Quality of Parental Caregiving and Security of Attachment

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The assumption that qualitative differences in parental behavior are associated with attachment security was examined in a sample of 62 children (M age = 21.5 months) who were seen separately with their mothers and fathers. Multiple measures of parental caregiving were used, including 2 qualitative behavioral rating scales and a self-report measure of attitudes and beliefs about child rearing. Analyses of the relation between these measures and maternal and paternal Strange Situation classifications of attachment security revealed effects only for mothers and only with 1 parent measure. These results add to a fairly impressive body of evidence indicating inconsistent and often weak associations between parental behavior and attachment security. Conceptual and methodological issues relevant to the parenting-attachment association were identified.

One of the assumptions pervading attachment theory and research is that the security of the attachment relationship reflects, in large part, variations in maternal behavior (Ainsworth, Bell, & Stayton, 1974; Ainsworth, Blehar, Waters, & Wall, 1978; Bretherton, 1985). Early findings on the effects of maternal deprivation (Bender & Yarnell, 1941; Goldfarb, 1943; Rutter, 1979; Skodak & Skeels, 1949) and findings regarding the quality of attachment in populations of maltreated infants (Carlson, Cicchetti, Barnett, & Brauwald, 1989; Egeland & Sroufe, 1981; Schneider-Rosen, Braunwald, Carlson, & Cicchetti, 1985; Schneider-Rosen & Cicchetti, 1984) provide evidence of the consequences of extreme variation in maternal behavior for the developing attachment relationship. Ainsworth's early studies (e.g., Ainsworth & Bell, 1969; Ainsworth & Wittig, 1969; Stayton & Ainsworth, 1973) exploring variations in maternal responsiveness within the normal range and their association to patterns of attachment strengthened the assumption that maternal behavior contributes significantly to the early attachment relationship.

Although this assumption does not preclude the possibility that caregivers are influenced by their infants (Bell, 1968; Belsky & Rovine, 1987; Chess & Thomas, 1982; Crockenberg, 1986; Kagan, 1984; Rosen & Chmiele, 1992; Sroufe, 1985; Thompson, 1986), it does implicate a critical influence of the mother on the organization of attachment relationships. Findings based on the Strange Situation procedure are used continually to draw conclusions about the contributions of mothers (Ainsworth, 1973; Blehar, Lieberman, & Ainsworth, 1977; Ericsson, Sroufe, & Egeland, 1985; Grossman, Grossman, Spangler, Suess, & Unzner, 1985; Waters, 1978), even though the procedure does not directly assess maternal behavior. There is relatively less research on the connection between maternal behavior and the quality of attachment than on other issues in attachment theory, such as the developmental consequences of early attachment patterns. This is surprising, given that attachment theorists have described the experiential origins of the attachment relationship even more explicitly than they have the developmental outcomes (Ainsworth, 1973; Ainsworth, Bell, & Stayton, 1971, 1974; Bowlby, 1969, 1988).

Where the association between parenting and attachment has been examined, there are mixed results. That is, there is inconsistent support in the literature for an association between dimensions of maternal responsibility or sensitivity and attachment classifications. Some research appears to confirm the association (Ainsworth et al., 1978; Grossman et al., 1985; Lewis & Feiring, 1989; Matas, Arend, & Sroufe, 1978; Smith & Pederson, 1988). However, there is also empirical work that has yielded low magnitude or nonsignificant relations (Frodi, Bridges, & Grolnick, 1985; Goldberg, Perrotta, Minde, & Corter, 1986; Isabella, Belsky, & von Eye, 1989; Lyons-Ruth, Connell, Zoll, & Stahl, 1987; Maslin & Bates, 1983; Miyake, Chen, & Campos, 1985). Even within the same study, there is evidence that both confirms and fails to support the contention that maternal behavior is critical in determining the quality of attachment (e.g., Bates, Maslin, & Frankel, 1985; Belsky, Rovine, & Taylor, 1984; Egeland & Faber, 1984; Londerville & Main, 1981).

Given the extant research findings, there are some who have concluded that the role of maternal responsibility is not as strong as was originally proposed (e.g., Lamb, Thompson, Gardner, & Charnov, 1985; Lamb, Thompson, Gardner, Charnov, & Estes, 1984; see Goldsmith & Alansky, 1987, for a meta-analysis). We believe that it is premature to draw such a conclusion before examining some of the methodological constraints of current empirical work. For example, the operationalization of the re-
sponsivity construct has not been uniform across studies. Many different measures of maternal behavior have been used. Because the critical behaviors that constitute responsivity have been defined inconsistently by different researchers, the real association between maternal behavior and the quality of attachment may be obscured.

Whereas certain methodological shortcomings may lead to underestimates of the parenting-attachment relationship, others may lead to overestimates. Some researchers, while recognizing the value of using multiple measures of parental caregiving behavior, emphasize findings only for those measures or for those subsamples yielding significant differences between attachment classifications (Egeland & Farber, 1984; Isabella et al., 1989; Pettit & Bates, 1989). When strong effects are obtained (Ainsworth et al., 1978; Matas et al., 1978), it is not always clear that the parent and attachment-security measures were coded independently, thereby raising the possibility of halo effects.

In addition, instructions accompanying qualitative measures of maternal caregiving do not prohibit raters from considering the child's behavioral response to the mother's intervention (e.g., Ainsworth et al., 1978; Matas et al., 1978). Thus, in assessing whether a parent's behavior is responsive, raters may take into consideration such positive responses as a decrease in crying or an immediate compliance to a parental request. Our position is that raters should be explicitly instructed not to consider the child's reaction to a parent's intervention because doing so introduces a confound. Children who are socially competent or temperamentally easy and who respond positively to their mother's behavior may make what the mother did look "better" or "more successful" than children who are more difficult to manage or whose behavior does not change or becomes worse as a result of the mother's intervention. In other words, consideration of the child's reaction in assessing the parent can build in a positive relationship between measures of child behavior (such as the Strange Situation assessment of attachment) and measures of maternal behavior.

There are several other limitations of extant research. First, few studies to date have examined paternal responsivity and attachment security (Easterbrooks & Goldberg, 1984). Thus, we know little about the association between paternal behavior and attachment. Second, in most studies, only a single measurement approach typically has been used to evaluate parental behavior. Using only one measure is particularly problematic, because in most cases there has been little independent evidence of the reliability and validity of the measure. Third, most studies examine parental behavior in one situation as opposed to multiple situations (Wachs, 1987). These problems and limitations in existing work may explain why there is inconsistent support for the association between parental behavior and attachment classifications.

In the present study, the association between several contemporaneous measures of maternal and paternal behavior and patterns of attachment was assessed in children during the second half of the second year. This is an important period of developmental transition (Cicchetti & Beeghly, 1991; Schneider-Rosen & Wenz-Gross, 1990; Sroufe, 1985) during which the attachment relationship remains critical (Bretherton & Waters, 1985; Greenberg, Cicchetti, & Cummings, 1991; Schneider-Rosen, 1991). There are conflicting findings regarding the association between caregiving and attachment during this period (Frodi et al., 1985; Matas et al., 1978). Concurrent assessments of both parental behavior and attachment security allow for an examination of their association at the point where the child is assuming greater autonomy and independence while simultaneously negotiating these developmental changes into the attachment relationship.

The Strange Situation was used to assess the quality of attachment. The parent-child dyads also participated in several interactive exchanges in which parental behavior was evaluated. Two qualitative observational measures of parenting were used: one was designed to assess parental Quality of Assistance during problem-solving tasks (Sroufe, Matas, & Rosenberg, 1981), and one was the Parental Acceptance Coding Scheme, appropriate for evaluating parental behavior in a variety of interactive situations and designed explicitly so as to not evaluate the parent's sensitivity or responsiveness on the basis of the child's reaction to the parent's behavior (Rothbaum & Schneider-Rosen, 1988). A self-report measure of parental attitudes and beliefs, the Child-Rearing Practices Report (Block, 1981), was used because it provides information about a variety of aspects of caregiving. Multiple measures were used so that results could not be attributed to the reliance on a single measure of parenting. All of the measures had prior evidence of reliability and validity.

The goal of this study was to further assess the association between parental caregiving and security of attachment. Several questions and hypotheses were examined. First, does the association between caregiving and attachment vary as a function of the measure of caregiving? Variations in this association may provide important clues as to those aspects of caregiving that are particularly relevant to the emerging attachment relationship; alternatively, similarities in this association across the different measures of caregiving will increase our confidence in the findings obtained.

Second, are the caregiving measures associated with one another? These associations were of interest, because they provided evidence of the convergent validity of the measures used in this study. We expected to find associations between the caregiving measures, although the behavioral measures (Quality of Assistance and Parental Acceptance) were expected to be more highly associated with one another than either was with the self-report measure (see Holden & Edwards, 1989).

Third, is there concordance between attachment security with mothers and fathers? Because there is evidence that both supports (Belsky, Garduque, & Hrncir, 1984; Grossman, Grossman, Huber, & Wartman, 1981; Lamb, Hwang, Frodi, & Frodi, 1982; Main & Weston, 1981) and refutes (Fox, Kimmerly, & Schafer, 1991; Lamb, 1978; Owen & Chase-Lansdale, 1982) the idea that maternal and paternal attachment classifications are independent of each other, the association between ratings of attachment to mothers and fathers was explored.

Finally, is there a difference in the association between parental caregiving and attachment security for mothers and fathers? Few theorists have addressed this comparison in research to date.
Method

Subjects

The subjects for this study were 62 children (29 girls and 33 boys) who were part of a larger sample of children participating in the Family and Child Development Project at Boston College. Children were seen with their mother and father in two separate 2-hr laboratory visits, scheduled with an average of 2 weeks between visits. The procedures were identical in the two sessions. The order of visits with mother and father was counterbalanced to diminish possible order effects. The mean age of the sample was 21.5 months (range = 17.8 to 25.6 months). Twenty-seven (44%) of the children were firstborn.

The children and their parents were recruited through city hall birth records. All families were contacted through letters describing the research and requesting voluntary participation. Of the 82% who responded, 85% (n = 70) agreed to participate. Separate appointments were scheduled for mothers and fathers to come in with their child. Scheduling difficulties precluded the inclusion of eight families. The children were all White and were from intact middle- to upper-middle-class families (Hollingshead, 1975).

Measures and Procedure

All parent-child dyads were seen in a 15 × 20 ft (4.57 × 6.09 m) carpeted playroom, and all experimental procedures were videotaped from behind a one-way mirror. The procedures in which the subjects participated were identical across the two laboratory visits.

Quality of attachment. The initial laboratory assessment was the Strange Situation (Ainsworth & Wittig, 1969), a standardized procedure for evaluating the quality of the parent-child attachment relationship. The child's exploration of the novel environment in the presence of the parent, the child's reaction to separation from the parent, and the reunion with the parent were observed. Individual differences both in the use of the caregiver as a secure base from which to explore the environment and in the ability to derive comfort from the caregiver when stressed were assessed throughout the seven 3-min episodes.

We rated the interactive behaviors of proximity-seeking, contact maintenance, avoidance, resistance, search, and distance interaction by using a modified scoring system appropriate for this older age group (Schneider-Rosen et al., 1985). We classified children into one of three attachment groups: anxious avoidant (Group A), secure (Group B), and anxious-resistant (Group C). Five children displayed behavioral characteristics representative of a disorganized pattern (Group D) attachment pattern (Main & Solomon, 1986). Because of the small number of these cases, forced classifications were used to fit them into traditional categories.

All Strange Situations were coded from videotapes by a trained graduate student. One half of the videotapes (n = 31 mother-child and n = 31 father-child tapes) were scored by a second trained rater to establish reliability. Interrater reliability (number of agreements over number of agreements and disagreements) was 86% (Cohen's kappa = .72). For those cases in which disagreements occurred, a final rating was made through discussions between the two raters and a third trained coder.

Situations for scoring parental caregiving behavior. Qualitative aspects of maternal and paternal behavior were assessed during five situations: a free-play session, a reading period, a clean-up period, and one in which the child was functioning and (b) the specific needs that are not based on the child's reactions to the parent's behavior, because this situation is "sets the stage" for the parent's subsequent behavior. We must contrast, rejecting parents act as if their own and their children's needs are in harmony with their own and when they are responsive to their children's needs. By contrast, rejecting parents act as if their own and their children's needs are in opposition to one another and that responsiveness to the child's needs implies a thwarting of their own needs. For a fuller description of the acceptance-rejection construct, see Rothbaum and Schneider-Rosen (1988).

Although the parent's behavior is the object of assessment in this coding scheme, the child's behavior is important to evaluate insomuch as it "sets the stage" for the parent's subsequent behavior. We must consider the child's behavior to determine (a) the developmental level at which the child is functioning and (b) the specific needs that are being expressed in the interaction. However, ratings of the parent are not based on the child's reactions to the parent's behavior, because this would confound assessments of parent and child.

Using the detailed instructions delineated in the Parental Accep-
tance Coding Scheme, minute-by-minute analyses of parent–child interaction yielded scores on the three main aspects of acceptance: appro
val, availability, and structure. Both Ainsworth et al. (1978) and Sroufe et al. (1981) discussed components of these three aspects, but we elaborate on and describe these in the Parental Acceptance Coding Scheme so as to include behaviors relevant to a wide range of situations and to children during toddlerhood and early childhood. Qualitative criteria for evaluating the three aspects of acceptance are also described in detail in the scoring manual. The aspects and their criteria are as follows: approval (evaluative affect and evaluative content); availability (physical presence, acknowledgment, and participation); and structure (helpfulness of guidance, explanations, motivation setting, consistency, and noncoercion).

Coders rated each minute of interaction using videotapes and verbal transcripts. They rated each criterion on a scale of 1 to 5, using descriptions anchored at the high end (rating of 5) by accepting behaviors that reflect responsiveness to and harmony with the child’s needs and at the low end (rating of 1) by rejecting behaviors that reflect nonresponsiveness and opposition to the child’s needs. For example, the criterion noncoercion was assigned a rating of 5 for behaviors such as “giving the child a sense of choice” and a rating of 1 for behaviors such as “thwarting the child’s sense of choice” (e.g., by using force). The score for each aspect was determined by averaging across the minute-by-minute ratings for the criteria relevant to that aspect. The overall acceptance score was computed by averaging across ratings for the three aspects.

A group of four trained raters scored each parent–child dyad. These raters were unaware of the attachment classifications and of all other data. Raters were trained to evaluate parental behavior in response to the immediately preceding child behavior. Training continued until even small disagreements between raters were judged not to be caused by the confounding of parental behavior and child’s responses to that behavior. Each situation was scored by pairs of raters; each rater worked independently but met regularly to discuss and resolve discrepancies. The average overall reliability between raters within pairs (i.e., raters scoring the same situation) was \( r = .80, \ p < .001 \). As in other studies using measures to capture various aspects of caregiving behaviors (Ainsworth et al., 1978, Crowell & Feldman, 1988, Easterbrooks & Goldberg, 1984), the different aspects of Parental Acceptance were highly intercorrelated (\( r > .90, \ p < .001 \)). Therefore, only the raters’ final Parental Acceptance scores, computed by averaging the various aspects, were analyzed.

Parental quality of assistance. A second measure of parental caregiving behavior used in this study was developed by Sroufe et al. (1981). The original system, which is widely used and well constructed with substantial evidence of reliability and validity, rated mothers on two dimensions: Supportive Presence and Quality of Assistance. Crowell and Feldman (1988) and Easterbrooks and Goldberg (1984) found a high correlation between the two dimensions (\( r = .90 \) and .71, \( p < .001 \) for the two studies, respectively). Sroufe (personal communication, September 1988) also reported that the two dimensions are highly correlated and in recent work (Planta, Sroufe, & Egeland, 1989) used only the Quality of Assistance scale to assess parental behavior in parents of 2-year-old children. We selected the Quality of Assistance scale for the purposes of this study because it identifies criteria that are the most different from the parental acceptance measure. The Quality of Assistance scale was used to assess behavior in the two problem-solving situations because it was developed for that type of situation.

Quality of Assistance refers to the parent’s ability to provide the child with minimal assistance and allow for the child’s maximal exploration while also responding sensitively to the child’s cues for direction by helping him or her see relations between actions required to solve the problem. The coding manual delineates several major criteria and corresponding subcriteria for coding Quality of Assistance, and it provides detailed instructions for assigning ratings. In this study, we interpreted the instructions to mean that coders should not take children’s reactions into account when coding the parents. This required adapting some of the scales so that the child’s responses could not influence evaluation of the parent’s preceding behavior. The final score ranged from 1 to 7, with higher scores indicating a greater degree of sensitivity and the capacity to provide helpful, well-timed instructions in a nonintrusive, clear, comprehensible, and positive manner. Because the Sroufe et al. (1981) coding system was originally developed for use with 24-month-old children, data were coded for only a subsample of 31 children who ranged in age from 23 to 25.6 months. One coder, unaware of the attachment classifications and parental acceptance scores, coded all the tapes and a second rater scored half of the tapes (15 mother–child tapes and 16 father–child tapes). The Pearson correlation between the two raters was \( r = .93, \ p < .001 \).

Child-rearing practices report (CRPR). At the end of each laboratory visit, the CRPR (Block, 1981) was administered to the parents. This Q-sort measure requires parents to sort 91 items into seven piles depending on how descriptive each statement is of his or her attitudes, practices, values, and goals with respect to child rearing. Based on each parent’s sorting of the items into piles varying in their descriptiveness with regard to their child, each item received a score from 1 (least descriptive with regard to their child) to 7 (most descriptive). Twenty-one different item clusters are then obtained from the CRPR (Roberts, Block, & Block, 1984). For each cluster, higher scores indicate more of the dimension in question (e.g., a higher score on the Negative Affect Toward Child cluster indicates more negative affect). Evidence of the reliability and validity of the CRPR has been reported by Block, Block, and Morrison (1981); Roberts et al. (1984); Susman, Trickett, Iannotti, Hollenbeck, and Zahn-Waxler (1985); and Trickett and Sus

Thus, the critical variables used to explore the hypotheses delineated earlier were maternal and paternal attachment classifications, Parental Acceptance scores, Quality of Assistance ratings, and scores on the 21 CRPR clusters.

Results

Attachment Classifications

In the mother–child dyads, 16% (\( n = 10 \)) were anxious–avoidant (Group A), 73% (\( n = 45 \)) were secure (Group B), and 11% (\( n = 7 \)) were anxious–resistant (Group C). In the father–child dyads, 13% (\( n = 8 \)) were anxious–avoidant (Group A), 69% (\( n = 43 \)) were secure (Group B), and 18% (\( n = 11 \)) were anxious–resistant (Group C). These proportions are comparable with those obtained in prior research on mother–child dyads in middle-class populations (Ainsworth et al., 1978).

Relation Between Quality of Attachment and Measures of Parental Caregiving

It was expected that there would be significant associations between attachment classifications and the various measures of parental caregiving. Separate analyses were conducted for children with their mothers and fathers. Analyses of variance (ANOVAs) revealed no significant differences within the three attachment categories in Parental Acceptance scores or in Quality of Assistance ratings. Analyses of variance on the 21 CRPR clusters revealed only one significant effect for mothers and one
for fathers. Because there were 21 possible effects, obtaining one significant effect could have been due just to chance.\footnote{Using the binomial expansion (Hays, 1981), we computed the probability of obtaining 1, 2, 3, and so on significant effects out of the 21 possible effects. We selected a significance level of $p < .01$ in analyzing the 21 individual CRPR clusters because of the large number of clusters and, thus, the large number of effects tested. The probability of one $p < .01$ effect out of the 21 possible is $p < .20$. To further decrease the likelihood of a Type I error, we treated findings involving the clusters as nonsignificant (and these were not reported) unless there were two or more $p < .01$ effects; the probability of obtaining two or more $p < .01$ effects out of 21 possible is $p < .05$.}

We conducted an ANOVA to compare the secure group (Group A) with the insecure groups—anxious avoidant (Group B) and anxious-resistant (Group C)—separately for mothers and fathers.\footnote{Although there is empirical evidence identifying different patterns of maternal behavior associated with the anxious-avoidant (Group A) and anxious-resistant (Group C) groups, there is also a great deal of inconsistency even in that literature (e.g., Belsky et al., 1984; Bohlin, Hagekull, Germer, Andersson, & Lindberg, 1989; Lyons-Ruth et al., 1987).} Mothers of securely attached children had significantly higher Parental Acceptance scores ($M = 3.21$) than did mothers of insecurely attached children ($M = 2.93$), $t(60) = 1.86$, $p < .05$, one-tailed. For fathers, although Parental Acceptance scores for the secure dyads were higher than those for the insecure dyads ($M_s = 2.82$ and 2.75, respectively), the differences were not significant.

There were no significant differences between the secure and insecure groups on the Quality of Assistance measure for either mothers or fathers. Similarly, the number of significant differences between the secure and insecure dyads on the CRPR clusters was not significantly greater than chance for mothers or for fathers.

Thus, mothers of securely attached children did not appear to offer better Quality of Assistance in problem-solving tasks, nor did they differ from mothers of insecurely attached children in their reported attitudes and beliefs, although they had marginally higher Parental Acceptance scores than did mothers of children who were insecurely attached. Fathers of children who were securely attached did not have higher Parental Acceptance scores, did not offer better Quality of Assistance, and did not differ from fathers of insecurely attached children in their reported attitude and beliefs as measured by the CRPR.

\textit{Relations Between Measures of Parental Caregiving}\n
Multiple measures were used to examine the quality of parental caregiving. It was expected that the ratings from the different measures would be associated with each other, thereby increasing our confidence in the findings. Results for mothers and fathers were considered separately.

For mothers, Parental Acceptance correlated significantly with Quality of Assistance, $r(29) = .63$, $p < .01$. Parental Acceptance scores also correlated significantly with the clusters of Suppression of Sex, $r(60) = .35$, $p < .01$, and Negative Affect Toward Child, $r(60) = -.35$, $p < .01$. Although Quality of Assistance scores correlated significantly with only one CRPR cluster (Suppression of Sex, $r(29) = -.55$, $p < .01$)—a finding that could be due to chance—it is interesting to note that this one cluster also correlated significantly with Parental Acceptance. For fathers, Parental Acceptance and Quality of Assistance scores were also significantly correlated, $r(29) = .42$, $p < .05$. There were significant correlations between Parental Acceptance scores and three of the CRPR clusters: Rational Guidance of Child, $r(60) = .40$, $p < .01$; Control by Anxiety Induction, $r(60) = -.35$, $p < .01$; and Suppression of Aggression, $r(60) = .36$, $p < .01$. There were no significant correlations between Quality of Assistance scores and the CRPR clusters.

The pattern of results indicates that the Parental Acceptance measure and the Quality of Assistance measure are evaluating similar aspects of parenting. Although the observational measures bear only a weak relation to the CRPR self-report measure, the significant correlations between Parental Acceptance and the CRPR were not likely due to chance. Also, all of the significant correlations were in the predicted direction for both mothers and fathers. Thus, the observational measures always related positively to clusters that, on the basis of item inspection and prior empirical findings (e.g., Trickett & Susman, 1988), we had a priori designated as positive caregiving clusters. Finally, higher Parental Acceptance scores for fathers appear to be associated with control-related attitudes and beliefs, whereas for mothers, higher Parental Acceptance scores appear to be associated with more emotionally related concerns. These findings provide evidence of the convergent validity of these measures with the present sample.

\textit{Concordance Between Maternal and Paternal Attachment Classifications}\n
The concordance between mother–child and father–child secure and insecure attachment classifications was examined and revealed a significant association, $\chi^2(1, N = 62) = 8.75$, $p < .01$. Children behaved similarly in the Strange Situation when observed with their mothers and fathers on two separate occasions separated by a 2-week time interval. The $\phi$ coefficient (Hays, 1981, pp. 555–558) was also computed to determine the strength of association for dichotomous variables. The association between classifications of children with their mothers and their fathers was significant ($\phi = .38$, $p < .01$).

\textit{Relations Between Measures of Maternal and Paternal Caregiving}\n
Because children were seen with both their mothers and fathers, it was possible to examine differences between parents on measures of Parental Acceptance, Quality of Assistance, and parental attitudes and beliefs on the CRPR. Analyses revealed that mothers ($M = 3.13$) had higher Parental Acceptance scores than fathers ($M = 2.89$), $t(61) = 4.50$, $p < .001$, but there was no significant difference between mothers and fathers in Quality of Assistance. On the CRPR, fathers scored significantly higher on Emphasis on Achievement, $t(61) = 4.30$, $p < .001$, and Parental Inconsistency, $t(61) = 2.88$, $p < .01$.

The correlation between maternal and paternal caregiving, as assessed by either of the observational measures, was not significant. However, there were several significant correlations...
between mothers’ and fathers’ CRPR clusters: Enjoyment of Parental Role, r(60) = .48, p < .01; Suppression of Sex, r(60) = .38, p < .01; and Control by Guilt Induction, r(60) = .50, p < .01. These results highlight the differences between self-report and observational measures of parenting and suggest that similarity between parents may emerge more in the realm of attitudes than behaviors.

Discussion

Attachment theorists emphasize the importance of the early interactional history of the caregiver and the child in determining the security of the attachment relationship (e.g., Ainsworth et al., 1978; Bowlby, 1969). They acknowledge that infant characteristics (such as temperament) and parental characteristics (such as responsiveness) interact in complex ways to affect the quality of the relationship and thus patterns of Strange Situation behavior. However, child characteristics are discussed in such a way as to minimize their importance, and parental responsibility is accorded a more significant role (e.g., Goldberg et al., 1986). In part because of the parent’s greater cognitive and socioemotional competence, more emphasis is placed on parental rather than child contributions. Thus, the parent’s accommodation to his or her child’s distinct behavioral style is assumed to be largely responsible for individual differences in the quality of the attachment relationship.

In this study, mothers of securely attached children were more responsive to their children’s needs, as measured by the Parental Acceptance Coding Scheme, than were mothers of insecurely attached children. This pattern did not emerge for fathers. Although there are several other studies that have found higher quality caregiving in dyads that are classified as securely attached, the magnitude of the effects in most of these studies, as in the present one, is small (see Goldsmith & Alansky, 1987, for a review). Also, as in this study, prior findings are often inconsistent in that they do not apply for all relevant caregiving measures. Even though there are a few studies that show large differences between attachment groups (e.g., Ainsworth et al., 1978; Grossman et al., 1985; Lewis & Feiring, 1989; Matas et al., 1978; Smith & Pederson, 1988), the majority of studies do not. Support for hypotheses from attachment theory is often gained from secondary analyses, for example, from post hoc analyses of subgroups, such as girls or boys (e.g., Egeland & Farber, 1984) or borderline attachment groups (e.g., Goldberg et al., 1986). Moreover, many studies that fail to reject the null hypothesis may exist, yet they remain unpublished because of the “file drawer phenomenon,” that is, data reporting no associations are unlikely to be published. The results of the present study, together with the inconsistent data from previous studies, support the conclusion that there is only a modest association between parental caregiving and the quality of the attachment relationship.

We can be reasonably certain that the modest associations are not due to lack of reliability or validity of the caregiving measures. The use of different measures, each of which has independent evidence of reliability and validity, contributes to our confidence in the findings. Also adding to this confidence are the significant interrelationships between the measures and the fact that two of them (the Parental Acceptance and Quality of Assistance measures) provide a comprehensive assessment of parental behaviors believed to be critical to the emerging attachment relationship. These measures focus on general qualities of parental responses to children’s specific needs, while also relying on behaviorally based criteria. Although the CRPR was not designed to predict attachment security, many of its factors are relevant to sensitive and responsive caregiving. These advantages of the caregiving measures used in this study contribute to our conclusion that the modest relations between parental caregiving and security of attachment is not the result of inadequate measurement.

There are several points to consider when interpreting the modest associations found between caregiving and attachment security. First, we observed parents and children in a laboratory situation. It is possible that highly socialized, middle-class families view the laboratory as a context for displaying their “best” behavior and, as such, draw on a repertoire of socially acceptable behaviors that consequently (a) reduces the range of variability and (b) does not accurately capture differences in daily, private, and more intimate behavioral patterns. It is important to observe children and their parents in the home, in addition to the laboratory, to determine whether there are differences in the strength of parenting-attachment associations in the two settings.

Second, the duration of the observation periods may be important in influencing the findings. The study that yielded the largest association between parenting and attachment (Ainsworth et al., 1978) not only relied on home observations, but also included extensive observations of the parent-child dyad over several months and in a variety of situations. Wachs (1987) provided evidence that the length and diversity of situations in which dyads are observed contribute to the predictive validity of measures of caregiving.

Third, it is possible that the specific nature of the situation in which parental responsiveness is evaluated may influence the strength of the obtained findings. Although we adopted the approach taken by Ainsworth et al. (1978), Matas et al. (1978), and others and observed parental behavior in situations involving parent-child interaction in general, it is possible that ratings of parental responsiveness in situations that evoke distress (e.g., separation-reunion sequences) will yield stronger associations with attachment classifications. This is certainly an issue that warrants further examination.

We examined other differences between studies that might shed light on the inconsistency in the literature on the parenting-attachment connection. Although studies vary in sample size, age of child, socioeconomic status, use of qualitative or quantitative measures of parental behavior, and reliance on secure versus insecure attachment distinction or the three traditional attachment groups, none of these variables helped to explain the inconsistency. Interestingly, even studies using the same measure report large differences in results. For example, the lack of association between Quality of Assistance scores and attachment security found in this study parallel those obtained by Bates et al. (1985) and Easterbrooks and Goldberg (1984), although they stand in contrast to the very strong results obtained by Matas et al. (1978). One factor that might explain this inconsistency is that when scoring parents’ Quality of Assistance, raters are allowed to consider child responses (e.g., one
subscale of the Quality of Assistance scale requires ratings of the “effectiveness” of the parent’s behavior. A liberal tendency to rely on child responses may contribute to strong relationships between parenting and attachment. To the extent that studies incorporate child behavior within their measures of caregiving (cf. Isabella & Belsky, 1991), we suspect that they will obtain strong caregiving-attachment associations. In our study, raters were explicitly instructed not to evaluate parental Quality of Assistance on the basis of the child’s reactions to the tasks or to the parent. Because we obtained no associations to attachment security with these instructions, there is reason to suspect that other studies obtaining weak findings (e.g., Bates et al., 1985; Easterbrooks & Goldberg, 1984) used instructions similar to those used in this study.

The measure developed by Sroufe and his colleagues is not the only one that has yielded inconsistent findings. Briggs, Schiller, Regan, LaGasse, Rosen, and Lipsitt (1992) used the Parental Acceptance measure to code parental behavior and obtained stronger associations with attachment security than were obtained in the present study. One possible explanation for the difference in findings is that the significant associations obtained by Briggs et al. (1992) were largely attributable to several dyads with very low Parental Acceptance scores. Prior research indicates a very strong relation between parenting that is extremely rejecting or abusive and insecure attachment (Schneider-Rosen et al., 1985). Studies using samples in which extreme negative forms of parenting are exhibited are likely to obtain stronger associations between parental behavior and attachment classifications. Differences between samples in the occurrence of extreme scores could contribute to the inconsistency in findings.

Even if the moderate size effects obtained by Briggs et al. (1992) and others are reflective of parenting-attachment associations in the general population, there is still a substantial amount of as yet unexplained variance in attachment security. Transactional models (e.g., Belsky, 1984; Belsky & Isabella, 1988; Crockenberg, 1981; Sameroff & Chandler, 1975) suggest that there are many variables that are likely to influence the quality of the attachment relationship. Likely sources of influence include child characteristics such as temperament (Bates et al., 1985; Belsky & Isabella, 1988; Goldsmith, Bradshaw, & Rieser-Danner, 1986; Pianta et al., 1989; Rosen & Chmiel, 1992; Vaughn, Lefever, Seifer, & Barglow, 1989; Weber, Levitt, & Clark, 1986) and family/situational factors such as maternal employment (Easterbrooks & Goldberg, 1985), family functioning and the quality of the marital relationship (Goldberg & Easterbrooks, 1984), cultural factors (Grossman et al., 1985), and stressful events (Crockenberg, 1981; Crockenberg & McCluskey, 1986).

The attachment concordance data are relevant to this issue. In the past, investigators have relied on evidence of a lack of concordance between maternal and paternal attachment classifications to support the claim that Strange Situation behavior is determined by prior patterns of interaction within the dyad (Sroufe, 1985). If quality of attachment with one parent is indeed unrelated to quality of attachment with the other, the argument goes, then it is the unique pattern of interaction rather than endogenous (characteristics of the child) or exogenous (situational) factors that is contributing to the security of the attachment relationship. There are data that support this position (e.g., Belsky, Rovine et al., 1984; Grossman et al., 1981; Lamb et al., 1982; Main & Weston, 1981). However, there is also research that yields significant concordance between maternal and paternal attachment classifications (e.g., Fox et al., 1991; Lamb, 1978; Owen & Chase-Lansdale, 1982), findings that concur with those from the present study. Careful examination of extant studies indicates that the degree of similarity between classifications is highest when there is a short lag between assessments, as in the present study (i.e., 1 week to 1.5 months; Lamb, 1978; Owen & Chase-Lansdale, 1982) and lowest when the time lag is greater (2 to 6 months; Grossman et al., 1981; Lamb et al., 1982; Main & Weston, 1981). A significant concordance increases the possibility that the attachment relationship reflects a capacity in the child (e.g., a propensity to become securely attached, the child’s internal working model of attachment relationships—Main, Kaplan, & Cassidy, 1985) and environmental factors (including agreement between parents in their caregiving attitudes or beliefs—Belsky, Rovine et al., 1984; cf. Fox et al., 1991).

This is only the second study to date to examine the association between parental caregiving and attachment for both mother-child and father-child dyads. In general, the earlier study (Easterbrooks & Goldberg, 1984) also found stronger associations between parenting and security of attachment for mothers than for fathers. The similarity in findings in the two studies emerged despite important differences in the measures of parenting and in the types of analyses performed. Future research is needed to further probe differences in the caregiving-attachment security association for mothers and fathers (e.g., by using larger samples and performing separate analyses for boys and girls).

Also warranting further research are the significant differences between mothers and fathers in Parental Acceptance scores as well as in several reported attitudes and beliefs about child rearing on the CRPR. This is not the only study to report differences in the ways in which mothers and fathers interact with their children (Belsky, Gilstrap, & Rovine, 1984; Parke, 1978; Parke & Swain, 1980). Of particular interest are the different correlations between Parental Acceptance scores and CRPR clusters for mothers and fathers: for mothers, Parental Acceptance is associated with attitudes about expressivity (e.g., affect and impulsivity), and for fathers, Parental Acceptance is associated with attitudes about instrumentality (e.g., control and discipline). Further research is needed to determine whether and how these differences in caregiving contribute to differences between mothers’ and fathers’ caregiving-attachment associations.

Given the inconsistent and overall modest results regarding the association between parenting and attachment, together with the attachment concordance data and the mother-father differences, a reasonable next research strategy is to move from the examination of simple main effects of parental caregiving, child characteristics, or family/situational factors—to more complex interactions between these and other critical factors as they influence and are influenced by attachment security.
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