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Abstract

This cross-sectional, dyadic questionnaire study examined the contribution of romantic attachment and responsive caregiving to parenting style, investigating both gender and partner effects. One hundred and twenty-five couples with children aged 7 to 8 years completed measures of attachment styles, responsive caregiving toward partner, and parenting styles. Structural Equation Modeling was used to examine the intra- and interpersonal associations between romantic attachment, caregiving responsiveness, and parenting styles. Attachment avoidance and anxiety were both negatively associated with responsive caregiving to partner, which in turn was positively associated with authoritative (optimal) parenting styles and negatively associated with authoritarian and permissive (nonoptimal) parenting styles. Responsive caregiving mediated all links between attachment and parenting, with an additional direct association between attachment anxiety and nonoptimal parenting styles that was not explained by caregiving responsiveness. Findings are discussed with reference to attachment theory.

Keywords

attachment, responsiveness, caregiving, parenting, couples

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Families, best viewed as dynamic systems (Cox & Paley, 1997), are collections of multiple overlapping interpersonal relationships, involving individual- and relationship-level mutual influence. Parent–child relationships are most comprehensively considered in the context of the parent–parent relationship, where there is one. Individuals with high levels of attachment security make the most responsive and cooperative romantic partners (Feeney & Collins, 2001; Kuncé & Shaver, 1994; Millings & Walsh, 2009) and the most sensitive and attuned parents (George & Solomon, 1999; Selcuk, Zayas, & Hazan, 2010). But by what mechanisms do attachment representations manifest in these interpersonal capabilities? In this article, we examine the relationship between romantic attachment and parenting directed toward the mid-childhood age group, considering the mediating role of responsiveness in caregiving.

Attachment theory offers the most appropriate framework in which to consider both parent–child and parent–parent relationships. With regard to parent–child relationships, the developmental attachment research tradition has established a link between maternal discourse surrounding own early attachment experiences, measured with methods such as the Adult Attachment Interview, and responsive caregiving toward children (e.g., Crowell & Feldman, 1989; George &

Solomon, 1999). Considering parent–parent relationships, links have been identified between couple romantic attachment and partner caregiving, with attachment security being associated with the ability to provide sensitive and responsive emotional care (e.g., Feeney & Collins, 2001; Kuncé & Shaver, 1994; Millings & Walsh, 2009). Finally, with regard to parent–parent *and* parent–child relationships, researchers have established links between romantic attachment and parental responsiveness toward infants and young children (e.g., Cowan, Cowan, & Mehta, 2009; Halford & Petch, 2010) and toward adolescents (Bifulco, Moran, Jacobs, & Bunn, 2009). However, little is known about how this proposed link manifests in parenting in mid-childhood, which is a notable period because the increasing autonomy of the child (e.g., developing an individual social life and individual

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interests) is coupled with a requirement for relatively high levels of parental supervision and discipline.

An unexplored link, then, in the family network is that between caregiving responsiveness and the manifestation of this responsiveness in relation to parenting behaviors—that is, parenting style. This link is particularly important because it may shed light on the mechanism by which attachment processes in one relationship (e.g., a romantic relationship) affect attachment processes in another (e.g., a parent–child relationship; Howard, 2010; Rholes, Simpson, & Blakely, 1995; Rholes, Simpson, & Friedman, 2006; Selcuk et al., 2010). We make a distinction between parenting capacities (e.g., sensitivity) and parenting practices (what parents actually do for and with their children, rules that they set). We therefore examine caregiving responsiveness in the romantic relationship as a possible mode of transmission between romantic attachment and caregiving behaviors in another relationship—the parenting style toward the child. Furthermore, we examine these variables in the context of parenting in mid-childhood, an age group so far relatively neglected in the aforementioned literature.

Attachment and Caregiving

Where researchers in the developmental attachment tradition categorize adult state of mind with regard to their own childhood attachment experiences based on the coherence of their discourse, adult attachment researchers in the social, personality, and cognitive traditions commonly conceptualize the quality of the emotional bonds people have with their romantic partners along two dimensions of attachment avoidance and attachment anxiety (Brennan, Clark, & Shaver, 1998). Attachment avoidance refers to the suppression of attachment-related affect, denial of attachment needs, and deactivation of the attachment system in times of need. Attachment anxiety refers to hyperactivation of the attachment system and attachment-related affect. Those high in attachment anxiety experience fears of abandonment and preoccupation with relationships, especially when faced with threat (Mikulincer & Shaver, 2007). Low scores on both avoidance and anxiety are commonly taken to denote attachment security (Brennan et al., 1998; Mikulincer & Shaver, 2007).

The caregiving behavioral system exists in parallel with, and as a partner to, the attachment behavioral system. While the attachment system promotes care-seeking in times of need, the caregiving system exists to motivate the caregiver to reduce suffering, keep a significant other safe from harm, and promote growth and development (Collins, Ford, Guichard, & Allard, 2006; George & Solomon, 1999). Two manifestations of the caregiving system have typically been examined in attachment literature: first, in relation to parental attitudes, expectations, and behaviors toward offspring (e.g., Bowlby, 1969; George & Solomon, 1999), and second, in relation to romantic pair bonds (e.g., Collins & Feeney, 2000; Kuncie & Shaver, 1994).

Studies show that adult romantic attachment insecurity is linked with parental caregiving and parenting expectations, experiences, interaction, and behaviors. In their studies of young adults without children and couples undergoing the transition to parenthood, Rholes, Simpson, and colleagues found attachment avoidance and ambivalence (akin to attachment anxiety) to be associated with more negative expectations about parenting, including uncertainty about parenting ability, expectations of being easily aggravated by and relating poorly to children, and having a less warm, more strict parenting style. In addition, high avoidance was associated with less desire to have children and an expectation of less overall satisfaction in parenting (Rholes et al., 1995; Rholes, Simpson, Blakely, Lanigan, & Allen, 1997). Attachment styles are also linked in theoretically predictable ways to parenting behaviors with infants and young children. Attachment anxiety has been linked with missing child signals and difficulty in supporting exploratory behaviors, whereas attachment avoidance has been reported to be positively associated with distance in caregiving interactions and negatively associated with maternal sensitivity with children aged below 4 years (Selcuk et al., 2010). Furthermore, avoidant attachment has also been linked with low maternal sensitivity toward infants, but only in conditions of psychological distress (Mills-Koonce et al., 2011). Although these studies broadly show that adult romantic attachment orientations and parenting behaviors are linked, avoidance and anxiety appear to be differentially associated with specific aspects of parental caregiving and parenting behaviors (Selcuk et al., 2010) and, importantly, the precise mechanisms remain unclear. We propose caregiving responsiveness as a mechanism.

Researchers have also explored the links between attachment orientation and responsive caregiving toward partner (e.g., Feeney & Collins, 2004; Kane et al., 2007; Kuncie & Shaver, 1994; Millings & Walsh, 2009), and find that attachment security is linked with optimal partner caregiving. Attachment avoidance is associated with lower levels of caregiving generally (Carnelley, Pietromonaco, & Jaffe, 1996), and less responsive and more controlling caregiving specifically (Feeney & Collins, 2001), whereas attachment anxiety is also associated with less responsive caregiving, as well as less provision of instrumental support (Collins & Ford, 2010; Millings & Walsh, 2009).

The two manifestations of the caregiving behavioral system discussed here have different targets (child versus partner) and necessitate different behavioral repertoires driven by the nature of the relationship (parental versus romantic). However, if governed by the same set of attachment-related schema that underpin the system, caregiving toward partner and child ought to share some fundamental commonalities. Thus, we expect partner caregiving responsiveness to be significantly associated with parenting styles and propose responsiveness in partner caregiving to be a key mediating mechanism, which may partially or fully account for the effects of romantic attachment on parenting styles.

Attachment, Caregiving, and Parenting in Family Systems

Individual family relationships (parent–parent, parent–child) are known to influence each other as dynamic systems (Cox & Paley, 1997). Because the goal of the caregiving behavioral system is to promote the recipient's ability to cope with challenges, it is possible that not only does an individual's own caregiving style influence his or her own parenting style but also the parenting style of his or her partner. Although attachment researchers have not examined partner caregiving as a facilitator to effective parenting directly, studies investigating couple interaction and satisfaction suggest this link warrants investigation. Indeed, one of the key functions of romantic attachments, according to Del Giudice and Belsky (2010), is "to promote long-term bonding, cooperative parenting and (ultimately) parental investment" (Del Giudice & Belsky, 2010, p. 112).

Cohn, Silver, Cowan, Cowan, and Pearson (1992) found attachment security to be associated with positive marital interaction and positive parent–child relationships, with the reverse true for insecurity. Cowan et al. (2009) reported that parents' attachment to their own parents and their "couple attachment," as measured by interview, were significant predictors of couple interaction quality, which, in turn, was a predictor of parenting. These studies suggest the relationship *between* parents impacts upon the parenting style of each individual. Indeed, the capacity for caregiving responsiveness within the couple may be important here. Cowan, Bradburn, and Cowan (2005) reported an intervention study whereby a marital relationship-focused intervention improved parenting as well as the couple relationship, whereas the parenting-focused intervention only improved parenting. Improvements in own responsiveness in the couple relationship could provide an explanation. It may be easier to improve responsiveness reciprocally, which would account for the transfer gains in one direction (from couple relationship to parenting) but not the other (from parenting to couple relationship). Alternatively, it might be that one partner's responsiveness facilitates the other partner's parenting.

Given the potential for influence at the level of the individual and the couple, we must therefore model for both intra- and inter-individual level effects of responsiveness in the prediction of parenting styles. We propose that an individual's own caregiving responsiveness toward their partner may partially or fully mediate the link between their attachment style and their parenting style. This might occur for two reasons. First, it might be that when an individual is capable and practiced at being responsive in one relationship, this capacity also transfers to other relationships (in intra-individual effect). Second, it might be that individuals with secure attachment to their partner benefits from having their own attachment needs met, and so they are more able to be responsive toward that partner. Furthermore, they can be responsive to their child because their own attachment needs

(whether elicited by the external world or by the child themselves) are taken care of. That is, attachment security with a romantic partner enables greater responsiveness in caregiving for others generally, which subsequently increases the likelihood of endorsing an optimal parenting style (an inter-individual effect).

Despite both the developmental and adult pair bond caregiving literatures asserting that caregiving is driven by an underlying behavioral system, as far as we are aware there has not yet been any attempt at examining this system from multiple perspectives integrating examination of caregiving toward partner and parenting toward child in a single study. In the current study, our aim was to consider how both the attachment and caregiving styles of a couple predict their parenting styles toward their child, postulating that responsiveness reported toward partner might act as a mediator between romantic attachment and parenting style, and allowing for both intra- and inter-individual effects.

The Current Study

We seek to extend the literature by examining attachment, caregiving responsiveness toward partner, and parenting in mid-childhood in a dyadic structural equation model. We adopt the most commonly used conceptualization of parenting style (both parenting practices and the emotional tone with which they are employed), that of Baumrind (1967, 1991), which provides a succinct and useful description of optimal and nonoptimal parenting styles toward the mid-childhood age range. Baumrind's model of parenting describes three styles—authoritative, authoritarian, and permissive parenting. Authoritative parenting is considered the optimal parenting style, and refers to parenting conveying clear boundaries and expectations to the child but within a warm and involved context. By contrast, authoritarian parenting is harsh and punitive and lacks warmth and dialogue, and permissive parenting is unstructured, unconfident, and lacks boundaries. Authoritative parenting is associated with the most positive child outcomes, including friendliness with peers, achievement orientation, cooperation with parents, and healthy independence (Baumrind, 1967, 1973, 1989). Furthermore, Querido, Warner, and Eyberg (2002) found that authoritative parenting was associated with fewer behavioral problems and the lowest intensity problem behaviors, compared with authoritarian and permissive parenting styles which were both positively associated with the intensity of problem behaviors. Despite Baumrind's typology of parenting style being commonly used within the parenting literature, to our knowledge, this is the first study to examine how dimensions of romantic attachment and caregiving relate to an individual's authoritative, authoritarian, and permissive parenting scores.

With the exception of Rholes et al. (2006), who used Actor Partner Interdependence Model analyses, much of the extant literature on parenting neglects to model for mutual

influence within dyads. We seek to correct this by presenting data from both parents in a family, reporting on their own relationship with their partner, as well as their own parenting style toward their child. Extant evidence regarding partner effects is mixed: some research emphasizes the importance of partner supportiveness in caregiving for infants and young children (Halford & Petch, 2010), but other research does not find an effect of marital satisfaction on parenting (Rholes et al., 2006). We tested a comprehensive model that examined the paths between romantic attachment orientation and parenting style, postulating responsive caregiving as a mediator, and accounting for both gender differences and partner effects throughout the model. We hypothesized that couple romantic attachments would predict parenting styles via differences in responsive caregiving and that one partner's responsive caregiving might affect the other partner's parenting.

Method

Data were collected via questionnaires distributed via state run, mixed sex schools in England, as part of the Parenting Project. Other findings pertaining to couple attachment and caregiving dynamics in this sample are reported elsewhere (Millings & Walsh, 2009). One hundred and twenty-two couples responded to questionnaire packs that were sent home with children in their second and third years of schooling (7-8 year olds). Cover letters invited parents to participate in the study, described as a research project on parenting and families, and asked them to complete the questionnaires separately and seal them in separate envelopes. No incentives were offered but a gift of stickers for the child was included in each pack. Envelopes were returned to the school, where they were collected by the researcher. A further three couples were recruited by a similar method in which parents were invited to participate by letters sent home from school, but participation was via logging on to an online version of the questionnaire.

Participants

One hundred and twenty-five couples participated. The mean age for men was 39.3 years ($SD = 5.73$) and for women it was 36.2 years ($SD = 5.06$), with a range 24 to 55 years overall. Eighty-nine percent of men and 99% of women were biological parents; biological and nonbiological (e.g., step or adoptive) parents did not differ significantly on any variable. Participants did not differ according to their method of recruitment on any variable.

Measures

Questionnaires included measures of romantic attachment to partner, caregiving toward partner, and parenting style, in that order. Questionnaires took around 20 min to complete.

Attachment. Attachment was measured using the Experiences in Close Relationships–Revised (ECR-R; Fraley, Waller, & Brennan, 2000). This 36-item measure assesses attachment avoidance and attachment anxiety. Each scale contains 18 items scored on a Likert-type scale from 1 (*strongly disagree*) to 7 (*strongly agree*). Mean scores are taken for each dimension. The ECR-R has been shown to be both reliable and valid (Sibley, Fischer, & Liu, 2005). Cronbach's alphas in the current study were .92 for anxiety and .92 for avoidance.

Caregiving. Caregiving towards partner was measured using the Caregiving Questionnaire (CQ; Kunce & Shaver, 1994). The CQ has 32 items, which are scored on a Likert-type scale from 1 (*strongly disagree*) to 6 (*strongly agree*). The CQ has 4 dimensions, each containing 8 items: *proximity*, willingness to provide a partner with physical closeness as a form of support; *sensitivity*, ability to pick up on a partner's nonverbal cues; *cooperation*, capacity to assist without becoming controlling and domineering; and *compulsion*, tendency to become overinvolved with a partner's difficulties. Due to our interest in the particular aspect of the caregiving behavioral system likely to be common across caregiving to partner and to child, we focused our investigation on responsive caregiving ($\alpha = .92$), a composite mean of proximity ($\alpha = .86$), sensitivity ($\alpha = .90$), and cooperation ($\alpha = .85$; for example, Feeney, 1996).¹

Parenting. Parenting styles were measured using the Parenting Styles and Dimensions Questionnaire (PSDQ; Robinson, Mandlco, Olsen, & Hart, 1995). This measure assesses authoritative (27 items), authoritarian (20 items), and permissive parenting (15 items). Items ask the respondent to rate the frequency with which they use particular parenting behaviors (e.g., "I explain the consequences of my child's behavior") from 1 (*never*) to 5 (*always*). Cronbach's alphas were .93 for authoritative, .85 for authoritarian, and .75 for permissive parenting, which is comparable with those found by Robinson et al. (1995). The PSDQ is widely used in parenting research and has been linked with child outcomes (Aunola, Stattin, & Nurmi, 2000; Querido et al., 2002).

Results

Analytic Strategy

Table 1 shows the means and *SDs* for all variables separated by gender, along with zero-order correlations between all study variables for male and female participants. Most correlations within gender (i.e., actor effects) were moderate and significant. The correlation between avoidance and anxiety was high for both men and women, although this is common in long-term, committed couples (Cameron, Finnegan, & Morry, 2012). There were also significant associations between genders indicating that within a couple, the two partners' attachment styles, caregiving responsiveness, and parenting tended to correspond to some extent (i.e., were not independent).

Table 1. Descriptives and Raw Correlations Between Study Variables by Couple

| | Men | | | | | Women | | | | | | |
|-----------------------|----------|-----------|-----------------------|---------------|---------------|------------|----------|-----------|-----------------------|---------------|---------------|------------|
| | Anxiety | Avoidance | Responsive caregiving | Authoritative | Authoritarian | Permissive | Anxiety | Avoidance | Responsive caregiving | Authoritative | Authoritarian | Permissive |
| Men | | | | | | | | | | | | |
| Avoidance | 0.62*** | — | | | | | | | | | | |
| Responsive caregiving | -0.57*** | -0.63*** | — | | | | | | | | | |
| Authoritative | -0.38*** | -0.37*** | 0.48*** | — | | | | | | | | |
| Authoritarian | 0.37*** | 0.24** | -0.38*** | -0.57*** | — | | | | | | | |
| Permissive | 0.42*** | 0.26** | -0.27** | -0.51*** | 0.38*** | — | | | | | | |
| Women | | | | | | | | | | | | |
| Anxiety | 0.35*** | 0.40*** | -0.38*** | -0.30*** | 0.23* | 0.16 | — | | | | | |
| Avoidance | 0.39*** | 0.42*** | -0.32*** | -0.33*** | 0.19* | 0.17 | 0.74*** | — | | | | |
| Responsive caregiving | -0.30*** | -0.32*** | 0.23** | 0.21* | -0.11 | -0.10 | -0.54*** | -0.69*** | — | | | |
| Authoritative | -0.27*** | -0.26** | 0.17 | 0.21* | -0.06 | -0.10 | -0.35*** | -0.43*** | 0.50*** | — | | |
| Authoritarian | 0.11 | 0.14 | -0.13 | -0.19* | 0.30*** | 0.13 | 0.40*** | 0.41*** | -0.47*** | -0.63*** | — | |
| Permissive | 0.18* | 0.09 | -0.07 | -0.14 | 0.18* | 0.28** | 0.37*** | 0.35*** | -0.40*** | -0.42*** | 0.40*** | — |
| M | 2.38 | 2.28 | 4.50 | 3.87 | 2.03 | 2.09 | 2.30 | 2.27 | 4.71 | 4.17 | 1.91 | 2.04 |
| SD | 1.12 | 0.99 | 0.80 | 0.58 | 0.43 | 0.43 | 1.22 | 1.19 | 0.85 | 0.39 | 0.40 | 0.43 |

Note: Correlations were computed at the dyad level. Correlations within the same gender reflect actor effects (e.g., an individual's own anxiety correlated with their own responsive caregiving). Correlations between male and female variables on the diagonal indicate degree of nonindependence (e.g., the association between mother's and father's attachment anxiety), and those off the diagonal reflect partner effects (e.g., within a couple, the association between mother's attachment style and father's parenting style).

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

We analyzed our data in AMOS 17.0 using a dyadic path model. We included covariances between mother and father variables (e.g., between mother attachment and father attachment) to control for the dyadic nature of the data and the between-partner correlations shown in Table 1. Although the variables of interest are unobserved and tapped indirectly by self-report scales, we used path analysis instead of latent-variable analysis because we did not have multiple measures of each variable and the sample size was smaller than is typically recommended for complex latent-variable structural models (Kline, 2005).

Initially, we included all direct paths from attachment anxiety and avoidance to each type of parenting (authoritative, authoritarian, and permissive), as well as paths from attachment to responsive caregiving and from responsive caregiving to parenting. For completeness, and because previous research has suggested mutual influence (Kane et al., 2007; Millings & Walsh, 2009), we included actor effects (e.g., from father's attachment to father's own caregiving) and all partner effects (e.g., from father's attachment to mother's caregiving). The model was simplified in a series of steps outlined below, in which a portion of the model was constrained and the reduction in model fit examined. If a constraint did not reduce model fit, then the simplified model was accepted and the next step conducted.

To evaluate model fit, we examined Hu and Bentler's (1999) recommended indices. These were the χ^2 statistic (which ideally shows a nonsignificant difference between the model and data), comparative fit index (CFI; good if .95 or more), root mean square error approximation (RMSEA; good if .06 or less), and standardized root mean square residual (SRMR; good if .08 or less). We estimated and tested indirect (i.e., mediating) paths by running 1,000 bootstrap resamples and calculating bias-corrected estimates and confidence intervals (CIs). When comparing model fit, we used the stringent partial χ^2 test (Byrne, 2010).

Model Refinement

Model 1 was totally unconstrained, freeing all paths including partner effects. As this was a saturated model, it was not relevant to examine model fit, but we inspected the path coefficients. The actor paths from attachment to responsive caregiving were all significant and negative except for the path from mothers' anxiety, as were the actor paths from responsive caregiving to parenting except for fathers' permissive parenting. The direct actor paths from attachment anxiety to authoritarian and permissive parenting were also significant. The only significant partner effect was the path from mothers' anxiety to fathers' responsive caregiving ($B = -.18, z = -1.97, p = .049$), implying that men are less responsive when caring for women with higher (compared with lower) attachment anxiety.

To test for any gender differences in the model, we next constrained all actor and partner paths to be equal for mothers and fathers (Model 2). This model did not fit significantly worse, $\Delta\chi^2(22) = 20.85, p = .53$, and met all criteria for a good-fitting model: $\chi^2(22) = 20.85, p = .53$, CFI = 1.00, RMSEA = .000, SRMR = .037. Thus, this sample showed no significant differences between fathers and mothers in terms of the associations among attachment, romantic caregiving responsiveness, and parenting styles.

Next, we tested for partner effects in the model by constraining all partner paths to zero (Model 3). Again, this model did not fit significantly worse than Model 2, $\Delta\chi^2(11) = 15.77, p = .15$, and met good-fit criteria: $\chi^2(33) = 36.61, p = .31$, CFI = .994, RMSEA = .030, SRMR = .053. Thus, no meaningful partner effects were present in the data (indicating that the small association between mothers' attachment anxiety and fathers' responsive caregiving was not sufficiently meaningful in size to contribute to model fit).

Finally, we examined whether there were direct associations between attachment and parenting (or whether these associations were entirely explained by romantic caregiving responsiveness). In Model 3, anxiety significantly predicted authoritarian ($B = .10, z = 3.39, p < .001$) and permissive parenting ($B = .13, z = 3.92, p < .001$), but the other direct paths were nonsignificant ($Bs < |.05|, z < 1.41, p > .15$). Fixing all direct paths to zero (Model 4) reduced model fit compared with Model 3, $\Delta\chi^2(6) = 27.82, p < .001$. Therefore, we next fixed to zero all paths *except* those from anxiety to authoritarian and permissive parenting (Model 5). This did not reduce model fit compared with Model 3, $\Delta\chi^2(4) = 4.69, p = .32$, and Model 5 met good-fit criteria: $\chi^2(37) = 41.31, p = .29$, CFI = .993, RMSEA = .031, SRMR = .063. This was retained as the final model for interpretation (see Figure 1).

Associations Among Attachment, Caregiving Responsiveness, and Parenting

Table 2 contains the estimates and significance tests for all direct paths in the final model. Reflecting the pattern of raw correlations, both attachment anxiety and avoidance negatively predicted responsive romantic caregiving, which in turn positively predicted authoritative parenting and negatively predicted authoritarian and permissive parenting. Bootstrapping analyses (Table 3) confirmed that the indirect associations from attachment to each parenting dimension via responsive caregiving were all significant at the 99% level, indicating that responsive caregiving mediated the attachment-parenting links.

As reported in Table 2, the direct paths from attachment anxiety to authoritarian and permissive parenting were also significant. Therefore, while responsive caregiving partially mediated these links, attachment anxiety also had a direct,

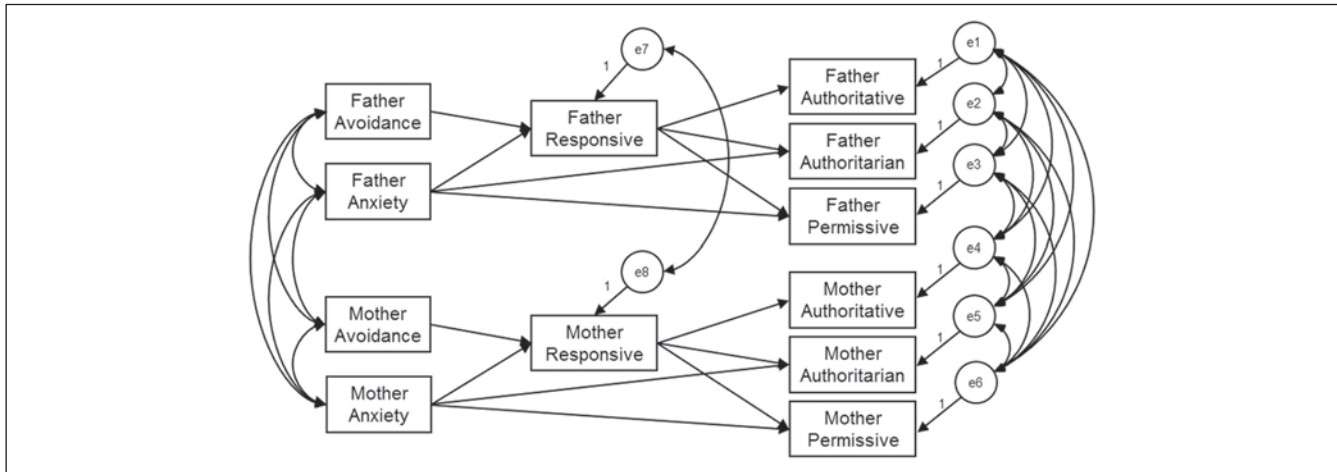


Figure 1. Final model
 Note: Note that male and female paths are constrained equal to each other.

Table 2. Final Model: Estimates for Direct Paths

| Path | B | SE | Z | p | R ² | |
|--------------------------------------|-------|------|--------|--------|----------------|-------|
| | | | | | Men | Women |
| Attachment-caregiving | | | | | | |
| Anxiety → responsiveness | -.201 | .064 | -3.167 | .002 | | |
| Avoidance → responsiveness | -.520 | .064 | -8.179 | < .001 | | |
| | | | | | .42 | .49 |
| Caregiving-parenting | | | | | | |
| Authoritative | .207 | .025 | 8.371 | < .001 | .13 | .29 |
| Authoritarian | -.144 | .025 | -5.746 | < .001 | .18 | .26 |
| Permissive | -.086 | .028 | -3.079 | .002 | .15 | .18 |
| Attachment-parenting (direct) | | | | | | |
| Anxiety → Authoritarian | .070 | .023 | 3.055 | .002 | | |
| Anxiety → Permissive | .112 | .027 | 4.089 | < .001 | | |

Note: Attachment anxiety and avoidance covaried positively and significantly (both actor and partner associations). Disturbances between partners' responsiveness scores were unrelated (covariance = -.03, *p* = .57). Parenting styles covaried significantly within a person and, for negative styles, with the corresponding style of one's partner (e.g., men's authoritarian-women's authoritarian). R² estimates are provided separately for men and women, and describe the total amount of variance in each endogenous variable accounting for all predictors in the model.

Table 3. Final Model: Indirect Paths Through Responsive Caregiving, Estimated and Tested Using Bootstrapping (1,000 Resamples, Bias-Corrected Confidence Intervals Calculated)

| Independent Variable | Dependent Variable | B | 99% CI | |
|----------------------|--------------------|------|--------|-------|
| | | | Lower | Upper |
| Anxiety | → Authoritative | -.04 | -.086 | -.007 |
| | → Authoritarian | .03 | .005 | .068 |
| | → Permissive | .02 | .001 | .052 |
| Avoidance | → Authoritative | -.11 | -.187 | -.059 |
| | → Authoritarian | .08 | .033 | .135 |
| | → Permissive | .05 | .004 | .093 |

Note: CI = confidence interval. All confidence intervals are significant (i.e., do not include zero).

nonmediated effect that was associated with an increase in both authoritarian and permissive parenting. In contrast, the associations between avoidance and all three parenting styles operated via responsive caregiving, with no direct effects.

Discussion

We sought to examine the association between romantic attachment and parenting, with responsive caregiving to partner as a mediator of this relationship. Our final model revealed that responsiveness to partner mediated the relationships between attachment and parenting styles, and that these relationships did not differ between mothers and fathers. Specifically, both attachment avoidance and

attachment anxiety had significant indirect associations with authoritative, authoritarian, and permissive parenting styles. Increases in both avoidance and anxiety were associated with lower levels of responsive caregiving, which in turn were associated with reduced authoritative parenting and increased authoritarian and permissive parenting. In addition, attachment anxiety had a direct, nonmediated association with both authoritarian and permissive parenting, such that increases in attachment anxiety were associated with higher levels of both forms of nonoptimal parenting. Contrary to our expectations, no partner effects were found. We next discuss (a) the intra-individual effects (attachment mediated by caregiving responsiveness and the direct effects of attachment) and (b) the absence of inter-individual effects (lack of partner effects) in turn.

That attachment security (lower levels of insecurity in terms of both avoidance and anxiety dimensions) was associated with optimal parenting styles via responsive caregiving is a novel but unsurprising finding. Other research has shown that those with greater attachment security are more responsive caregivers to their partners (Feeney & Collins, 2001), and recent research has shown global caregiving hyperactivation and deactivation to be associated with support provision in parent-child interactions (Shaver, Mikulincer, & Shemesh-Iron, 2010). Optimal parenting requires the capacity for responsive caregiving, and the requirements for responsive caregiving are the same in response to adult romantic partners and children alike: the ability to detect need and respond appropriately, to detect distress and provide a *safe haven* when under threat, and to provide a *secure base* from which to explore the environment appropriately when no threat is present (Collins & Feeney, 2010; George & Solomon, 1999; Kunce & Shaver, 1994). Securely attached individuals appear to be able to manage these tasks more effectively, and thus demonstrate more responsive caregiving, partly because their own attachment needs do not overwhelm them. In parenting particularly, which can be a stressful task, the attachment and caregiving systems are often activated simultaneously. Attachment security, and thus the capacity to be a responsive caregiver, affords the parent the resources required to provide not only a safe haven in times of threat but also as a secure base from which to explore. The provision of both safe haven and secure base is a fundamental component of authoritative parenting, which comprises a warm, child-centered approach, but with clear boundaries and democratic rules (Robinson et al., 1995).

Attachment insecurity, on the other hand, is known to inhibit responsive caregiving (Feeney & Collins, 2001). Anxious and avoidant individuals have different affect-regulation strategies, which come into operation when the attachment system is triggered. For those high in avoidance, affect-regulation strategies include the denial of negative emotions and a detachment from relationships. For those high in attachment anxiety, affect-regulation strategies involve a hyperactivation of the attachment system,

involving preoccupation, excessive proximity seeking, and contact maintenance (Mikulincer & Shaver, 2007). Collins and Feeney (2010) suggest that responsive caregiving for others in distress might be particularly difficult for those who are uncomfortable with emotional expression or who have difficulty regulating their own emotions, and these difficulties are associated with attachment insecurity, which explains why both avoidance and anxiety are associated with lower levels of responsive caregiving.

In our sample, lower levels of responsive caregiving were linked with higher levels of both nonoptimal parenting styles (intra-individual effects). If both secure base and safe haven abilities are reduced by attachment insecurity, then so too is reduced the ability to provide the fundamental requirements of authoritative or optimal parenting. In our model, responsive caregiving was related to authoritative parenting. Equally, deficits in responsive caregiving, which are characterized by difficulties attending to the needs of others in a sensitive and attuned manner, were related to greater levels of nonoptimal parenting, which can be authoritarian or permissive, or encompass aspects of both.

It is important to note that while qualitatively different—authoritarian parenting is dictatorial and permissive parenting is lax—parenting styles are measured dimensionally. That is, a person can score highly in authoritarian, or permissive, or both of these parenting styles. Reduced responsive caregiving may lead to a general vulnerability for developing nonoptimal parenting styles, rather than leading to permissive or authoritarian parenting specifically. The pathway taken may depend on other individual, relationship, and contextual factors. Authoritarian parenting lacks a child-centered focus: the child must fit in with the parent's regime, flexibility is minimal, and the parenting lacks warmth. Reduced responsiveness might contribute here as lack of understanding or care about the child's perspective. Permissive parenting lacks confidence, boundaries, and consistency. Reduced responsiveness might contribute here in terms of reduced psychological and emotional availability: issuing threats without follow-through, neglecting to set boundaries at all, and being preoccupied with other concerns. Both nonoptimal styles are characterized by a lack of sensitivity to the child's needs and thus are underpinned by deficits in responsive caregiving.

We also found direct effects of attachment on parenting (a further intra-individual effect). Although it makes theoretical sense that attachment insecurity influences parenting styles via caregiving responsiveness, perhaps more surprising are the direct effects of attachment anxiety on both types of seemingly opposing nonoptimal parenting. There are two explanations for this that are not mutually exclusive. One relates to the characteristics of attachment anxiety in relation to caregiving. Not all evidence suggests that attachment anxiety is associated with reduced caregiving responsiveness. Although those high in attachment anxiety may have some difficulties providing responsive care, they also have qualities that could support effective caregiving, such as comfort

with the expression of emotion, closeness, and intimacy (Mikulincer & Shaver, 2011). In cases where anxiety does not negatively impact upon caregiving responsiveness, it may still impact upon parenting, either directly or via an alternative mechanism unmeasured in our study. Future research may explore additional mediators and moderators of the effects of anxiety on parenting.

The other explanation has to do with the nature of the affect-regulation strategy endorsed by those high in anxiety. When the attachment system is activated (and we have argued that parenting tasks can serve to activate both the attachment and caregiving systems simultaneously), those high in anxiety hyperactivate their emotional experience and negative affect, and become hypervigilant to subsequent negative attachment-related cues. Those high in anxiety are known to experience greater levels of interpersonal problems, partially mediated by emotional reactivity (Wei, Vogel, Ku, & Zakalik, 2005). Such an affect-regulation strategy may make highly anxious parents more reactive in parenting confrontations, for example, regarding undesirable or perhaps embarrassing child behavior.

We did not find any partner effects of responsiveness on parenting style (inter-individual effects). We had anticipated that one partner's responsiveness might facilitate the other partner's parenting style, but there was no evidence of this in our data. Findings from previous research in this area are mixed. Some research has highlighted that receiving good support from a partner results in better caregiving abilities with infants and young children during the transition to parenthood (Halford & Petch, 2010). It may be that in our sample of parents of children in mid-childhood, such effects have already taken place and that receipt of partner support might only be particularly important while parental caregiving patterns are first being established. Alternatively, other research has not found a link between marital satisfaction and parenting style, and instead suggests that the "subjective experience of parenting may be determined primarily by internal factors" (Rholes et al., 2006, p. 283). Future research needs to examine these ideas by tracking these associations longitudinally, accounting for intra- and inter-personal factors.

In the main, caregiving responsiveness appears to mediate associations between attachment insecurity to partner and parenting style. This mechanism now needs further exploration and explanation. Perhaps our measure of partner caregiving is a proxy for a more general caregiving schema, which is applied to all caregiving situations and which is more responsive for more secure individuals. A good test of this would be to see if our model holds for single parents and whether in such cases a more global measure of responsiveness would play a similar mediating role. It certainly seems from our findings that caregiving to partner and caregiving to child are linked. Or perhaps there is something specific about a particular partner relationship

and associated levels of security and support that enable more effective caregiving in that particular parenting context, perhaps enhanced by more synchronized co-parenting. Collins and Read (1994) have suggested that global attachment representations are at the top of an attachment hierarchy with more specific relationship representations further down. The same cognitive structuring might also be true for caregiving representations. Future research should explore the limits of more general global caregiving schemas, using new measures such as the Caregiving Structures Scale, which assesses hyperactivation and deactivation in caregiving strategies (Shaver et al., 2010), and the circumstances under which they are activated or superseded by more specific relationship representations.

Although caregiving responsiveness and parenting style are closely associated in our model, and responsive caregiving fully mediates the association between attachment avoidance and nonoptimal parenting, we are not claiming that responsiveness is the same thing as authoritative parenting, but rather that it is an important facilitator of it. Responsiveness taps an individual's ability as a caregiver whereas parenting style taps an individual's reported use of different kinds of parenting strategies. Our conclusions are cautious, considering the limitations of our design. We used self-report measures and a single sample, although our sample was fairly substantial for a more difficult-to-recruit population of couples with children of a specific age, and we had dyadic reports that enabled us to model for both actor and partner effects. We were interested in self-reports of parenting styles, but future research could observe caregiving and parenting interactions longitudinally or manipulate specific caregiving representations through priming methods to test the causal relationships. Despite these limitations, our findings provide valuable evidence that responsive caregiving mediates the association between couple romantic attachment and parenting styles.

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Note

1. See Millings and Walsh (2009) for a dyadic analysis of attachment and each Caregiving Questionnaire dimension separately, in the current sample.

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