

---

# Parental attachment and conflict behavior: Implications for offspring's attachment, loneliness, and relationship satisfaction

---

JUDITH A. FEENEY  
*University of Queensland, Australia*

## Abstract

This study assessed the implications of parental attachment security and parental conflict behavior for offspring's relational adjustment (attachment security, loneliness, and relationship satisfaction). Further, reports of parental conflict behavior were obtained from both parents and offspring, addressing questions regarding agreement between reporters and the origin and extent of discrepant perceptions. Results revealed consistent patterns of conflict behavior and moderate agreement between reporters. However, offspring reported parental conflict behavior more negatively than parents, especially when offspring or parents were anxious about relationships. Parental attachment security had direct associations with offspring's relationship anxiety, whereas associations between parental attachment and offspring's loneliness and discomfort with closeness were mediated by parental conflict behavior. Parental conflict behavior was also associated with offspring's relationship satisfaction. The results are discussed in terms of the mechanisms involved in the intergenerational transmission of relationship difficulties.

In his formulation of attachment theory, Bowlby (1969, 1973, 1980) described the bonds of affection that develop between children and their caregivers (usually the parents). He argued that these attachment bonds reflect humans' universal needs for comfort and a sense of security, and that they play a key role in promoting children's social and emotional development. Consistent with Bowlby's claims about the importance of secure attachment bonds and their origins in responsive parenting, a vast body of literature now attests to the correlates and consequences of parent-child attachment security.

Within this body of literature, considerable attention has been paid to the concept of "intergenerational transmission" of attachment difficulties. According to the intergenerational transmission hypothesis, the offspring of parents who are not available and responsive to their

needs are likely to experience later difficulties in developing stable couple relationships and in serving as a secure base for their own children (Bretherton & Munholland, 1999). In this way, insecurity may be perpetuated across the generations. A meta-analysis of mother-child attachment patterns (van IJzendoorn, 1995) supports this claim. Specifically, studies show substantial concordance between the attachment patterns of mothers (interviewed about the nature and current influence of their own childhood relationships) and young children (observed in the Strange Situation). However, the mechanisms of transmission are not yet fully understood (George & Solomon, 1999).

In examining the processes involved in parent-child attachment relationships, communication behavior is thought to be of prime importance. Attachment theory proposes that working models of attachment form as the result of communications between caregiver and child. Thus, communication serves as the vehicle by which attachment bonds are developed, maintained, and negotiated from day to

---

Correspondence should be addressed to Judith A. Feeney, University of Queensland, School of Psychology, Queensland 4072, Australia, e-mail: judy@psy.uq.edu.au.

day (Bretherton, 1988; Kobak & Duemmler, 1994). Studies of mother-infant interaction support the link between open, sensitive communication and attachment security. Mothers of secure infants show a conversational pattern marked by responsiveness, attentiveness, and calm, soothing tone; conversely, secure infants tend to engage their mothers in direct communication (Grossmann & Grossmann, 1984; Grossmann, Grossmann, & Schwan, 1986). The link between open communication and attachment security extends beyond infancy. Infant attachment classification predicts the quality of parent-child communication in the preschool years and the quality of children's communication about attachment topics; in addition, communication patterns between mothers and preschoolers predict the attachment classifications of both children and parents (Bretherton & Munholland, 1999). Kobak and Duemmler further argued that parent-child conversations that foster understanding of differences are critical to attachment security in childhood and adolescence.

As the latter suggestion implies, *conflict-centered* communication (which addresses differences or disagreements and hence may involve negativity and stress) is particularly relevant to attachment researchers. According to attachment theory, situations in which caregivers are distant or rejecting are stressful for children and tend to elicit attachment behavior (Bowlby, 1969). Hence, in childhood, behavioral differences between the different attachment styles are thought to emerge most strongly under these conditions of stress and conflict. Similarly, adult attachment researchers have paid particular attention to conditions that may threaten the bond between romantic partners, including relationship conflict. Again, theory and research suggest that individual differences in attachment behavior are most pronounced in these situations (Feeney, 2004).

Despite evidence that parental insecurity is linked to ineffective parent-child communication (including conflict-centered communication) and to offspring's own insecurity, the mechanisms underlying intergenerational transmission of relationship problems remain subject to debate (Feldman, 1997). In fact, a number of psychological processes may be

involved. When insecurely attached parents adopt destructive conflict behaviors in interactions with their children, they may send the implicit message that offspring's needs and feelings are not important. This message is likely to promote negative working models of self and others. In addition, however, offspring in these families may fail to learn important social skills and may enact the maladaptive relationship behavior modeled by parents with peers (Pettit & Clawson, 1996). Modeling of family conflict patterns is supported by studies comparing offspring's reports of conflict between their parents, with their parents, and with their romantic partners (e.g., Conger, Cui, Bryant, & Elder, 2000; Martin, 1990). These studies suggest that conflict between parents is associated with negative patterns of parent-child interaction (e.g., aggression, avoidance) and similar negative patterns of interaction with romantic partners. These findings are important as a considerable body of research links aggression and avoidance with relationship dissatisfaction and instability (e.g., Heavey, Layne, & Christensen, 1993).

In summary, parents' responses to conflict with their children carry implicit messages about the value of self and the dependability of others, and also provide a source of observational learning. Hence, parental security and conflict behavior may be linked not only to offspring's attachment security but also to other indices of offspring relational adjustment, such as loneliness and relationship satisfaction. Further, parents' constructive approach to conflict may be an important mechanism that underlies (mediates) the association between parents' attachment security and offspring's relational adjustment. It is worth noting that a similar mediational model has been proposed for adults' romantic relationships. In a longitudinal study of young couples, Feeney, Noller, and Callan (1994) found little support for conflict behavior mediating the relation between attachment security and relationship satisfaction. (Conflict behavior added relatively little to the prediction afforded by attachment.) However, in a broader sample of married couples, the relation between attachment security and marital satisfaction was mediated by conflict patterns for wives

and partially mediated for husbands (Feeney, 1994).

*Studying parent-child communication:  
Methodological issues*

Studying communication between parents and offspring raises important methodological issues. Common approaches to the study of family communication include observational and questionnaire methods. Each of these methods has strengths and weaknesses (Ickes, 2000). Observational methods can generate highly reliable data, generally based on coding by trained, independent observers. However, this approach tends to be costly and time consuming. Further, in terms of studying conflict, questions arise about how to observe conflict behavior in ways that are ethical, nonreactive, and not overly artificial. In contrast, questionnaires are relatively easy to administer and have the unique advantage of tapping people's subjective thoughts and feelings about their relationships. At the same time, it is important to acknowledge that questionnaire reports may be affected by memory and reporting biases (Scharfe & Bartholomew, 1998).

Concerns about such biases can be addressed, to some extent, by obtaining data from more than one reporter. This approach has particular merit when applied to the study of family relationships (Pruchno, 1989). For example, if both parents and offspring report on parental behavior, two important issues can be addressed. First, it is possible to assess the degree of consensus (agreement) between different reporters, by correlating their scores. Where substantial agreement between reporters exists, researchers can be more confident in the reliability of the data.

Second, the use of multiple reporters allows researchers to check for differences in the *levels* of behavior reported by different family members. These differences are of interest in their own right—that is, different family members have different subjective realities, and it is important to consider their individual perceptions (Kitzmann & Cohen, 2003; Pruchno, 1989). Previous studies suggest that offspring (especially adolescents and young adults) are often more negative than parents in their

perceptions of family functioning and communication (Noller, Feeney, Peterson, & Sheehan, 1995; Noller, Seth-Smith, Bouma, & Schweitzer, 1992). This finding has been interpreted in terms of the generational stake hypothesis, which proposes that parents and offspring have a different “stake” (emotional investment) in how they see the family (Bengtson & Troll, 1978). Because parents have generally invested very substantial resources (time, energy, affection, money) in the family, they have a stake in seeing it in a positive light. In contrast, adolescents and young adults are in the process of seeking autonomy and moving out from the family, and may find this process easier if they see the family in a somewhat negative light. Although several studies have asked multiple family members to report on family communication, little attention has been paid to the *correlates* of discrepant perceptions. It is possible, for example, that parents who are insecurely attached are more defensive about their communication patterns and hence that their offspring are particularly likely to see that communication more negatively.

*The present study*

As noted earlier, theory and research suggest that the offspring of parents who are securely attached are more likely to be securely attached themselves and to report adequate social relationships. Given the pivotal role of communication (including conflict-centered communication) in the negotiation of attachment relationships, parents' responses to conflict should also predict child outcomes and may mediate the link between parental security and child outcomes. The present study was designed to assess the implications of parental attachment and perceptions of conflict behavior for offspring's relational adjustment (attachment security, loneliness, and relationship satisfaction). Because parents' response to conflict with offspring was focal to the study, both parents and offspring were asked to report on parents' conflict behavior.

*Hypotheses.* Based on previous studies of family members' perceptions of conflict

behavior (e.g., Noller et al., 1995), parents' and offspring's reports were expected to show significant agreement, particularly for scales tapping specific, overt behaviors, such as verbal attack (Hypothesis 1). However, in line with the generational stake hypothesis, parental conflict behavior was expected to be reported more positively by parents than by offspring (Hypothesis 2). Further, parental insecurity was expected to be associated with greater discrepancies between parents' and offspring's reports of parental conflict behavior (Hypothesis 3). Although gender differences were not focal to this study, possible effects of gender of parent and offspring on reported conflict behavior were examined; no specific prediction was made about these effects.

In terms of the implications of parental variables, parental attachment security was expected to be associated with reports of more constructive conflict behavior; that is, more problem solving and less avoidance and attack (Hypothesis 4). In addition, both parental attachment security and constructive conflict behavior were expected to be associated with offspring's relational adjustment (Hypothesis 5). Finally, the association between parental attachment security and offspring's adjustment was expected to be mediated, in part, by parental conflict behavior (Hypothesis 6). Although these predictions were theoretically and empirically based, it is important to acknowledge that alternative models of the focal variables are plausible. In couple relationships (which involve mutual attachment and caregiving), conflict behaviors are influenced by the attachment characteristics of both partners (Creasey, 2002; Feeney, 1994). Hence, offspring's attachment characteristics may influence parental conflict behaviors (rather than being influenced by them). More specifically, it is possible that conflict behaviors are shaped directly by both parties' attachment characteristics, or that parents' attachment shapes offspring's attachment, which in turn affects conflict behavior. These alternative models were also evaluated. For completeness, a final alternative model was tested in which parental attachment was not a distal predictor variable; this model tested whether parental attachment mediates the association between

parental conflict behaviors and offspring adjustment.

## Method

### *Participants*

The sample consisted of 122 students (86 females and 36 males), enrolled in a 3rd-year course on research methodology. Age ranged from 19 to 35 years, with a mean of 23.53 years. Surveys were also returned by 88 mothers and 81 fathers; however, two of the mothers and four of the fathers were step-parents, and their data were not included in the analyses (leaving *N*s of 86 and 77, respectively). Eighty-two of the student participants were in an exclusive romantic relationship. Thirty-six of these indicated that they were living with their partners; of the remainder, 34 described their relationship as serious, and 12 described it as casual. Relationship length for the 82 participants ranged from 1 to 120 months ( $M = 21.3$  months).

### *Measures*

As part of a larger study, reports were obtained from students, and where possible, from their mothers and fathers. Both students and parents reported on their own attachment security. In addition, parents reported on their own conflict behavior toward their offspring, and students reported on their mother's and father's conflict behavior toward them. Finally, students completed a loneliness scale, and those who were in exclusive relationships rated their satisfaction with the relationship.

*Attachment security.* This construct was assessed using the Attachment Style Questionnaire (ASQ; Feeney, Noller, & Hanrahan, 1994). The ASQ is a 40-item measure, with response format from 1 = *totally disagree* to 6 = *totally agree*. Although the ASQ can yield scores on five scales, the two major factors are discomfort with closeness (discomfort) and relationship anxiety (anxiety). The discomfort scale (16 items) measures the tendency to be uncomfortable with high levels of intimacy and to have difficulty in depending

on relationship partners. A sample item is "I find it relatively easy to get close to other people" (reverse scored). Relationship anxiety (13 items) measures fears of being rejected and abandoned, and concerns about whether partners' feelings of love and commitment are deep and lasting (e.g., "I worry that others won't care about me as much as I care about them"). The scales were highly reliable for both parents and offspring: Alpha coefficients exceeded .80 for discomfort and .85 for anxiety.

*Conflict behavior.* The Conflict Resolution Styles Questionnaire (Peterson, 1990) was used to assess parents' behavior in the context of conflict with offspring. This 12-item measure was adapted from a marital conflict scale (Rands, Levinger, & Mellinger, 1981). It consists of three 4-item scales: avoidance, attack, and problem solving, and uses a 4-point response format from 1 = *not at all true* to 4 = *very true*. In past research using this measure, participants have been asked to rate how some other family member usually reacts when there is a disagreement. The versions used in this study required participants to evaluate their own conflict behavior (parents' version) or the behavior of their parents (offspring's version). Sample items for the offspring version are "S/he tries to avoid talking about it" (avoidance), "S/he gets really angry and starts yelling" (attack), and "S/he listens to what I have to say and tries to understand how I really feel" (problem solving). The scales were highly reliable, with all coefficient alphas exceeding .80 for each reporter.

*Loneliness.* The revised University of California, Los Angeles Loneliness Scale (Russell, Peplau, & Cutrona, 1980) contains 20 items that assess participants' relationships in terms of both satisfactions (e.g., "I feel part of a group of friends") and dissatisfactions (e.g., "There is no one I can turn to"). The response format is from 1 = *never* to 4 = *often*, and scores are summed across items. Coefficient alpha for this scale was .93.

*Relationship satisfaction.* Offspring who were in an exclusive romantic relationship completed the Quality Marriage Index (QMI;

Norton, 1983), with the items reworded slightly to refer to "relationship," rather than "marriage." The QMI is a unidimensional scale, consisting of six items, which evaluate the global quality of the relationship (e.g., "Our relationship is strong"). Coefficient alpha for the scale was .94.

### *Procedure*

Student participants completed the measures in small groups as part of a larger class study. Responses were anonymous, and students were told that they did not have to submit their data for group analysis if they preferred not to (no student withheld their data). The two major sections of the questionnaire (attachment security, parental conflict behavior) were presented in counterbalanced order; further, for student participants, these sections either preceded or were followed by the measures of loneliness and relationship satisfaction. Students were asked to obtain data from their mothers and fathers, if possible. Those who volunteered to do so were given the appropriate questionnaires with cover sheets that explained the purpose and confidential nature of the study, and requested that each respondent complete the measures independently. A prepaid envelope was provided for each parent to return the materials, and a telephone contact was provided so that any questions about the materials could be directed to the researcher. Code numbers placed on each set of materials enabled parents' and offspring's data to be matched.

## **Results**

### *Preliminary analyses*

*Descriptive statistics.* Table 1 shows descriptive statistics for the parental attachment and conflict scales, for students and their parents. Scores on the attachment scales were approximately normally distributed and spanned close to the full possible range. Although the mean scores suggest relatively constructive patterns of parental conflict behavior (i.e., higher levels of problem solving than of avoidance and attack), there was considerable

**Table 1.** Descriptive statistics for reports of attachment, loneliness, and conflict behavior

Variable (and reporter)	<i>M</i>	<i>SD</i>	<i>n</i>
Discomfort			
Mother report	52.25	10.35	84
Father report	54.31	9.49	74
Offspring report	50.48	11.09	122
Anxiety			
Mother report	40.92	8.92	83
Father report	40.60	8.33	76
Offspring report	45.12	8.12	122
Loneliness			
Offspring report	39.37	11.06	122
Parental avoid			
Mother report	7.95	3.40	86
Father report	8.71	2.97	76
Offspring report of mother	8.45	3.25	120
Offspring report of father	8.88	3.27	114
Parental attack			
Mother report	6.40	2.53	86
Father report	6.46	2.88	77
Offspring report of mother	8.03	3.61	120
Offspring report of father	7.32	2.69	114
Parental solve			
Mother report	11.61	3.07	86
Father report	11.07	2.97	77
Offspring report of mother	9.74	3.22	120
Offspring report of father	9.97	3.25	114

*Note.* Possible scores ranges are 16–96 (discomfort), 13–78 (anxiety), 20–80 (loneliness), and 4–16 (all conflict scales).

variability, and scores on most scales spanned the full possible range.

With regard to offspring's adjustment, the measures again showed adequate variability. Mean scores (with standard deviations in parentheses) were 50.48 (11.09) for discomfort, 45.12 (8.12) for anxiety, and 39.37 (11.06) for loneliness. For those offspring in exclusive romantic relationships, scores on the QMI (possible range 6–42) varied from 18 to 42 ( $M = 33.57$ ,  $SD = 6.90$ ); average scores were relatively high, which is typical of evaluative measures of relationship quality.

*Complete versus incomplete family data.* The first set of analyses assessed possible differences between those families in which students did and did not provide parental data. This issue has implications for the generality of results

based on parents' reports. Specifically, three multivariate analyses of variance (MANOVAs) were conducted, comparing the two groups in terms of students' reports of maternal conflict behavior, paternal conflict behavior, and own relational adjustment (attachment security and loneliness). These analyses revealed no differences between the two groups on any of these variables.

#### *Reports of parent-child conflict behavior*

To obtain a comprehensive picture of family members' perceptions of parent-child conflict behavior, five sets of analyses were conducted. First, the conflict scales provided by members of each generation were intercorrelated to assess associations among the various indices of parental behavior. Second, agreement

correlations were formed to assess the degree of association between parents' and offspring's reports of parental behavior. Third, MANOVAs assessed whether reports of conflict behavior were related to gender of parent or gender of offspring. Next, additional MANOVAs were used to evaluate whether parents and offspring differed in their perceptions of parental behavior. Finally, the link between attachment scales and discrepancies in reports of parent-child conflict behavior were investigated, using correlational and regression techniques.

*Correlations among measures of parental conflict behavior.* Both parents and offspring tended to see a coherent pattern of behavior on the part of each parent (see Table 2). There were highly significant inverse correlations between reports of problem solving and reports of avoidance and attack by the same individual; to a lesser extent, avoidance and attack were perceived as positively related. With regard to links between mothers' and fathers' behavior, parents' reports suggested low to moderate associations: If one parent reported constructive conflict behavior, the other tended to do likewise. This pattern was less evident for offspring's reports, although three of the nine correlations were significant; in particular, where one parent was seen as attacking, the other tended to be seen as avoiding.

*Agreement correlations.* Correlations were calculated for offspring's and parents' reports of the three parental conflict behaviors. Agreement was significant for each maternal behavior ( $r = .31, p < .01$  for avoidance;  $r = .64, p < .001$  for attack;  $r = .40, p < .001$  for problem solving). For paternal behavior, agreement was significant for reports of attack and problem solving ( $r = .39, p < .001$ , and  $r = .23, p < .05$ , respectively), but not avoidance ( $r = .18$ ). Overall, the results point to significant agreement between reporters, as expected. Further, consistent with Hypothesis 1, tests of the difference between nonindependent correlations (Howell, 2002) indicated greater agreement for attack than for avoidance, for both maternal,  $t(83) = 9.95, p < .001$ , and paternal,  $t(74) = 7.43, p < .001$ , behavior.

*Effects of gender.* To assess the effects of gender of parent and gender of offspring on conflict patterns, separate MANOVAs were performed for reports by offspring and parents. For offspring's reports, no main or interactive effects of gender were obtained. The analysis of parents' reports yielded a main effect of gender of offspring, multivariate  $F(3, 66) = 3.76, p < .02$ , but univariate tests showed that this effect applied only to the problem-solving scale,  $F(1, 68) = 10.84, p < .01$ . Overall, parents reported engaging in more

**Table 2.** *Correlations among measures of parental conflict behavior*

Variable (reporter)	1	2	3	4	5	6
1. Mother avoid (mother)	—					
(offspring)	—					
2. Mother attack (mother)	.25*	—				
(offspring)	.32***					
3. Mother solve (mother)	-.42***	-.60***	—			
(offspring)	-.50***	-.60***				
4. Father avoid (father)	.26*	.21	-.32**	—		
(offspring)	.18	.37***	-.33***			
5. Father attack (father)	.11	.53***	-.43***	.43***	—	
(offspring)	.38***	.18	-.16	.22*		
6. Father solve (father)	-.02	-.38***	.39***	-.41***	-.64***	—
(offspring)	-.17	.09	.19	-.33***	-.47***	

Note. In each cell, the top entry is for parents as reporters and the bottom entry is for offspring as reporters. \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

problem solving with sons ( $M = 12.62$ ) than with daughters ( $M = 10.74$ ).

Given that the effects of gender were largely nonsignificant, it is important to consider the power of these tests. Based on the observed treatment effects, there was adequate power for testing some gender differences. For example, power for the effect of offspring's gender was .88 for offspring's reports of maternal attack and .78 for mothers' reports of maternal problem solving. However, other tests showed limited power; in particular, power was only .58 for the effect of offspring's gender on mothers' reports of maternal attack. Power for the effects of gender of parent were comparable. Hence, some of the null results are likely to stem from limited power.

*Effects of reporter.* To address the issue of systematic differences in family members' perceptions, two MANOVAs were conducted. For ratings of mothers' conflict behavior, the overall effect of reporter (mother, offspring) was highly significant, multivariate  $F(3, 79) = 9.07, p < .001$ . Univariate tests indicated that mothers and offspring differed in their reports of attack and problem solving,  $F(1, 81) = 20.33$  and  $15.49$ , respectively,  $p < .001$  in each case. Consistent with Hypothesis 2, mothers saw themselves as less attacking ( $M = 6.27$ ) than did their offspring ( $M = 7.76$ ); further, mothers saw themselves as more problem solving ( $M = 11.61$ ) than did their offspring ( $M = 10.11$ ).

For ratings of fathers' conflict behavior, the multivariate effect of reporter was not significant,  $F(3, 69) = 1.90, ns$ . However, univariate tests indicated that fathers and offspring differed in their reports of attack,  $F(1, 72) = 5.77, p < .02$ , with fathers seeing themselves as less attacking ( $M = 6.40$ ) than did their offspring ( $M = 7.38$ ). Although this finding should be interpreted cautiously given the nonsignificant multivariate effect, researchers have argued that it is appropriate to note such univariate results as a guide to further research (Bray & Maxwell, 1985; Tabachnick & Fidell, 1989), especially if they remain significant using a Bonferroni correction (in this case,  $p < .02$ ).

*Attachment and discrepant perceptions.* To assess the link between attachment insecurity and differing perceptions of conflict, the attachment scales were correlated with discrepant perceptions of parent-child conflict (offspring's score minus parent's score). Although Hypothesis 3 focused on the role of *parental* attachment, both parents' and offspring's attachment scales were included for completeness. Discrepancy scores for paternal conflict behavior showed only one significant association with attachment scales. Specifically, discrepancy scores for paternal problem solving were associated with fathers' anxiety ( $r = -.41, p < .001$ ); that is, where fathers were highly anxious, offspring tend to report less paternal problem solving than fathers did. For maternal conflict behavior, links with discrepancy scores were more widespread and consistent with Hypothesis 3. Where mothers were highly anxious, offspring reported less maternal problem solving than mothers did ( $r = -.23, p < .05$ ), together with more maternal avoidance ( $r = .25, p < .05$ ) and maternal attack ( $r = .27, p < .01$ ). Further, where offspring were highly anxious, offspring reported more maternal avoidance than mothers did ( $r = .40, p < .001$ ) and more maternal attack ( $r = .26, p < .05$ ).

Although discrepancy scores offer a simple and intuitively appealing way of investigating issues of similarity and dissimilarity, their use has been criticized on statistical and conceptual grounds (e.g., Griffin, Murray, & Gonzalez, 1999; Johns, 1981). Reliability and interpretability of discrepancy scores are less problematic when the two component scores are provided by different individuals and are based on reliable multiple-item measures (Johns). Nevertheless, researchers have argued that because the two components are usually correlated, it is important to "unconfound" their effects (Griffin et al., 1999). In the present study, this was achieved by running supplementary regression analyses in which parental attachment was regressed on parents' reports (Step 1) and offspring's reports (Step 2) of parent-child conflict. In these analyses, parents' and offspring's reports provided independent prediction of parental anxiety (but not parental discomfort). Specifically, offspring's



reports explained an additional 15% of the variance in paternal anxiety ( $F$  change = 2.52,  $p < .05$ ); paternal anxiety was related to reports that fathers used less problem solving,  $\beta = .49$ ,  $p < .01$  (controlling for fathers' reports of conflict behavior). Similarly, offspring's reports explained an additional 14% of the variance in maternal anxiety ( $F$  change = 2.99,  $p < .05$ ); maternal anxiety was related to reports that mothers engaged in attacking behavior,  $\beta = .29$ ,  $p < .05$  (controlling for mothers' self-reports). These results are generally consistent with the correlations based on discrepancy scores.

*Perceived parental conflict: Links with parental security and offspring adjustment*

The correlates of parental conflict behavior were examined in two ways. First, associations with parents' own attachment security were investigated. Second, the implications of parental attachment and conflict behavior for offspring adjustment were examined in a series of correlational and regression analyses.

*Parental attachment and parental conflict behavior.* To assess whether parental attachment security was linked to perceptions of conflict behavior, parents' scores on the attachment scales were correlated with reports of parent-child conflict (see Table 3). The main entries in this table involve parents as reporters of their own attachment and conflict behavior. For both mothers and fathers, reports of attacking behavior were associated with their own anxiety and discomfort (although the link between fathers' discomfort and attacking behavior was only a trend). Other findings were gender specific: Problem solving was related negatively to mothers' discomfort and fathers' anxiety. Overall, these results provide considerable support for the link between parental security and constructive conflict behavior (Hypothesis 4).

However, it is possible that these correlations are inflated by the use of a common reporter; that is, ratings of both attachment and conflict behavior may be influenced by parents' general perspective on close relationships. To address this issue, parental attachment

security was also correlated with offspring's reports of parental conflict behavior (see entries in parentheses). Although some differences emerged in the specific pattern of correlations, these data again supported the link between parental security and constructive conflict behavior. Offspring reported less parental problem solving when mothers were high in discomfort and when fathers were high in anxiety. However, the most consistent results were for maternal anxiety: When mothers were anxious, offspring saw them engaging in less problem solving and more avoidance and attack.

*Parental variables and offspring attachment and loneliness.* Before examining the predictors of offspring's attachment and loneliness, it is worth noting that although the two attachment dimensions were relatively independent ( $r = .14$ ), loneliness showed moderately strong associations with both of these dimensions ( $r = .61$  with discomfort,  $r = .49$  with anxiety). These correlations provide indirect support for the view that these measures tap a common construct of relational adjustment.

With regard to the predictors of child outcomes, bivariate correlations showed that both parental attachment security and perceived conflict behavior were related to offspring's discomfort, anxiety, and loneliness (see Table 4), although the specific pattern of association varied across these three measures of offspring adjustment.<sup>1</sup> Further, in terms of the possible mediating role of conflict behavior, the results in Table 3 provide preliminary support for links between the independent variables (parental attachment) and proposed mediators (conflict behaviors).

However, identifying direct and mediated effects requires three sets of regression analyses: first, regressing the mediators on the independent variables; second, regressing the dependent variables on the independent

---

1. Because participants varied considerably in age, age was included as a control variable in all correlational and regression analyses involving measures of offspring adjustment. However, age did not affect any of the associations between focal variables; hence, for ease of presentation, this variable is not included in the reported results.

**Table 3.** *Correlations between parental attachment and reports of conflict behavior*

Conflict scale	Attachment scale	
	Discomfort	Anxiety
Avoid		
Mother	.12 (.08)	-.09 (.23*)
Father	.14 (.02)	-.05 (.19)
Attack		
Mother	.35*** (.20)	.36*** (.38***)
Father	.21† (.13)	.33** (.13)
Solve		
Mother	-.49*** (-.30**)	.02 (-.25*)
Father	-.16 (-.05)	-.40*** (-.26*)

Note. Main entries are for parents as reporters of conflict, entries in parentheses are for offspring as reporters.  
 † $p < .10$ . \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

variables; and finally, regressing the dependent variables on both independent and mediating variables (Baron & Kenny, 1986; Frazier, Tix, & Barron, 2004). In the first set of analyses, parental attachment failed to predict maternal and paternal avoidance. However, prediction was significant for maternal attack ( $R^2 = .21$ ,  $p < .001$ ;  $\beta = .34$  for maternal discomfort and .30 for maternal

anxiety), paternal attack ( $R^2 = .14$ ,  $p < .05$ ;  $\beta = .28$  for paternal anxiety), maternal problem solving ( $R^2 = .22$ ,  $p < .01$ ;  $\beta = -.43$  for maternal discomfort), and paternal problem solving ( $R^2 = .16$ ,  $p < .05$ ;  $\beta = -.29$  for paternal anxiety).

In terms of linking the independent variables and mediators to the dependent variables (offspring's discomfort, anxiety, and

**Table 4.** *Correlations between parental variables and offspring adjustment*

Parental variable	Measure of offspring adjustment		
	Discomfort	Anxiety	Loneliness
Discomfort			
Mother	.26*	.16	.30**
Father	.32**	-.19	.04
Anxiety			
Mother	.15	.42***	.22*
Father	.13	.35**	.30**
Avoid			
Mother	.09	-.13	.06
Father	.20†	.30**	.24*
Attack			
Mother	.21*	.20*	.31**
Father	.22*	.19	.44***
Solve			
Mother	-.25*	-.12	-.38***
Father	-.17	-.15	-.42***

Note. † $p < .10$ . \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

loneliness), separate regression analyses were run for maternal and paternal predictor variables. Parents' reports were used for all predictor variables as only parents rated parental attachment.<sup>2</sup> In all six analyses using the independent variables (alone) as predictors, parental attachment provided significant prediction of offspring's adjustment, with the percentage of explained variance ranging from 10% to 16% (see top section of Table 5). Specifically, parental discomfort (both paternal and maternal) predicted offspring discomfort, parental anxiety predicted offspring anxiety, and maternal discomfort and paternal anxiety predicted offspring loneliness. In addition, the association between maternal anxiety and offspring loneliness approached significance. These results support Hypothesis 5.

In the third set of analyses, parents' reports of attachment and conflict behavior were entered simultaneously. These analyses test the predictive power of each parental variable in the context of the full set of measures and provide the final test of mediation: If the relationship between parental attachment and offspring adjustment is mediated by conflict patterns, the importance of the attachment scales should decrease when conflict variables are included, as reflected in a reduction in the standardized regression weights (Baron & Kenny, 1986). These results are shown in the lower section of Table 5.<sup>3</sup>

In terms of the effects of parental conflict (controlling for parental attachment), offspring's discomfort was related to low maternal problem solving and marginally related to maternal attack. In addition, offspring's anxi-

ety was related to paternal avoidance. Finally, offspring's loneliness was related positively to paternal attack and inversely to maternal and paternal problem solving. Further, in predicting offspring discomfort and loneliness, the importance of parental attachment was reduced somewhat with the addition of the conflict scales.

To provide a further check on possible mediated relationships, the Sobel test was used. This test determines whether the indirect effect of an independent variable on a dependent variable via a proposed mediator is significantly different from zero (Howell, 2002). In four instances, Sobel tests supported the proposition that parental conflict behavior mediates the relationship between parental attachment and offspring adjustment (Hypothesis 6).<sup>4</sup> Low maternal problem solving mediated the relationship between maternal discomfort and offspring discomfort ( $z = 2.01$ ,  $p < .05$ ). However, evidence of mediation was strongest for the prediction of offspring loneliness. Specifically, the relationship between maternal discomfort and loneliness was mediated by low maternal problem solving ( $z = 1.99$ ,  $p < .05$ ), and the relationship between paternal anxiety and loneliness was mediated by paternal attack ( $z = 2.03$ ,  $p < .05$ ) and low paternal problem solving ( $z = 1.98$ ,  $p < .05$ ). There was no evidence of mediation for the prediction of offspring's anxiety.

As noted earlier, alternative theoretical models of the focal variables are plausible (especially given the retrospective and cross-sectional nature of the data). In particular, offspring attachment may influence parent-child conflict patterns, rather than being influenced by them. Specifically, parent-child conflict behaviors may be shaped by the attachment characteristics of both partners; or parents'

---

2. To assess whether the results of these analyses were robust across reporters, additional analyses were conducted in which parents' reports of their own attachment were entered at Step 1 and offspring's reports of parental conflict behavior were entered at Step 2. The increase in explained variance at Step 2 was generally similar to that afforded by parental reports ( $R^2$  change ranged from .02 to .15). Further, similar patterns of mediation emerged, except that the association between maternal discomfort and offspring discomfort was no longer mediated by maternal problem solving.

3. Parental avoidance cannot function as a mediator because it was not predicted by parental attachment. However, it was included in these analyses for completeness as the study was concerned with both direct and mediated effects (see Hypothesis 5).

---

4. Standard errors for the effects in the significant Sobel tests were as follows. Maternal discomfort predicting maternal problem solving, .025; maternal problem solving predicting offspring discomfort, .410; maternal problem solving predicting loneliness, .524; paternal anxiety predicting paternal attack, .030; paternal anxiety predicting paternal problem solving, .032; paternal attack predicting loneliness, .469; paternal problem solving predicting loneliness, .410.

**Table 5.** Regressions of offspring adjustment on parental attachment and conflict behavior

Predictor variable(s)	Measure of offspring adjustment					
	Discomfort		Anxiety		Loneliness	
	$R^2$ (explained variance)					
Attachment	.10*	.13*	.12**	.16**	.13**	.10*
	Beta weight					
Discomfort	.28**	.36**	.14	-.17	.29**	.07
Anxiety	.16	.10	.33**	.38**	.20†	.32**
	$R^2$ (explained variance)					
Attachment and conflict	.13†	.22**	.16*	.25**	.21**	.28**
	Beta weight					
Discomfort	.16	.29*	.09	-.15	.13	.12
Anxiety	.15	.16	.30**	.38**	.19	.18
Avoid	-.02	.12	-.16	.34**	-.08	.17
Attack	.19†	.16	.06	-.02	.14	.30*
Solve	-.20*	-.17	-.12	-.15	-.34**	-.26*

Note. In each cell, the entry on the left is for prediction from maternal variables; the entry on the right is for prediction from paternal variables.

† $p < .10$ . \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

attachment may influence offspring attachment, which in turn influences conflict behavior. To test these alternative models, a series of hierarchical regression analyses were conducted, with parents' reports of parent-child conflict behavior as the dependent variables. The predictor variables were parental attachment and offspring attachment; to provide a complete picture of the relative importance of these two sets of predictors, both orders of entry were performed (parental attachment followed by offspring attachment, then the reverse). According to the alternative models, both parents' and offspring's attachment should afford prediction, and the effects of offspring's attachment may be indirect.

These models were less effective in explaining the data. As already noted, parental attachment (alone) provided significant prediction of four of the six conflict scales: maternal and paternal attack and maternal and paternal problem solving. At Step 2, offspring attachment added to the explained variance for only one dependent variable: paternal avoidance ( $R^2$  change = .09,  $p < .05$ ;  $\beta$  for off-

spring anxiety = .32). When the order of entry was reversed, offspring attachment again predicted paternal avoidance only ( $R^2 = .10$ ,  $p < .05$ ;  $\beta$  for offspring anxiety = .37); for the remaining five conflict scales,  $R^2$  ranged from .03 to .07. Addition of the parental attachment scales provided a significant increase in explained variance for maternal attack, maternal problem solving, and paternal problem solving ( $R^2$  change ranged from .14 to .18), and a marginal increase in explained variance for paternal attack. Hence, in this sample, offspring attachment was relatively unimportant in predicting parental conflict (providing no support for its direct or indirect effects).

There was also little support for the final alternative model, which proposed that parental attachment might mediate the association between parent-child conflict and offspring relational adjustment. Parental conflict scales predicted offspring's adjustment in three of the six analyses ( $R^2$  in these analyses ranged from .05 to .23); however, the only significant Sobel test was for maternal anxiety as a mediator of the association between maternal

attack and offspring anxiety ( $z = 2.08$ ,  $p < .05$ ).

*Parental variables and offspring's relationship satisfaction.* We were also interested in the parental correlates of offspring's relationship satisfaction. Given that only 82 participants were in an exclusive relationship (and not all of them provided parental reports), the numbers were too small to conduct multiple regression analyses like those reported above. Hence, correlational analyses were performed, using parents' reports of their own attachment and conflict behaviors. In these analyses, offspring's relationship satisfaction was unrelated to parental attachment but related to three of the six conflict scales: maternal avoidance ( $r = -.30$ ,  $p < .01$ ), maternal attack ( $r = -.40$ ,  $p < .001$ ), and paternal attack ( $r = -.31$ ,  $p < .01$ ). Further, partial correlations indicated that these associations were quite robust. Specifically, all three correlations remained significant when participants' age and attachment dimensions were controlled; controlling for relationship length reduced the association with paternal attack to a trend ( $r = -.25$ ) but did not affect the other two correlations.

## Discussion

This study explored family members' perceptions of parent-child conflict and assessed the implications of parental attachment and conflict behavior for offspring's relational adjustment. As discussed in more detail below, the results provide substantial support for the hypotheses and have important implications for theory and practice.

### *Reports of parent-child conflict behavior*

Data from both parents and offspring pointed to consistent patterns of conflict behavior by individual parents. That is, parental problem solving was inversely related to avoidance and attack, and to a lesser degree, avoidance and attack were positively related. These findings suggest that parents who are unable or unwilling to negotiate conflict issues calmly may engage in both forms of destructive conflict behavior. Further, if one parent reported

constructive conflict behavior, the other tended to do likewise. This pattern was less marked for offspring's reports, but there was some evidence that where one parent was seen as attacking, the other tended to be seen as avoiding. Although these data describe each parent's dealings with offspring, previous research suggests that relatively strong associations exist between these patterns and those used in marital conflict (Noller et al., 1995). Hence, these data provide indirect support for the widespread nature of demand-withdraw communication, in which one spouse pushes for discussion and demands that issues be addressed, while the other tries to avoid the issues (e.g., Heavey et al., 1993).

*Gender effects.* Although gender was not a focal variable in this study, it was considered important to assess the effects of gender of parent and gender of offspring on reported conflict patterns. Offspring's reports yielded no gender effects, and parents' reports yielded only an effect of gender of offspring for problem-solving behavior. (As noted earlier, however, statistical power was limited for testing some of the effects of gender.)

Given that sons and daughters reported similar patterns of parental conflict, the finding that parents reported engaging in more problem-solving behavior with sons than daughters is rather difficult to interpret. Specifically, this finding may reflect actual differences in parental behavior and/or gender-role stereotypes, which suggest that boys are more open to reason and logic than girls are (Geis, 1993). Alternatively, or in addition, the finding may be linked to gender differences in offspring's communication patterns. Studies suggest that adolescent daughters engage in more frequent discussion and greater disclosure with their parents than do adolescent sons (e.g., Noller & Bagi, 1985). Hence, in conflict situations, parents may perceive less need to draw out the thoughts and feelings of daughters and to engage them in open discussion.

*Perceptions of conflict: agreement and disagreement.* As expected, there was moderate agreement between parents' and offspring's perceptions of parental conflict behavior. This

finding suggests that the obtained reports possess adequate reliability. However, agreement was stronger for attack than for avoidance, presumably because of the relatively ambiguous nature of avoidance behavior. Although some forms of avoidance are quite blatant (e.g., storming out of the room), others, such as joking, are much more subtle and open to subjective interpretation (Rausch, Barry, Hertel, & Swain, 1974). The present findings concerning agreement are similar to those reported by Noller et al. (1995), although these researchers used different scales to assess parental conflict behavior. In that study, agreement correlations were generally moderate in size but were higher for scales that tapped overt behaviors (e.g., coercion), rather than emotional states (distress). Similarly, parents and children show greater agreement in their ratings of the overt properties of marital conflict than in ratings of subjective distress (Kitzmann & Cohen, 2003).

Despite the substantial levels of agreement between the two generations, there was also evidence of systematic differences in their perceptions. Specifically, both mothers and fathers saw themselves as less attacking than did their offspring; in addition, mothers saw themselves as more problem solving than did their offspring. The direction of these effects is consistent with the generational stake hypothesis, which points to parents' greater investment in perceiving a cohesive family unit and offspring's need to establish autonomy (Bengtson & Troll, 1978). In light of the pattern of agreement correlations, it seems that the lack of reporter effects for avoidance may again reflect the more ambiguous nature of avoidance behavior.

The generational stake hypothesis implies that a certain level of discrepancy between parents' and offspring's perceptions of the family is common and may even facilitate young people's move toward a more autonomous life. However, a unique contribution of the present study was the finding that relationship anxiety (in parents and offspring) was associated with more discrepant perceptions of parental conflict behavior. This finding suggests that some of the observed discrepancies are likely to reflect an insecure and defensive style of reporting on the part of anxious parents

and/or a particularly critical style of reporting on the part of anxious offspring. Substantial discrepancies may be problematic for relationships between parents and offspring, giving rise to further disagreements and to differing attributions of blame and responsibility. In fact, attributions about relationships with parents have been linked to attributions about intimate relationships, suggesting that attributional patterns represent another mechanism in the intergenerational transmission of relationship problems (Benson, Ardit, Reguero De Atilas, & Smith, 1992).

#### *Perceived parental conflict: Links with parental security and offspring adjustment*

In line with attachment theory, parental attachment security was associated with reports of more constructive patterns of conflict behavior. Some of the findings were gender specific, but the link between parental anxiety and verbal attack was moderately strong for both mothers and fathers. This finding is consistent with previous studies linking relationship anxiety (cf. anxious-ambivalence) to anger, hostility, coercion, and domination (Feeney, Noller, & Callan, 1994; Mikulincer, 1998). Together, these results suggest that anxiety about core relationship issues often drives aggressive responses to conflict. Unfortunately, over time, these responses may increase the risk of relationship distress and breakdown and hence exacerbate insecurity. It is important to note that the link between parental attachment security and constructive behavior was not restricted to parents' own reports. Rather, offspring's reports supported this link, particularly for maternal anxiety: Offspring saw anxious mothers as engaging in less problem solving and more avoidance and attack.

As expected, parental attachment predicted all the measures of relational adjustment used in the regression analyses (discomfort, anxiety, and loneliness). Specifically, parental discomfort (both paternal and maternal) predicted offspring discomfort, parental anxiety predicted offspring anxiety, and maternal discomfort and paternal anxiety predicted offspring loneliness. These results again point to the pervasive effects of parental insecurity and

support the assertion that insecure adults find it more difficult to act as a secure base for their offspring (Weiss, 1991). This is not to say that parental behavior is the only factor involved in the intergenerational transmission of insecurity and relationship difficulties. Rather, recent data suggest that adult attachment styles reflect both genetic and environmental influences (Brussoni, Jang, Livesley, & MacBeth, 2000).

There was some evidence that perceptions of parental conflict behavior mediated the association between parental insecurity and offspring's discomfort and loneliness. Low maternal problem solving mediated the relationship between mothers' and offspring's discomfort. However, the strongest evidence of mediation was for the prediction of offspring loneliness: Low maternal problem solving mediated the relationship between maternal discomfort and loneliness, and paternal attack and low paternal problem solving mediated the relationship between paternal anxiety and loneliness. As noted earlier, these mediated relationships may involve complex mechanisms—parents who verbally attack, rather than engaging in problem solving, may send implicit messages that foster insecure working models, as well as modeling relationship behaviors that put offspring at risk of rejection by peers (Feldman, 1997). In contrast, there was limited support for the alternative models tested in this study, in which conflict behaviors are shaped by the attachment characteristics of offspring, as well as those of parents.

An important feature of mediational models of relationship functioning is that they can identify variables in a "causal chain" and hence suggest possible points of intervention. In recent years, considerable attention has been devoted to developing interventions that target working models of attachment (e.g., Levy & Orlans, 2003; Sperling & Lyons, 1994). The present findings suggest that both attachment and social learning principles provide a useful perspective on individuals' relationship functioning and on the transmission of relationship difficulties. Hence, family functioning and offspring adjustment may be improved not only by attachment-related interventions but also by those that focus on

enhancing parent-child communication, particularly in conflict situations.

There was no evidence of mediation for the prediction of offspring's anxiety; Rather, both maternal and paternal anxiety showed direct associations with this variable. Given that these associations were not mediated by conflict behavior, it is important to consider other possible mechanisms for the transmission of relationship anxiety. Anxious parents are likely to be hypervigilant to cues of threat and negativity (Shaver & Mikulincer, 2002). It is possible that their children become aware of these fears and negative expectations, which become incorporated in their own working models. In addition, anxious parents may discourage exploratory activities and overprotect their offspring, leading to self-perceptions of incompetence (Bretherton & Munholland, 1999). Finally, it is important to recognize that parents engage in direct teaching about relationships (Pettit & Clawson, 1996); anxious parents may provide poorer advice (e.g., telling their children that others cannot be trusted), thereby contributing to offspring's difficulties in interacting with peers.

For those young adults who were in exclusive romantic relationships, reports of satisfaction with the couple relationship were related negatively to mothers' and fathers' verbal attack and to mother's avoidance. These findings again support the intergenerational transmission of relationship difficulties and point to the formative influence of parent-child conflict patterns. In particular, it seems that offspring whose parents respond aggressively when disagreements occur are at risk of poor relational adjustment. Interestingly, this effect remained significant when offspring's attachment characteristics were controlled; this finding suggests that other mechanisms of transmission, such as modeling of aggressive patterns of interaction, are likely to be involved (Conger et al., 2000).

#### *Limitations and strengths of the study*

In considering these results, it is important to bear in mind the limitations and strengths of the study. With regard to limitations, the

sample was too small to permit detailed investigation of the effects of gender of parent and gender of offspring on child outcomes. Similarly, although power was adequate for testing direct effects of parental variables on child outcomes, a larger sample would have provided more power for testing indirect effects. Overall, the sample was relatively well adjusted. Although this might be seen as a limitation, it is worth noting that associations between parental variables and offspring adjustment may be stronger in clinical (or diverse) samples, as more extreme parenting behaviors (such as physical aggression) tend to have more powerful and lasting effects (Stafford & Bayer, 1993). Perhaps, the major limitation is that the data were cross-sectional and based on self-reports. Attachment security is relatively stable over time when assessed by interview or reliable questionnaires (Feeney, Noller, & Callan, 1994; Scharfe & Bartholomew, 1994), but it is certainly not immutable. Hence, the measures of attachment security (both parents' and offspring's) should be seen as tapping current working models, rather than those that may have been evident in offspring's more formative years. Nevertheless, the data are useful in demonstrating associations among attachment, perceptions of conflict behavior, and child outcomes.

A major strength of the study lies in its use of multiple reporters. By obtaining reports of parental conflict behavior from both parents and offspring, it was possible to address issues regarding parent-offspring agreement and systematic differences in perceptions, including the correlates of discrepant perceptions. In addition, it is important to note that the measure of attachment used in this study has established reliability and validity. For example, ASQ self-reports provide prospective prediction of individual and relational adjustment (Feeney, Hohaus, Noller, & Alexander, 2001), and have been linked to clinicians' assessments of personality disorders (Fossati et al., 2003). Further, attachment measures that are similar (but less comprehensive) in item content have been linked to independent observers' ratings of actual conflict behavior (e.g., Feeney, 1998). Finally, despite the limitations of the cross-sectional design, multivariate

analyses were able to shed some light on competing theoretical models.

### *Concluding comments*

In this study, the use of multiple reporters was important in establishing the reliability of the data and in clarifying the origin and extent of discrepant perceptions across generations. The study supports and extends previous research on the intergenerational transmission of relationship difficulties: Parental discomfort and anxiety were associated with offspring's reports of discomfort, anxiety, and loneliness. In the case of offspring's discomfort and loneliness, the effects of parental attachment were mediated, at least in part, by parent-child conflict behavior. Although previous studies show that conflict behavior in couple relationships is shaped by both partners' attachment characteristics, it seems that conflict behavior between parents and young adult offspring may be shaped primarily by the attachment characteristics of the parents. Given the formative role of relationships with parents, an important direction for future research would be to investigate the associations among parental attachment, offspring's attachment, and the conflict behaviors adopted by offspring in their romantic relationships. In addition, recent research indicates that as offspring mature and become more independent, they often become important attachment figures for their elderly parents (Doherty & Feeney, 2004). Given that conflict is a feature of all personal relationships and that offspring are increasingly called on to care for elderly parents, another crucial area for future research is to clarify the nature of relations between attachment and conflict variables in these later-life attachment relationships.

### **References**

- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*, 1173–1182.
- Bengtson, V. L., & Troll, L. (1978). Youth and their parents: Feedback and intergenerational influence in socialization. In R. M. Lerner & G. B. Spanier (Eds.), *Children's influences on marital and family interaction: A lifespan perspective* (pp. 106–130). New York: Academic Press.



- Benson, M. J., Arditti, J., Reguero De Atiles, J. T., & Smith, S. (1992). Intergenerational transmission: Attributions in relationships with parents and intimate others. *Journal of Family Issues*, *13*, 450–464.
- Bowlby, J. (1969). *Attachment and loss: Vol. 1. Attachment*. New York: Basic Books.
- Bowlby, J. (1973). *Attachment and loss: Vol. 2. Separation: Anxiety and anger*. New York: Basic Books.
- Bowlby, J. (1980). *Attachment and loss: Vol. 3. Loss*. New York: Basic Books.
- Bray, J. H., & Maxwell, S. E. (1985). *Multivariate analysis of variance*. Beverly Hills, CA: Sage.
- Bretherton, I. (1988). Open communication and internal working models: Their role in the development of attachment relationships. In *Nebraska Symposium on Motivation* (pp. 57–113). Lincoln: University of Nebraska Press.
- Bretherton, I., & Munholland, K. A. (1999). Internal working models in attachment relationships: A construct revisited. In J. Cassidy & P. R. Shaver (Eds.), *The handbook of attachment: Theory, research, and clinical applications* (pp. 89–111). New York: Guilford.
- Brussoni, M. J., Jang, K. L., Livesley, W. J., & MacBeth, T. M. (2000). Genetic and environmental influences on adult attachment styles. *Personal Relationships*, *7*, 283–289.
- Conger, R. D., Cui, M., Bryant, C. M., & Elder, G. H., Jr. (2000). Competence in early adult romantic relationships: A developmental perspective on family influences. *Journal of Personality and Social Psychology*, *79*, 224–237.
- Creasey, G. (2002). Associations between working models of attachment and conflict management behavior in romantic couples. *Journal of Counseling Psychology*, *49*, 365–375.
- Doherty, N., & Feeney, J. A. (2004). The composition of attachment networks throughout the adult years. *Personal Relationships*, *4*, 469–488.
- Feeney, J. A. (1994). Attachment style, communication patterns and satisfaction across the life cycle of marriage. *Personal Relationships*, *1*, 333–348.
- Feeney, J. A. (1998). Adult attachment and relationship-centered anxiety: Responses to physical and emotional distancing. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 189–218). New York: Guilford.
- Feeney, J. A. (2004). Adult attachment and relationship functioning under stressful conditions: Understanding partners' responses to conflict and challenge. In J. A. Simpson & W. S. Rholes (Eds.), *Adult attachment: New directions and emerging issues* (pp. 339–364). New York: Guilford.
- Feeney, J. A., Hohaus, L., Noller, P., & Alexander, R. (2001). *Becoming parents: Exploring the bonds between mothers, fathers, and their infants*. Cambridge, UK: Cambridge University Press.
- Feeney, J. A., Noller, P., & Callan, V. J. (1994). Attachment style, communication and satisfaction in the early years of marriage. In K. Bartholomew & D. Perlman (Eds.), *Advances in personal relationships* (Vol. 5, pp. 269–308). London: Jessica Kingsley.
- Feeney, J. A., Noller, P., & Hanrahan, M. (1994). Assessing adult attachment: Developments in the conceptualization of security and insecurity. In M. B. Sperling & W. H. Berman (Eds.), *Attachment in adults: Theory, assessment, and treatment* (pp. 128–152). New York: Guilford.
- Feldman, C. M. (1997). Childhood precursors of adult interpartner violence. *Clinical Psychology: Science and Practice*, *4*, 307–334.
- Fossati, A., Feeney, J. A., Donati, D., Donini, M., Novella, L., Bagnato, M., et al. (2003). Personality disorders and adult attachment dimensions in a mixed psychiatric sample: A multivariate study. *The Journal of Nervous and Mental Disease*, *191*, 30–37.
- Frazier, P. A., Tix, A. P., & Barron, K. E. (2004). Testing moderator and mediator effects in counseling psychology research. *Journal of Counseling Psychology*, *51*, 115–134.
- Geis, F. L. (1993). Self-fulfilling prophecies: A social psychological view of gender. In A. E. Beall & R. J. Sternberg (Eds.), *The psychology of gender* (pp. 9–54). New York: Guilford.
- George, C., & Solomon, J. (1999). Attachment and caregiving: The caregiving behavioral system. In J. Cassidy & P. R. Shaver (Eds.), *The handbook of attachment: Theory, research, and clinical applications* (pp. 649–670). New York: Guilford.
- Griffin, D., Murray, S., & Gonzalez, R. (1999). Difference score correlations in relationship research: A conceptual primer. *Personal Relationships*, *6*, 505–518.
- Grossmann, K. E., & Grossmann, K. (1984, September). *The development of conversational styles in the first year of life and its relationship to maternal sensitivity and attachment quality between mother and child*. Paper presented at the Congress of the German Society for Psychology, Vienna.
- Grossmann, K. E., Grossmann, K., & Schwan, A. (1986). Capturing the wider view of attachment: A reanalysis of Ainsworth's Strange Situation. In C. E. Izard & P. B. Read (Eds.), *Measuring emotions in infants and children* (pp. 124–171). New York: Cambridge University Press.
- Heavey, C. L., Layne, C., & Christensen, A. (1993). Gender and conflict structure in marital interaction: A replication and extension. *Journal of Consulting and Clinical Psychology*, *61*, 16–27.
- Howell, D. C. (2002). *Statistical methods for psychology* (5th ed.). Pacific Grove, CA: Duxbury.
- Ickes, W. (2000). Methods of studying close relationships. In W. Ickes & S. Duck (Eds.), *The social psychology of personal relationships* (pp. 157–180). Chichester, UK: Wiley & Sons.
- Johns, G. (1981). Difference score measures of organizational behavior variables: A critique. *Organizational Behavior and Human Performance*, *27*, 443–463.
- Kitzmann, K. M., & Cohen, R. (2003). Parents' versus children's perceptions of interparental conflict as predictors of children's friendship quality. *Journal of Social and Personal Relationships*, *20*, 689–700.
- Kobak, R. R., & Duemmler, S. (1994). Attachment and conversation: Toward a discourse analysis of adolescent and adult security. In K. Bartholomew & D. Perlman (Eds.), *Advances in personal relationships. Vol. 5: Attachment processes in adulthood* (pp. 121–149). London: Jessica Kingsley.
- Levy, T. M., & Orlans, M. (2003). Creating and repairing attachments in biological, foster, and adoptive families. In S. M. Johnson & V. E. Whiffen (Eds.), *Attachment processes in couple and family therapy* (pp. 165–190). New York: Guilford.

- Martin, B. (1990). The transmission of relationship difficulties from one generation to the next. *Journal of Youth and Adolescence, 19*, 181–199.
- Mikulincer, M. (1998). Adult attachment style and individual differences in functional versus dysfunctional experiences of anger. *Journal of Personality and Social Psychology, 74*, 513–524.
- Noller, P., & Bagi, S. (1985). Parent-adolescent communication. *Journal of Adolescence, 8*, 125–144.
- Noller, P., Feeney, J. A., Peterson, C. C., & Sheehan, G. (1995). Learning conflict patterns in the family: Links between marital, parental, and sibling relationships. In T. J. Socha & G. H. Stamp (Eds.), *Parents, children and communication: Frontiers of theory and research* (pp. 273–298). Mahwah, NJ: Erlbaum.
- Noller, P., Seth-Smith, M., Bouma, R., & Schweitzer, R. (1992). Parent and adolescent perceptions of family functioning: A comparison of clinic and non-clinic families. *Journal of Adolescence, 15*, 101–114.
- Norton, R. (1983). Measuring marital quality: A critical look at the dependent variable. *Journal of Marriage and the Family, 45*, 141–151.
- Peterson, C. C. (1990). Disagreement, negotiation, and conflict resolution in families with adolescents. In P. Heaven & V. J. Callan (Eds.), *Adolescence: An Australian perspective* (pp. 66–79). Sydney, Australia: Harcourt Brace Jovanovich.
- Pettit, G. S., & Clawson, M. A. (1996). Pathways to interpersonal competence: Parenting and children's peer relations. In N. Vanzetti & S. Duck (Eds.), *A lifetime of relationships* (pp. 125–154). Pacific Grove, CA: Brooks/Cole.
- Pruchno, R. A. (1989). Alzheimer's disease and families: Methodological advances. In E. Light & B. D. Lebowitz (Eds.), *Alzheimer's disease treatment and family stress: Directions for research* (pp. 174–195). Rockville, MD: Hemisphere.
- Rands, M., Levinger, G., & Mellinger, G. D. (1981). Patterns of conflict resolution and marital satisfaction. *Journal of Family Issues, 2*, 297–321.
- Raush, H. L., Barry, W. A., Hertel, R. K., & Swain, M. A. (1974). *Communication, conflict and marriage*. San Francisco: Jossey-Bass.
- Russell, D., Peplau, L. A., & Cutrona, C. E. (1980). The Revised UCLA Loneliness Scale: Concurrent and discriminant validity evidence. *Journal of Personality and Social Psychology, 39*, 472–480.
- Scharfe, E., & Bartholomew, K. (1994). Reliability and stability of adult attachment patterns. *Personal Relationships, 1*, 23–43.
- Scharfe, E., & Bartholomew, K. (1998). Do you remember? Recollections of adult attachment patterns. *Personal Relationships, 5*, 219–234.
- Shaver, P. R., & Mikulincer, M. (2002). Attachment-related psychodynamics. *Attachment and Human Development, 4*, 133–161.
- Sperling, M. B., & Lyons, L. S. (1994). Representations of attachment and psychotherapeutic change. In M. B. Sperling & W. H. Berman (Eds.), *Attachment in adults: Theory, assessment, and treatment* (pp. 331–347). New York: Guilford.
- Stafford, L., & Bayer, C. L. (1993). *Interaction between parents and children*. Newbury Park, CA: Sage.
- Tabachnick, B. G., & Fidell, L. S. (1989). *Using multivariate statistics* (2nd ed.). New York: Harper & Row.
- van IJzendoorn, M. H. (1995). Adult attachment representations, parental responsiveness, and infant attachment: A meta-analysis on the predictive validity of the Adult Attachment Interview. *Psychological Bulletin, 117*, 387–403.
- Weiss, R. S. (1991). The attachment bond in childhood and adulthood. In C. M. Parkes, J. Stevenson-Hinde, & P. Marris (Eds.), *Attachment across the life cycle* (pp. 66–76). London: Tavistock/Routledge.