide a complete picture of the links between attachment and parenting. In particular, parents may be altering their engagement patterns with their children based on their own and their partner's attachment-related behavior.

There was some support for two of our initial hypotheses regarding how parents' own attachment anxiety and avoidance, assessed prenatally, would predict the time they spent in proximity-focused and exploration-focused engagement with their infants at nine months postpartum. First, greater paternal attachment avoidance was marginally associated with

fathers spending more time in exploration-focused engagement on workdays. However, higher paternal avoidance was only significantly associated with higher exploration-focused engagement on workdays when mothers were high in attachment anxiety. Perhaps more avoidant fathers, to escape their partners' elevated desire for closeness, retreated into the parent-child relationship, spending more time in a kind of engagement with which they would likely feel more comfortable: helping the child explore the world around them as opposed to more emotional bonding. Contrary to our expectation that avoidance would show more associations with engagement on nonworkdays, this particular association occurred on workdays. Perhaps these fathers were compensating for their more anxious partners who, on workdays, were less able or willing to spend time in exploration-focused engagement.

Second, fathers and mothers with greater attachment anxiety also displayed a tendency to spend less time in exploration-focused engagement on nonworkdays and workdays, respectively. Perhaps the availability of one's partner on nonworkdays allows fathers with greater attachment anxiety to opt out of this kind of interaction. Intriguingly, greater father anxiety did not predict greater maternal exploration-focused engagement on nonworkdays, so it does not appear that mothers with more anxious partners were working in a compensatory manner regarding this kind of engagement. Considering that father engagement in early childhood has been associated with greater social-emotional competence (Cabrera, Shannon & Tamis-LeMonda, 2007; Lang et al., 2013), it is important that we understand factors that may affect the types and amount of engagement that fathers initiate with their infants. Regarding more anxious mothers, perhaps, as hypothesized, the stress of being away from loved ones on workdays activated these mothers' attachment views and expectations, leading to less time spent in a type of engagement that may cause them uneasiness (Selcuck et al., 2010).

However, contradictory to our expectations, fathers' anxious attachment was also marginally associated with less time in proximity-focused engagement on nonworkdays. We are unsure why more anxious fathers reported this tendency, but perhaps more anxious fathers experienced difficulty comforting their infants and hence opted out of this type of engagement, or their expectations and fears about closeness drive them to do other things with their time.

Our analyses also revealed several interesting additional associations between one parent's romantic attachment and his/her partner's parental engagement. For mothers, greater paternal attachment anxiety was associated with less time in proximity-focused engagement on workdays. It may be that the stress of work and being away from loved ones activates fathers' desire for closeness, somehow shifting mothers' engagement patterns. Perhaps to handle anxious fathers' fears or pleas for closeness, mothers "retreat" to other kinds of activities, thereby limiting the amount of time they have available for more proximity-focused engagement.

Intriguingly, mother's attachment anxiety and avoidance appeared to have more positive influences on fathers, indicating that fathers in newly formed families may be more apt to act in a compensatory manner. In particular, on nonworkdays, when mothers had greater attachment anxiety, their partners displayed greater proximity-focused engagement. Mothers with strong attachment anxiety may experience difficulty comforting their infant and helping him/her to sleep, and thus fathers may "step up" their proximity-focused engagement contributions to adequately soothe their children. In addition, when mothers had greater attachment avoidance, fathers reported greater exploration-focused engagement on nonworkdays. Perhaps distancing behaviors between more avoidant mothers and their partners offer more opportunities for fathers to play and read with their children. These patterns may be more prevalent on nonworkdays, as fathers, with fewer restrictions on their

time, may have greater freedom with regard to the child-related tasks they are able to perform for the family (McBride & Mills, 1993). However, on workdays, fathers with more anxious partners also reported more minutes in exploration-focused engagement. Coupled with the finding above regarding more anxious mothers' tendency to spend less time in exploration-focused engagement on workdays, again fathers may have increased specific kinds of engagement to compensate for mothers' withdrawal.

Overall, our results suggest that a father's parenting may be more sensitive to his own and his partner's attachment, and corresponds with previous research demonstrating that fathers' parenting may be particularly vulnerable to context (Coiro & Emery, 1998). The parental obligations for fathers, particularly within the realm of parental engagement in infancy, may be less rigidly defined compared to mothers (Katz-Wise, Priess, & Hyde, 2010). Hence, the amount of time fathers spend in particular kinds of engagement may be more significantly influenced by family contextual factors, in this case, mothers' romantic attachment and family-work constraints, as compared to mothers.

Our exploration of how parents' attachment anxiety and avoidance may interact to predict subsequent parental engagement provided additional support for examining the potential interplay of romantic attachment within the family system. Confirming our hypothesis regarding the interaction between maternal anxiety and paternal avoidance, we found that the association between a mother's attachment anxiety and the time she spent in proximity-focused engagement on nonworkdays was moderated by paternal attachment avoidance. In particular, only when paternal attachment avoidance was high did greater maternal attachment anxiety predict greater time spent in proximity-focused engagement with the infant, and low paternal avoidance was associated with the opposite pattern, with more anxious mothers spending significantly less time in proximity-focused engagement. Perhaps when mothers with greater attachment anxiety were paired with fathers higher in attachment avoidance mothers spent more time in proximity-focused engagement with their young children to compensate for the lack of closeness they felt in their romantic relationship. Attachment theory recognizes that with regard to the infant's developing internal working model of attachment, too much time in proximity-focused care could be negative (van IJzendoorn, Dijkstra, & Bus, 1995). An overemphasis on the mother-child relationship could lead to the development of an insecure child-mother attachment. Especially at this point in the child's development, i.e., at nine months postpartum, healthy patterns of parenting would be shifting to more time in exploration-focused as opposed to proximity-focused engagement, as children should have acquired some forms of self-soothing (Rothbart, Ziaie, & O'Boyle, 1992) and be more capable of interacting with the world around them (Bakeman & Adamson, 1984). In fact, in our sample, it was clear that on average parents were spending more time in exploration-focused than in proximity-focused engagement.

Although we have assumed that parents' attachment beliefs and expectations are guiding their engagement with their children, it may also be that infants have learned from which parent to solicit particular types of engagement. For instance, when fathers were avoidant but mothers anxious, the infant may have learned to approach the father for exploration or play, but to approach the mother for comfort and connection. Future research should further consider the infant's role in soliciting different types of parental engagement.

Our findings must be interpreted in the context of our sample and methodology. The parental engagement patterns for dual-earner, different-sex, first-time parents, and their associations with self-reported romantic attachment may be different than in other types of families, or families from different areas of the world. In addition, although our time diary methodology provides a detailed assessment of our sample's self-reported parental engagement at nine months, the amount of time parents reported spending in proximity- or

exploration-focused engagement does not provide information about the quality of the parent-child interactions during such activities. Moreover, some emotional bonding may take place in what we have labeled as more exploration-focused engagement. However, time diaries also represent an individual's perception of how he/she is spending the minutes of his/her day; when engaged in multiple tasks simultaneously, which task the parent perceives as his/her "primary" activity may be significant. For example, a mother who is higher in attachment anxiety may perceive an emotional-bonding activity (i.e., proximity-focused, recorded, for example, as rocking or listening to) as her primary activity. Hence, beliefs and expectations about close relationships may not only influence how individuals actually spend their time, but may also influence how individuals interpret and report their daily activities. Future research incorporating quality as well as quantity assessments of parent engagement will be even better positioned to continue the expansion of our understanding of the associations between romantic attachment and parenting.

Our research illustrated multiple pathways through which parents' self-reported romantic attachment may manifest in their parenting. As our results suggest, parents within young, dual-earner families, particularly fathers, may compensate for their partner's weaknesses when it comes to time spent in particular forms of engagement. This has important implications for the literature on father involvement. In addition, our findings align with and expand attachment (Del Giudice, 2009) and family systems theory and research (Cowan, 1997; Minuchin, 1985) by demonstrating particular parenting patterns based upon specific, gendered interactions of parents' romantic attachment. In particular, the finding that mothers with anxious romantic attachment, when coupled with fathers with greater attachment avoidance, spent more time in emotional and physical closeness with their infants is consistent with family therapy theory (Lebow, 2005) and has implications for those who conduct couple therapy with new parents. However, additional research is needed to see if similar patterns are found in other samples, and whether children play a role in eliciting certain types of engagement from parents with particular romantic attachment tendencies. Further exploration of factors that may shape parenting - like romantic attachment style - in the context of investigations that consider day-to-day patterns of developmentally appropriate parental engagement in addition to observations of parenting quality are necessary to achieve a fuller understanding of the underpinnings of the multiple dimensions of parenting behavior that are important for children's development.

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References

- Arbuckle, J.L. Amos (Version 7.0) [Computer Program]. Chicago: SPSS; 2006.
- Bakeman R, Adamson LB. Coordinating attention to people and objects in mother-infant and peer-infant interaction. *Child Development*. 1984; 55(4):1278–1289. [PubMed: 6488956]
- Belsky J. The determinants of parenting: A process model. *Child Development*. 1984; 55(1):83–96. [PubMed: 6705636]
- Belsky J, Pensky E. Marital change across the transition to parenthood. *Marriage and Family Review*. 1988; 12:133–156.10.1300/J002v12n03_08

- Bentler PM. Comparative fit indexes in structural models. *Psychological Bulletin*. 1990; 107:238–246. [PubMed: 2320703]
- Bornstein MH, Putnick DL. Cognitive and socioemotional caregiving in developing countries. *Child Development*. 2012; 83(1):46–61.10.1111/j.1467-8624.2011.01673.x [PubMed: 22277006]
- Bowlby, J. Attachment and loss, Vol 1: Attachment. New York: Basic Books; 1969.
- Bowlby, J. Attachment and loss, Vol 2: Separation, Anxiety and Anger. New York: Basic Books; 1973.
- Brennan, KA.; Clark, CL.; Shaver, PR. Self-report measure of adult romantic attachment: An integrative overview. In: Simpson, JA.; Rholes, WS., editors. Attachment theory and close relationships. New York: Guilford Press; 1998. p. 46-76.
- Brown GL, McBride BA, Shin N, Bost KK. Parenting predictors of father-child attachment security: Interactive effects of father involvement and fathering quality. *Fathering*. 2007; 5(3):197–219.10.3149/fth.0503.197
- Cabrera NJ, Shannon JD, Tamis-LeMonda C. Fathers' influence on their children's cognitive and emotional development: From toddlers to pre-k. *Applied Developmental Science*. 2007; 22(4): 208–213.10.1080/10888690701762100
- Cohn DA, Cowan PA, Cowan CP, Pearson J. Mothers' and fathers' working models of childhood attachment relationships, parenting styles, and child behavior. *Development and Psychopathology*. 1992; 4:417–431.10.1017/S0954579400000870
- Coiro MJ, Emery RE. Do marriage problems affect fathering more than mothering? A quantitative and qualitative review. *Clinical Child and Family Psychology Review*. 1998; 1(1):23–40.10.1023/A: 1021896231471 [PubMed: 11324075]
- Cook WL, Kenny DA. The Actor-Partner Interdependence Model: A model of bidirectional effects in developmental studies. *International Journal of Behavioral Development*. 2005; 29(2):101–109.10.1080/01650250444000405
- Cowan PA. Beyond meta-analysis: A plea for a family systems view of attachment. *Child Development*. 1997; 68(4):601–603.10.1111/j.1467-8624.1997.tb04222.x [PubMed: 9306639]
- Cowan PA, Cowan CP, Mehta N. Adult attachment, couple attachment, and children's adaptation to school: An integrated attachment template and family risk model. *Attachment & Human Development*. 2009; 11(1):29–46.10.1080/14616730802500222 [PubMed: 19197702]
- Cox MJ, Owen MT, Henderson VK, Margand NA. Prediction of infant-father and infant-mother attachment. *Developmental Psychology*. 1992; 28(3):474–483.10.1037/0012-1649.28.3.474
- Crowell, JA.; Fraley, RC.; Shaver, PR. Measures of individual differences in adolescent and adult attachment. In: Cassidy, J.; Shaver, PR., editors. Handbook of attachment: Theory, research, and clinical applications. New York: Guilford; 1999. p. 434-465.
- Davies PT, Sturge-Apple ML, Woitach MJ, Cummings EM. A process analysis of the transmission of distress from interparental conflict to parenting: Adult relationship security as an explanatory mechanism. *Developmental Psychology*. 2009; 45(6):1761–1773.10.1037/a0016426 [PubMed: 19899930]
- Del Giudice M. Sex, attachment, and the development of reproductive strategies. *Behavioral and Brain Sciences*. 2009; 32:1–67.10.1017/S0140525X09000016 [PubMed: 19210806]
- Edelstein RS, Alexander KW, Shaver PR, Schaaf JM, Quas JA, Lovas GS, Goodman GS. Adult attachment style and parent responsiveness during a stressful event. *Attachment and Human Development*. 2004; 6(1):31–52.10.1080/146167303100001659584 [PubMed: 14982678]
- Fraley RC, Waller NG, Brennan KA. An item response theory analysis of self-report measures of adult attachment. *Journal of Personality and Social Psychology*. 2000; 78:350–365.10.1037/0022-3514.78.2.350 [PubMed: 10707340]
- Hayes AF, Matthes J. Computational procedures for probing interactions in OLS and logistic regression: SPSS and SAS implementations. *Behavior Research Methods*. 2009; 41:924–936.10.3758/BRM.41.3.924 [PubMed: 19587209]
- Hazan C, Shaver PR. Love and work: An attachment-theoretical perspective. *Journal of Personality and Social Psychology*. 1990; 59(2):270–280.10.1037/0022-3514.59.2.270
- Johnston DD, Swanson DH. Constructing the “good mother”: The experience of mothering ideologies by work status. *Sex Roles*. 2006; 54:509–19.

- Johnson D, Young R. Toward best practices in analyzing datasets with missing data: Comparisons and recommendations. *Journal of Marriage and Family*. 2011; 73:926–945.
- Katz-Wise SL, Priess HA, Hyde JS. Gender-role attitudes and behavior across the transition to parenthood. *Developmental Psychology*. 2010; 46(1):18–28.10.1037/a0017820 [PubMed: 20053003]
- Kirkpatrick LA, Davis KE. Attachment style, gender, and relationship stability: A longitudinal analysis. *Journal of Personality and Social Psychology*. 1994; 66(3):502–512.10.1037/0022-3514.66.3.502 [PubMed: 8169762]
- Lamb ME, Pleck JH, Charov EL, Levine JA. Parental behavior in humans. *American Zoologist*. 1985; 25(3):883–894.
- Lang, SN.; Schoppe-Sullivan, SJ.; Feng, X.; Kotila, LE.; Kamp Dush, CM.; Johnson, SC. Changes in new parents' time spent in engagement and association with toddler social emotional competence. Poster presented at the biennial meeting of the Society for Research in Child Development; Seattle, Washington. 2013 Apr.
- Lareau, A. Unequal childhoods: Class, race and family life. 2. University of California Press; Berkley and Los Angeles, California: 2011.
- Lebow, J. Handbook of clinical family therapy. Hoboken, NJ: John Wiley and Sons; 2005.
- Main, M.; Goldwyn, R. Adult Attachment Rating and Classification Systems. University of California; Berkeley: 1998. Unpublished manuscript
- McBride BA, Mills G. A comparison of mother and father involvement with their preschool age children. *Early Childhood Research Quarterly*. 1993; 8(4):457–477.10.1016/S0885-2006(05)80080-8
- Milkie MA, Peltola P. Playing all the roles: Gender and the work-family balancing act. *Journal of Marriage and the Family*. 1999; 61(2):476–490.
- Minuchin P. Families and individual development: Provocations from the field of family therapy. *Child Development*. 1985; 56(2):289–302. [PubMed: 3886321]
- Mikulincer M, Florian V, Cowan PA, Cowan CP. Attachment security in couple relationships: A systemic model and its implications for family dynamics. *Family Process*. 2002; 41(3):405–434.10.1111/j.1545-5300.2002.41309.x [PubMed: 12395567]
- Pietromonaco PR, Barrett LF. The internal working model concept: what do we really know about self in relation to others? *Review of General Psychology*. 2000; 4(2):155–175.10.1037/1089-2680.4.2.155
- Pleck, JH. Paternal involvement: Levels, sources, and consequences. In: Lamb, ME., editor. The role of the father in child development. 3. New York: Wiley; 1997. p. 66-103.
- Pleck JH. Why could father involvement benefit children? Theoretical perspectives. *Applied Development Science*. 2007; 11(4):196–202.10.1080/10888690701762068
- Press JE, Townsley E. Wives' and husbands' housework reporting: Gender, Class and Social Desirability. *Gender & Society*. 1998; 12(2):188–218.
- Roisman GI, Holland A, Fortuna K, Fraley RC, Clausell E, Clarke A. The Adult Attachment Interview and self-report measures of attachment: An empirical rapprochement. *Journal of Personality and Social Psychology*. 2007; 92(4):678–697.10.1037/0022-3514.92.4.678 [PubMed: 17469952]
- Rothbart, MK.; Ziaie, H.; O'Boyle, C. Self-regulation and emotion in infancy. In: Eisenberg, N.; Fabes, RA., editors. Emotion and its regulation in early development: New directions for child development, No. 55: The Jossey-Bass education series. San Francisco: Jossey-Bass Publishers; 1992. p. 7-23.
- Sarkadi A, Kristiansson R, Oberklaid Fr, Bremberg S. Fathers' involvement and children's developmental outcomes: a systematic review of longitudinal studies. *Acta Paediatrica*. 2008; 37(2):153–157.10.1111/j.1651-2227.2007.00572.x [PubMed: 18052995]
- Selcuk E, Guaydin G, Sumer N, Harma M, Salman S, Hazan C, Dogruyol B, Ozturk A. Self-reported romantic attachment style predicts everyday maternal caregiving behavior at home. *Journal of Research in Personality*. 2010; 44:544–549.10.1016/j.jrp.2010.05.007
- Steiger JH. Structural model evaluation and modification: An interval estimation approach. *Multivariate Behavioral Research*. 1990; 25:173–180.

- US Bureau of Labor Statistics. American Time Use Survey user guide: Understanding ATUS 2003, 2004, and 2005. 2006. Retrieved from <http://www.bls.gov/tus/atususersguide.pdf>
- van IJzendoorn MH, Dijkstra J, Bus AG. Attachment, intelligence, and language: A meta-analysis. *Social Development*. 1995; 4(2):115–128.10.1111/j.1467-9507.1995.tb00055.x
- Vasquez K, Durik AM, Hyde JS. Family and work: Implications of adult attachment style. *Personality and Social Psychology Bulletin*. 2002; 28(7):874–886.10.1177/014616720202800702
- Wilson CL, Rholes WS, Simpson JA, Tran S. Labor, delivery, and early parenthood: An attachment theory perspective. *Personality and Social Psychology Bulletin*. 2007; 33:505–518.10.1177/0146167206296952 [PubMed: 17400834]

Figure 1.

Actor-Partner Interdependence Model Predicting Proximity- and Exploration-Focused Engagement. This model represents the APIMs performed to assess the associations between mothers' and fathers' attachment anxiety and avoidance pre-birth and mothers' and fathers' exploration- and proximity-focused engagement at 9 months postpartum. d1–d4 represent the residual (unexplained) proportions of each engagement variable. Single headed arrows indicate predictive pathways. Double-headed arrows indicate correlated variables. Separate models were conducted for work and nonworkdays. Solid lines indicate the main effects. Dotted lines and variables indicate the interaction terms which were added to the final models.

Figure 2.

Simple slope analyses of significant interactions. (a) The association between mothers' attachment anxiety and mothers' proximity-focused engagement on a nonworkday as moderated by fathers' attachment avoidance. (b) The association between fathers' attachment avoidance and fathers' exploration-focused engagement on a workday as moderated by mothers' attachment anxiety.

Table 1

Descriptive Statistics for Mothers and Fathers on Key Variables

	Mothers				Fathers			
	<i>M</i>	<i>SD</i>	Range	% report 0 mins	<i>M</i>	<i>SD</i>	Range	% report 0 mins
Attachment Anxiety	3.11	1.08	1.00–6.11		2.73	1.03	1.00–5.61	2.96 ^{***}
Attachment Avoidance	1.85	0.80	1.00–4.39		2.15	0.70	1.00–3.94	–3.06 ^{***}
Time in PF on NW day	19.89	27.68	0–157	21.3%	20.58	29.38	0–145	32.4%
Time in EF on NW day	139.44	102.70	0–510	8.1%	103.50	94.98	0–485	19.9%
Time in PF on W day	12.27	17.68	0–90	36%	8.63	15.00	0–80	43.4%
Time in EF on W day	53.15	57.10	0–375	19.9%	46.30	43.87	0–250	19.9%
								1.12
								1.12

Note. PF = Proximity-Focused Engagement; EF = Exploration-Focused Engagement; NW = Nonworkdays; W = Workdays; % report 0 mins = % of participants reporting 0 minutes in that type of engagement. Time is in minutes. *N*s ranged from 120 to 136.

^t
p < 0.06

^{***}
p < 0.01.

Table 2
Correlations among Self-Reported Romantic Attachment and Engagement Variables

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
1. M Anxiety	1.00	0.29**	0.07	0.10	0.09	-0.05	0.23**	-0.06	0.10	-0.16 ^t	0.15	0.25**
2. M Avoidance		1.00	0.00	0.08	-0.01	-0.10	0.04	0.16 ^t	0.15 ^t	-0.08	0.08	0.01
3. F Anxiety			1.00	0.40**	-0.11	-0.11	-0.15 ^t	-0.17 ^t	-0.17 ^t	-0.10	-0.04	0.07
4. F Avoidance				1.00	0.09	-0.02	-0.06	-0.05	0.04	0.07	-0.01	0.17 ^t
5. M PF NW					1.00	-0.04	0.13	-0.02	0.42**	0.05	0.18 ^t	0.19*
6. M EF NW						1.00	-0.04	0.28**	-0.08	0.24**	0.03	-0.01
7. F PF NW							1.00	0.15 ^t	0.15 ^t	-0.04	0.25**	-0.01
8. F EF NW								1.00	0.14	0.12	0.12	0.14
9. M PF W									1.00	0.09	0.18 ^t	-0.01
10. M EF W										1.00	-0.04	0.13
11. F PF W											1.00	-0.07
12. F EF W												1.00

Note: M = Mother; F = Father; PF = Proximity-Focused Engagement; EF = Exploration-Focused Engagement; NW = Nonworkdays; W = Workdays. Ns ranged from 114 to 134.

^t
 $p < 0.10$

*
 $p < 0.05$

**
 $p < 0.01$.

Table 3

APIM of Mother-Father Romantic Attachment and Parental Engagement (n = 136)

APIM Parameters	Nonworkday		Workday	
	Estimate	Standardized Estimate	Estimate	Standardized Estimate
<i>Actor</i>				
MANx -> MPF Engage	2.25	0.09	1.35	0.08
MANx -> MEF Engage	-2.20	-0.02	-7.73 ^t	-0.15 ^t
MAvd -> MPF Engage	-0.66	-0.02	2.56	0.12
MAvd -> MEF Engage	-12.95	-0.10	-3.52	-0.05
FAnx -> FPF Engage	-4.94 ^t	-0.17 ^t	-0.66	-0.05
FAnx -> FEF Engage	-16.56 ^t	-0.18 ^t	-1.61	-0.04
FAvd -> FPF Engage	-0.48	-0.01	0.16	0.01
FAvd -> FEF Engage	4.21	0.03	10.45 ^t	0.17 ^t
<i>Partner</i>				
MANx -> FPF Engage	7.36 ^{**}	0.27 ^{**}	1.87	0.14
MANx -> FEF Engage	-8.18	-0.09	11.07 ^{**}	0.27 ^{**}
MAvd -> FPF Engage	-1.59	-0.04	0.44	0.02
MAvd -> FEF Engage	21.66 [*]	0.18 [*]	-5.44	-0.10
FAnx -> MPF Engage	-1.61	-0.06	-3.67 [*]	-0.21 [*]
FAnx -> MEF Engage	-12.06	-0.12	-7.53	-0.14
FAvd -> MPF Engage	4.32	0.11	2.75	0.11
FAvd -> MEF Engage	5.33	0.04	11.16	0.14
<i>Interaction Effects</i>				
MANx X FAvd -> FPF Engage	-1.05	-0.11	0.40	0.09
MANx X FAvd -> FEF Engage	-6.73	-0.94	13.73 ^{**}	1.04 ^{**}
MAvd X FAnx -> FPF Engage	-2.68	-0.26	-1.53	-0.30
MAvd X FAnx -> FEF Engage	9.03	-0.28	5.87	0.38
MANx X FAvd -> MPF Engage	12.59 ^{**}	1.53 ^{**}	3.19	0.61
MANx X FAvd -> MEF Engage	4.01	0.13	1.34	0.08
MAvd X FAnx -> MPF Engage	1.09	0.12	-1.22	-0.20
MAvd X FAnx -> MEF Engage	-0.97	-0.03	-2.12	-0.10

Note: M and F = Mother and Father, respectively, Anx = Attachment Anxiety; Avd = Attachment Avoidance; PF Engage = Proximity-focused Engagement; EF Engage = Exploration-focused Engagement; X indicates an interaction between variable.

^T
 $p < 0.10$,

^{*}
 $p < 0.05$,

^{**}
 $p < 0.01$.