Attachment and Bookreading Patterns: A Study of Mothers, Fathers, and Their Toddlers

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This study, involving 138 families rearing firstborn sons, extends work on bookreading by relating quality of parent-child interactive exchange during bookreading to contemporaneous and antecedent assessments of infant-parent attachment security. One parent and the child were observed when children were 12, 13, 18, and 20 months. At the first and third visit, infant–mother attachment security was assessed, with infant–father attachment security being assessed at the second and fourth visit. Following the assessment of attachment security at 18 and 20 months, parent and child were videotaped in a bookreading session. At 18 and 20 months, children responded to the pictures in a book by pointing and labelling, and their parents tried to initiate these reactions by following predictable routines. In contrast to other mothers, insecure–avoidant mothers were more inclined to read the verbal text and less inclined to initiate interactions around the pictures. Insecure–avoidant children were less inclined to respond to the book and were more distracted. In insecure–resistant dyads, overcontrolling and overstimulating behavior by the mother appeared to covary with ambivalence on the part of the children. The results do not support a similar pattern for the father–child dyads. Implications for family literacy programs are discussed.

A family’s influence on children’s literacy involves far more than the mere provision of books or leisure-time reading (Neuman & Gallagher, 1994; Sulzby & Teale, 1991). We take the position that literacy should be studied in the broader context of child development, rather than as the exclusive consequence of isolated print events (see also Pellegrini & Galda, 1993; Roskos, 1990). Understanding
how children become literate thus calls for examination of the relevant contexts, including the parent–child relationship that structures the environments. To illuminate how early relationships may influence young children’s involvement in literacy activities we have begun to examine storybook reading and other literacy activities when the parent–child relationship is problematic (Bus, 1994; Bus & van IJzendoorn, 1988a; 1988b; 1992; 1995; 1997). The study presented in this article fits into this line of research by comparing bookreading patterns of securely attached children and their parents with the joint bookreading of insecurely attached children. This study is focused upon an early age when most children do not yet show much spontaneous interest in reading or book orientation. We test the hypothesis that the dyad’s ability to share a book depends on the broader relationship context. We explore a link between early attachment relationships and the ability of parent–child dyads to engage in quality bookreading activities. To our knowledge, the work presented here is the first to examine the affective interpersonal context of bookreading with an American sample of children younger than four years of age. Only limited research has explored such questions with older American children (e.g., Estrada, Arsenio, Hess, & Holloway, 1987).

The 18–20 months old toddlers participating in this study may be expected to have completed a shift from “acting upon the book” towards higher levels of referencing such as pointing and using verbal and nonverbal symbols (Bus & van IJzendoorn, 1997). Murphy (1978) reports that by 20 to 24 months, pointing is a well-established activity coordinated with vocal activity. According to Sénéchal et al. (Sénéchal, Cornell, & Broda, 1995), changes in the patterns of visual attention by children and pointing behavior by parents indicate that infants appreciate the symbolic features of picture books by 17-months of age. We expect that at 18 and 20 months children respond to the pictures in the book by pointing and labelling, and that parents try to initiate such activities by evoking interest in pictures, asking questions, labelling, commenting, and feedback. Ninio and Bruner (1976) showed that mothers support labelling and other referencing behavior with the help of highly predictable routines. The parent’s role is one of scaffolding, providing the ritualized dialogue and the constraints within which the child is acquiring many different uses of language and other reading routines.

We hypothesize that particularly at this early age when children do not yet show much spontaneous interest in books, differences in bookreading routines strongly depend on the socioemotional context of adult support. The establishment of an effective collaborative context for activities such as bookreading is seen by Bowlby (1973) as an outgrowth of a secure relationship between parent and child. Children develop a mental representation of their interactions with the parent, and they anticipate that the parent’s future behavior will be similar to the past interactions on which the child’s representations are based. Securely attached children should thus be able to strike a balance between attachment and exploration, whereas insecurely attached children should remain focused on their attachment figures, either indirectly (the avoidantly attached children) or explicitly (the resistantly attached children). From studies on
attachment security and cognitive development, it appears that secure children are more enthusiastic and curious than insecure children when being taught new subjects, and that their parents are better able to instruct them than are those of their insecure peers (van IJzendoorn, Dijkstra, & Bus, 1995).

Evidence for the importance of considering the broader relationship context of the bookreading process comes from a series of Dutch investigations. Results of one cross-sectional study of interactive reading with 18-, 32- and 66-month-old children revealed that insecurely attached children were more distracted and, in consequence, their mothers engaged in more disciplining than was true of secure child–mother dyads (Bus & van IJzendoorn, 1988b). A more recent investigation of one-year-olds by the same research group indicated that avoidant children in particular were less inclined to stay on the mother’s lap and were less attentive during the reading session than secure children (Bus & van IJzendoorn, 1997): these insecure–avoidant children were less willing to explore books with their mothers and their mothers were less successful when they tried to actively involve their child in the reading session.

These limitations in the readiness of insecure toddlers to focus upon books seems to derive, at least in part, from their mothers’ relative unwillingness to let their infants explore books. The aforementioned study with one-year-olds indicated that mothers of insecure–avoidant children were less willing to allow the child to reach, grasp and touch the book—all common reactions at this young age—and, as a result, infants may lose interest in the book. Apparently, the hallmark of mothers of insecure infants, insensitive responsiveness (Belsky & Cassidy, 1994), is even evident within the context of a routinized activity such as bookreading.

Whatever the causal sequence of problematic bookreading interactions, one negative consequence of this process is that insecure child–mother pairs may be less inclined to read books at home. Bus and van IJzendoorn (1995) chronicled such a result in their study of three-year-olds. Such evidence pertaining to the quantity of bookreading, when considered in relation to the previously summarized work on the quality of bookreading, should make it clear that issues of quality and quantity are interrelated: When the quality of bookreading is less satisfying to parent and child, frequency of reading is likely to be affected adversely.

In order to understand more fully the interaction between an infant and parent while reading a book and to develop appropriate methods for improving the infant’s educational and social experiences, systematic assessment of the parent–child interaction is needed. Our main focus will be on whether parents succeed in evoking effective reading formats with their 18- and 20-month-old toddlers, and whether parents who have a problematic (i.e., insecure) relationship with their child in particular prove less successful in creating an interactional context that fosters high quality bookreading. The elements of such context include the individual behavioral repertoire of both the infant and parent, and the reciprocity that develops as both partners in an interaction respond and adapt to each other.

Through a microanalysis of 5 minute-bookreading sessions, the present study further explores the differences between insecure dyads. In line with descriptions
of interactive patterns of insecure–avoidant pairs, we expected that these pairs would prove least successful in creating an interactional context that fosters children’s engagement. For example, insecure–avoidant children were expected to be less enthusiastic and curious and their parents were predicted to be consistently insensitive to their children’s needs by not being adaptive to their child’s level of understanding. We also wondered whether insecure–resistant pairs may be less successful in sharing books than secure pairs, although distraction and disciplining might not differentiate these two types of relationships. More specifically, insecure–resistant children may not be distracted but may show disruptive behavior by being aggressive or negative towards the parent. Their parents may be sensitive as long as their children show positive behavior, but it was expected that they could deal less skillfully with outbursts of negative behavior. Mothers of insecure–resistant children may be able to display sensitive responses under optimal conditions (Cassidy, 1994). Particularly when the interactive session is of short duration as in this study, mothers may be able to perform at their level of competence (see also Bus & van IJzendoorn, 1997).

Previous research on the affective context of bookreading has focused almost exclusively on mother–child pairs (Pellegrini, Brody, & Sigel, 1985), despite the fact that many fathers today read to their young children on a fairly regular basis. In light of this gap in prior research, we investigated the association between the quality of maternal and paternal bookreading. One study by Pellegrini et al. (1985) that included fathers did not reveal any effect of parent sex on storybook reading strategies such as questioning, verbal and emotional support, or paraphrasing. We wondered, however, whether bookreading patterns are related to attachment to the same extent, and in the same way, for mothers and fathers. Thus, in this study, both maternal and paternal behaviors are examined. We observed mothers reading to their child at 18 months and father–child pairs reading at 20 months. We hypothesize that fathers may be less experienced in bookreading and, as a result, their reading style may be less the outcome of earlier relationship history and may, instead, reflect more ad hoc processes.

**METHOD**

**Subjects**

One hundred and thirty-eight middle- and working-class Caucasian families rearing firstborn sons participated in a longitudinal study of child and family development. Volunteers were recruited by means of letters and follow-up phone calls after identifying birth announcements in the local newspaper. Seventy-one percent of eligible families (i.e., firstborn son, expecting to remain in local area for two years) agreed to participate and were paid for each data collection. All children in this investigation were boys because the larger research project from which this study was carved focused upon family interaction processes during the toddler years as antecedents of the development of externalizing problem
behaviors (Belsky, Woodworth, & Crnic, 1996a; 1996b). Since boys are more likely to evince such problems in the preschool and early elementary school years, families rearing sons were sampled exclusively. At the time of enrollment into the study (when infants were 10 months of age), mothers’ and fathers’ average ages were 29 and 31 years, respectively. These working- and middle-class families averaged 48.3 on the Hollingshead index of family socioeconomic status (range 23–66).

Procedures and Measurements
Visits by one parent and the child to the university laboratory were scheduled when children were 12, 13, 18, and 20 months. At the first and third visit, infant–mother attachment security was assessed, with the same being true of infant–father attachment security at the second and fourth visit. Following the assessment of attachment security at 18 months, mother and child were videotaped in a bookreading session; the same procedure was followed with fathers at 20 months. Parent–child pairs are included in the statistical analyses when data on attachment and bookreading are complete. With mothers, data were complete for 113 parent–child pairs and with fathers for 100 pairs. Nine mother–child bookreading sessions and ten father–child bookreading sessions were lost because the sound of the videotapes did not allow coding the verbal interaction while reading the book. Number of subjects is lower for sessions including fathers than for sessions including the mothers due to a higher absence rate for the fathers. Bookreading sessions with father and mother were available for 92 boys.

Attachment. The well-known Strange Situation procedure was used to measure mother–child security at 12 and 18 months of age and father–child security at 13 and 20 months. A stressful situation is created by bringing the child in an unknown environment, by having a stranger present and by separating the parent and child twice. The attachment categories are scored on the basis of behavior during parent–child reunion. Upon reunion, secure children (“B” category) seek proximity to the parent but after being cuddled they explore the environment again. Insecure–avoidant children (“A” category) avoid the mother, and insecure–resistant children (“C” category) seek proximity, but are at the same time resistant to contact. The procedure was conducted according to the prescriptions of Ainsworth et al. (Ainsworth, Blehar, Waters, & Wall, 1978). The scoring of the Strange Situations was done by two different labs. Reliability of coding the 12 and 13 months Strange Situations was evaluated using a set of “test tapes” scored by two highly experienced coders. At the ABC level a $\kappa$ of .82 was achieved. Eighteen and 20 month Strange Situations were coded at a separate laboratory by highly experienced coders. Using the ABC coding system, coders reported a $\kappa$ of .92 (for details, see Belsky, Campbell, Cohn, & Moore, 1996).

Bookreading. To observe parent–child interaction while reading a book, the mothers and fathers were invited to share a book with their child during the 18- and 20- month lab visits. Both parents read from “Book of babies: All the things that
babies do” (Foord, 1989). The book includes a series of pictures with babies making faces, crawling, staying, walking, playing, eating, drinking, being dressed, going into the bath and sleeping. Each page contains a few sentences printed over two pages. The rhyming text describes what is visible on the pictures but does not add new information to the pictures, which are clear and expressive on their own. With few exceptions, the children were not familiar with the book. The book was read twice to the child, first by the mother and two months later by the father.

The parents were invited to sit down with their child on a “bean-bag” chair and to share the book. To prevent misunderstandings, the word “reading” was purposefully not used. No further instructions were provided. Mean time (in seconds) spent on book sharing was about the same for mothers ($M = 297.7$, $SD = 5.9$) and fathers ($M = 297.8$, $SD = 7.2$), ($t_{df=91} = -.12, ns$). Some sessions lasted less than 5 min (16 sessions for fathers and 16 sessions for mothers), mostly because of parents’ inability to focus the child on the book at the start of the reading session. All sessions were videotaped for subsequent coding.

**Coding**

**Frequency Counts.** Taking into account expected bookreading routines and individual differences, a list of parental and child behavior was composed and completed after observing ten randomly selected book sharing sessions. At this stage of the inquiry, frequency counts were preferred above ratings because behavior-count observations give maximal information on situational variability. Frequency of the behaviors was divided by the time spent on the task in order to compensate for differences in length of the bookreading sessions.

After several revisions, parental behaviors selected for analysis were: (1) pointing at details of a picture, (2) questioning (“look, what’s that?”), (3) commenting on pictures (“you are also wearing blue today”) or emotions (“you had tears a little earlier”), (4) labelling (activities, colors, objects or persons; this category also includes making animal sounds), (5) nonverbal responses (e.g., imitating drying as if the child comes out of the bath), (6) motivating (“look at that!”), (7) positive (“good boy!”) or (8) negative (“no, that’s not a ball”) feedback, (9) correcting the child’s behavior (the parent turns the page back after the child has spontaneously turned the page), (10) reading the text (the number of pages verbally read by the parent), and (11) disciplining (“don’t look at that, look at this”).

Selected children’s behaviors were: (1) initiating (e.g., the child points at a picture to share the picture with the parent), (2) pointing at a detail of a picture, (3) labelling (objects or colors or counting), (4) commenting (“that’s mine”), (5) nonverbal responses (dancing with the feet while looking at a picture of a baby doing the same), (6) low level responses (e.g., hitting the book), (7) aggression towards the parent (pushing aside the hand of the parent, pinching the parent, hitting the parent), and (8) distraction (the child starts to look or walk around the room).

The frequency of occurrence of each behavior was scored by two independent coders. Fifty protocols were double scored. Double- and single-scoring were alternated; after ten double-scored protocols each coder did 5 to 10 protocols on her
own. Pearson correlations between frequency counts of the two coders were computed. The mean correlation for parental behaviors was .88 (ranging from .72 for correcting to .97 for pointing, questioning and reading). The mean correlation for children’s behavior was .96 (ranging from .91 for commenting to 1.00 for aggression towards the parent). In double-scored protocols, disagreements were reconciled after discussion.

**Overall Quality of Interaction.** Immediately after the frequency counts of a broad range of parental and child behaviors were coded, bookreading sessions were rated on a scale designed to evaluate the overall quality of the pair’s bookreading behavior. By assessing the overall quality of interaction with a scale (ranging from 1 to 7), the moment-to-moment changes in situations were averaged out. It should be noted that attempts to construct composite measures using the frequency counts proved unsuccessful (i.e., lack of unidimensionality).

In line with findings by Whitehurst et al. (1988), the rating of bookreading quality is based on the assumption that evoking initiatives and responses of the child and shadowing the child’s interest are characteristic of high quality bookreading (Arnold, Lonigan, Whitehurst, & Epstein, 1994, Whitehurst et al., 1988). High ratings were given when reading sessions were characterized by efforts to evoke and encourage initiatives by the child. Low ratings were given to statements and acts reflecting inflexible interactions. Thus, parents receiving high scores accept and support the child’s responses to the book. When a child, for example, turned the page and the parent didn’t go back even though the other page was not yet finished, the likelihood of a high rating was increased. Parents receiving high scores support spontaneous responses by the child. For example, a parent responded with: “Yeah, he looks like Michael” to a child saying “Michael” when he saw a picture of a baby. Parents on the negative side of the scale do not adapt to the child’s level of responding and discourage involvement in the session. We saw some parents reading through the whole book, starting from the table of contents, and ignoring the child’s responses. For example, we saw a child sitting on the bean-bag chair while the mother sat on the floor with the book. When the child straightened up to point at a picture the mother said: “Sit down.” At first this child seemed to have a lot of pleasure looking at the pictures. When the mother turned the first page the child screamed spontaneously as if taken by surprise but the mother ignored the child’s enthusiasm. When the child tickled the foot of a baby on one of the pictures the mother said with a serious face: “You cannot tickle their feet, it’s just a picture. You can’t tickle it, they won’t feel it.”

The bookreading quality of fifty sessions was rated separately by two coders. Interrater agreement was .92, using Pearson’s correlation coefficient. Disagreements were reconciled after discussion. Standard multiple regressions were performed between the rating of bookreading quality as the dependent variable and frequencies of parent and child behavior as predictor variables. Altogether, 68% (66% adjusted) of the variability in the rating of the mother–child session was predicted by knowing scores on distraction of the child (β = -.14), labelling by the child (β = .28), nonverbal responses by the child (β = .28), commenting
by the mother ($\beta = .14$), labelling by the mother ($\beta = .39$), questioning by the mother ($\beta = .17$), and negative feedback by the mother ($\beta = -.16$). For fathers, 62% (61% adjusted) of the variability in ratings of bookreading quality was predicted by low level responses such as reaching, grasping or touching the book by the child ($\beta = -.14$), labelling by the father ($\beta = .38$), questioning by the father ($\beta = .39$), and reading the verbal text by the father ($\beta = -.23$).

**Statistical Analyses**

Profile analysis was performed on the bookreading behavior of parents and children. SPSS* MANOVA was used for these analyses. Grouping variables were attachment security with the father (at 13 and 20 months) and attachment security with the mother (at 12 and 18 months). To assure commensurability, z-scores were used instead of raw scores for the dependent variables. The major question to be answered by profile analysis is whether or not profiles of groups differing in attachment security also differ on a set of bookreading measures. This is commonly known as the test of parallelism. For example, insecure–avoidant children may have higher scores on disruptive behavior and lower scores on responses such as labelling, commenting or pointing than other pairs. For interpretation of nonparallel profiles, a contrast procedure is needed to determine which behaviors separate the three groups of dyads. Profiles were evaluated in terms of behaviors on which group averages fell outside the confidence interval of the pooled profile. In order to compensate for multiple testing, a wider confidence interval was developed for each behavior to reflect an experimentwise 95% confidence interval. We followed the guidelines of Tabachnick and Fidell (1989) in reporting and interpreting the profile analyses.

Although the age of the children covaries with sex of the parent (mothers were reading to 18-months-olds, and fathers to 20-months-olds), we nevertheless compared the means for mothers and fathers on the scale. Because the rating, unlike the frequency scores used in this study, took the children’s level of competence into account, this was deemed appropriate. One-way ANOVAs were applied to test effects of infant–parent attachment security on the ratings of bookreading quality.

**RESULTS**

**Mother–Child Attachment and Bookreading**

Given unequal and small n’s of the attachment groups (distribution of A, B, and C categories: 23, 74, and 16 mother–child pairs in each category), deviation from normality may be expected. After logarithmic transformations were applied to some maternal behaviors (disciplining and negative feedback) and to some child behaviors (aggression towards the parent, low level responses and commenting), assumptions regarding normality of sampling distributions were met. Assumptions regarding homogeneity of variance–covariance matrices, linearity, and multicollinearity were satisfactory.
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**Notes:** Maternal behavior: *pnt* = pointing; *com* = commenting; *lab* = labelling; *mot* = motivating; *qst* = questioning; *non* = nonverbal; *dis* = disciplining; *rea* = reading; *pos* = positive feedback; *cor* = correcting; *neg* = negative feedback

Children's behavior: *agg* = aggression towards the mother; *low* = low level responses; *cme* = commenting; *ini* = initiatives; *lbc* = labelling; *ptc* = pointing; *nnc* = nonverbal responses; *dis* = distraction

*rat* = rating scale
**Maternal Behaviors.** Using Wilks' criterion, the profiles, seen in Figure 1, with mother–child attachment security at 18 months as the grouping variable and maternal behaviors as the dependent variables, deviated significantly from parallelism, $F(20, 202) = 1.74$, $p = .029$. To examine the pattern of differences in greater detail, confidence limits were calculated around the mean of the profile for the three groups combined. Alpha error for each interval was set at .0015 to achieve an experimentwise error rate of 5%. Therefore, 99.85% confidence limits were evaluated for the pooled profile. For six of the measures, one or more groups had means that fell outside these limits. As anticipated, insecure–avoidant pairs had reliably lower scores on commenting, labelling, pointing, correcting and motivating than those of the pooled groups; moreover, insecure–avoidant pairs had a reliably higher mean on reading the text. Insecure–resistant pairs had reliably higher scores on correcting and motivating than those of the pooled groups.

**Children's Behavior.** Using Wilks' criterion, the profiles with children's behavior as the dependent variables, seen in Figure 2, deviated significantly from parallelism, $F(14, 208) = 1.98$, $p = .020$. To examine the pattern of differences in greater detail, alpha error for each interval was set at .0021 to achieve an experimentwise error rate of 5%. Therefore, 99.79% confidence limits were evaluated for the pooled profile. For aggression, distraction and nonverbal responses, the insecure–resistant group had means that fell outside these limits. They had reliably higher scores on aggression and reliably lower means on distraction and nonverbal responses than the pooled groups. The insecure–avoidant group had reliably lower scores on pointing and reliably higher scores on distraction.

![Figure 1. Profiles of maternal bookreading behavior (z-scores)](image)

Note 1. *com* = commenting; *lab* = labelling; *pnt* = pointing; *non* = nonverbal responses; *cor* = correcting; *mot* = motivating; *qst* = questioning; *pos* = feedback (positive); *neg* = feedback (negative); *dis* = disciplining; *rea* = reading.

Note 2. *Wide line* = secure pairs ($N = 74$); *narrow line* = insecure–resistant pairs ($N = 16$); *medium line* = insecure–avoidant pairs ($N = 23$).
**Outcomes with Security at 12 Months as the Grouping Variable.** With mother–child attachment security at 12 months as the grouping variable and maternal and child behaviors as dependent variables, the profiles did not deviate significantly from parallelism. However, particularly the pattern of maternal behavior tended to be similar to the pattern with 18 months attachment security as the grouping variable. Mothers of insecure–avoidant children were less interactive and, often, simply read the verbal text. More than other mothers, mothers of insecure–resistant pairs were inclined to evoke active participation by motivating and questioning.

**Father–Child Attachment and Bookreading.**

Because of unequal and small n’s of the father–child attachment groups (distribution of A, B, and C categories: 22, 64, and 14 father–child pairs in each category) and significant skewness of some segments, logarithmic transformations were applied to: aggression towards the parent, low level responses, commenting by the child, disciplining and negative feedback. After normalizing transformations, the assumptions for profile analysis were met.

Using Wilks’ criterion, the profiles with father–child attachment security at 20 months as the grouping variable and paternal bookreading measures as the dependent variables did not significantly deviate from parallelism, $F(20, 176) = 1.44, p = .109$. Inspection of the differences in profiles did not reveal interpretable patterns; nor did the profiles with father–child attachment security at 13 months as the grouping vari-

![Figure 2. Profiles of children’s bookreading behavior (z-scores)](image)

Note 1. *aggp* = aggression towards parent; *low* = low level responses such as hitting the book; *init* = initiatives by the child; *point* = pointing at (details of) pictures; *lab* = labelling; *comm* = commenting; *nonv* = nonverbal responses; *dist* = distraction.

Note 2. *Wide line* = secure pairs ($N = 74$); *narrow line* = insecure–resistant pairs ($N = 16$); *medium line* = insecure–avoidant pairs ($N = 23$).
able. The profiles with children’s behaviors as the dependent variables did not reveal any significant effects, neither with 13 months’ nor with 20 months’ attachment security as the grouping variables.

**Ratings of Bookreading Quality**

On average, mothers and fathers appeared to display a similar quality of bookreading ($M = 4.1, SD = 2.25$, and $M = 4.2, SD = 2.14$, respectively; $t (91) = -0.34; p = .74$). However, the mothers’ and fathers’ quality of reading a book to the same infant did not appear to be associated. The correlation between maternal and paternal bookreading was $r = .20; p = .055$ (two-tailed).

A one-way ANOVA revealed a significant effect of infant–mother attachment security at 18 months on the bookreading rating, $F(2,110) = 3.58; p = .031$. Follow-up tests indicated that insecure–avoidant dyads scored lower than all other dyads ($M = 3.0, SD = 2.3$ vs. $M = 4.4, SD = 2.3$; $T (110) = 2.52, p = .013$) on bookreading quality. Interestingly and importantly, inspection of the means of the three infant–mother attachment groups at age 12 months revealed exactly the same patterning of means, with insecure–avoidant dyads scoring significantly lower on quality of bookreading ($M=3.5, SD = 2.1$) than secure ($M = 4.5, SD = 2.1$) and insecure–resistant dyads ($M = 4.8, SD = 2.0$). However, the overall differences did not reach significance, $F(2, 112) = 2.24, p = .112$. Similar to profile analyses, however, scores of attachment groups on the bookreading rating scale did not reach significance when fathers were involved.

**DISCUSSION**

At 18 and 20 months, children respond to the pictures in a book by pointing and labelling, and their parents try to initiate such actions by following predictable routines. Typically, mothers initiate interactions by motivating (“look here!”), pointing at pictures, questioning (“what’s that?”), labelling (“see, a rabbit!”), commenting (“it has the same color as yours”) and feedback (“yes, it’s a rabbit”). Children initiate interactions and respond to parental questions and comments by pointing, labelling, commenting and nonverbal responses. The following fragment illustrates a typical interaction. This mother succeeds in involving her child during the whole session, using techniques such as asking questions, making comments, and shadowing the child’s interest. In turn, the child takes initiatives and is responsive to the mother.

C: Toes (and points to a picture with a toe on it).

M: Yeah, toes.

M: (Taking the child’s hand) Fingers.

C: (stretches out his foot)

M: (takes the foot with her hand)

M: Ball (pointing to another picture at the same page).

M: Ball, but there’s no ball out here (mother and child look around in the room).

M: (turning the page) Ooh, look.

C: (points at a picture of a baby) Michael
M: Yeah, he looks like Michael.
M: Look, what’s that? (pointing to another picture at the same page)
C: A ball.
M: Good boy, you’re right, it’s a ball.

This study confirms that interaction patterns of insecure–avoidant and insecure–resistant mother–child pairs during bookreading deviate in different ways from the interactions of secure pairs. The microanalytic results support the hypothesis that the interactive patterns that are generally found in avoidant and resistant mother–child pairs also characterize bookreading sessions. We found differences in interaction patterns very similar to those found in situations in which mothers and insecure children are invited to play together or to solve some problem (Cassidy & Berlin, 1994; Cassidy & Kobak, 1988).

Infant and mother in the insecure–avoidant relationships seemed unable to merge their unique styles into a contingent and reciprocal relationship. These mothers were less able to create an age appropriate interaction with their child even when the session was of short duration. Instead of evoking interactive routines around the pictures, in ways such as Ninio and Bruner (1976) described, these mothers were more inclined to just read the verbal text. The mothers focused on the text, ignoring the child’s limited ability to understand story and pictures on their own. The avoidant children were inclined to be more unresponsive to the book content and to be more distracted than other children. They did not explore the book but remained focused on the mother in an indirect way.

Consider in this respect the following fragment which illustrates a bookreading session of an insecure–avoidant child who did not show any interest in the book and a parent who was unable to evoke any interest during the 5 minutes of bookreading.

M: (turns page while child is looking around in the room and reads:) The book of babies.
C: (tries to leave the mother’s lap by pushing at the mother’s arm)
M: Look, look, look (turns page)
M: Ah, look at this.
C: (The child tries to escape under the book).
M: (reads the literal text) Making faces, kicking, crawling, busy hands …
C: (standing on the floor and walking around)
M: You don’t wanna read, do you? Come here (with an angry voice).

Insecure–resistant pairs proved to be similar in many respects to secure pairs. The mothers initiated labelling routines to the same extent (or more so) than secure mothers. However, these insecure dyads seemed less successful at regulating children’s behaviors than did their secure counterparts. Over-control or “overscaffolding” (Wood, 1989) appeared to be more characteristic of insecure–resistant pairs than of the other pairs. More than secure mothers, these mothers were inclined to correct the child’s behavior (“sit down!”) and to motivate (“look at that!”). Overstimulating (and a tendency to overcontrolling) behavior by the mother seemed to covary with ambivalence on the part of the children. The children in these dyads were not distracted, but they explored the book somewhat less
than other children (lower scores on nonverbal responses). They also differed from the rest by showing aggression towards the mother (pushing or hitting her) and by responding at a low level (hitting the book).

By encouraging book-orientation, these mothers may have been attempting to circumvent their children’s aggressive responses. Another interpretation is that insecure-resistant children were irritated by their mothers’ directives and were reacting negatively to maternal “overscaffolding.” The mothers’ attempts to teach or help their children may leave too little developmental space for the child to grow into. And, of course, a bidirectional reciprocal process of influence may also account for these results. However, the group of resistant pairs was small \((n = 16)\) and replication of these results seems warranted.

The more global quality rating of bookreading sessions showed differences between insecure-avoidant mother-child pairs and other pairs, but not between insecure-resistant and other pairs. This global measure was mainly biased on the assumption that evoking initiatives and responses of the child and shadowing the child’s interest are characteristic of high quality bookreading (Whitehurst et al., 1988). However, the microanalysis revealed patterns characteristic of insecure-resistant dyads which are not uncovered by this rating. These mothers evoke initiatives and responses of their children and they indeed shadow their children’s interest, but they also seem to over-stress scaffolding.

In sum, early infant–parent relationships seem to influence young children’s involvement in literacy activities. Bookreading sessions of insecure-avoidant and insecure-resistant pairs proved less rewarding and didactic for different reasons—and we expect that, as a consequence, such dyads may not develop satisfying bookreading routines to the same extent as secure pairs. Bookreading patterns appeared to be more strongly related to mother–child attachment security when measured at the same age than to attachment security measured six months earlier. Further research is warranted to decide whether this result is a consequence of unreliability of coding attachment security or whether it indicates real changes in the socioemotional context of bookreading.

An alternative interpretation of the results is that child temperament leading to the formation and maintenance of a secure attachment relationship also causes the emergence of curiosity and competence in the domain of bookreading. Following this interpretation, security of attachment would not be a necessary antecedent of interest in reading, but rather differences in security of attachment as well as bookreading patterns would follow from differences in child temperament. However, this study’s finding that mothers and fathers do not display a similar quality of book reading seems contradictory to this assumption. This result is more in line with our hypothesis that the quality of book reading is dependent on interactional aspects of the parent–child relationship. An earlier finding that the mother’s biography (i.e., her mental representation of attachment experiences in the past) predicts attachment security as well as quality of bookreading interactions also contradicts the notion that bookreading patterns simply follow from child characteristics such as temperament (Bus & van IJzendoorn, 1992; van IJzendoorn, 1995).
It must be noted that in the case of father–child dyads no attachment-group differences emerged with respect to bookreading. Although on average the fathers reported being involved in bookreading routines to the same extent as mothers, the expected association with father–child attachment security did not emerge. Despite their self-reports, it may be that fathers, on average, are less experienced in reading to their child and, as a result, their bookreading style may be more determined by situational factors than by interactive patterns developed over a longer history of bookreading. In fact, many fathers may not have a notion of how to adapt the reading session to their child’s comprehension and motivation level.

Moreover, book characteristics may have hindered high quality bookreading particularly with parents (fathers) who were not used to reading often to their child. The text on the pages combined with the fathers’ uncertainty about the expected reading behavior may have triggered an all-too-literal reading of the text. In fact, we witnessed fathers (more often than mothers) who started to label and question at the beginning of the session while looking at pictures on the inside of the book cover but who stopped interacting in this way when they first encountered a page with text.

Limitations
Unfortunately, the present study did not allow for direct comparisons of the maternal and paternal reading strategies. Recall that fathers were observed two months after mothers were observed. Because the age of the children covaried with sex of the parent, it was impossible to compare the reading behaviors of mothers and fathers independent of the children’s age. Language ability at this age is improving at a fast rate and this may cause differences in children’s interest and involvement and in parent’s ability to evoke interaction around the book.

Another limitation of the present investigation is that observations in a contrived setting, as in the present study, may be less realistic, and therefore not as valid a representation of the meaning and purpose of the participants in actual life experience (Rogoff, Mistry, Göncü, & Mosier, 1993). On the other hand, laboratory observations are more likely to be comparable from one participant to the next and are more likely to contain the kinds of interactive behavior that are of interest to us. The results of the present study indeed represent expected differences in patterns of interaction and make visible why some families do not succeed in creating effective bookreading routines.

A third limitation is that the study only involved boys. In consequence, replication of the findings with a sample of families rearing daughters is called for before generalizing broadly from the results of this investigation.

Practical Implications
Taking into account that “quality” bookreading depends on the affective interpersonal context (mothers are more successful in involving their child as the mother–child relationship is more secure), it is not very plausible that the quality of bookreading sessions only reflects the child’s temperament or the child’s lan-
language abilities (Scarborough & Dobrich, 1994). The overall picture presented here is in line with the notion that high quality bookreading depends on the interactional context (Bus, van IJzendoorn, & Pellegrini, 1995).

The results suggest to us that, without helping the participants to change their reading habits, literacy programs encouraging bookreading at home might have a counterproductive effect. Insecure–avoidant pairs have difficulty starting interactions about the meaning of pictures and text. Insecure–resistant pairs, on the contrary, do interact about the book but parental as well as child responses betray a history resulting in negative responses of the child.

Intervention programs such as dialogic reading (Arnold et al., 1994; Whitehurst et al., 1988) seem more attuned to the insecure–avoidant pairs than to insecure–resistant pairs. Parents are trained in praising and encouraging, and in shadowing the child’s interest but not in dealing with children’s negative responses. Stressing dialogic reading may even increase behavior such as aggression towards the parent and low level responses. More diverse intervention strategies to encourage and sustain specific types of parent–child relationships should be devised, implemented and tested for differential efficacy.

CONCLUSION

From an early age, literacy experiences around books strongly differ as a function of the broader relationship context. The microanalysis of this study indicate that patterns of interaction characteristic of secure and insecure dyads are even present in routinized events such as bookreading sessions. Infant engagement and disengagement in bookreading depends on the socioemotional context of adult support. Further research seems warranted to test how literacy develops from educational and social experiences during bookreading. In 27 months and age 5 follow-up data collection we address this issue.

Acknowledgments

The research described herein was supported by a grant from the National Institute of Mental Health to Jay Belsky and Keith Crnic (MH44604) and by a Pioneer award of the Netherlands Organization of Scientific Research to Marinus van IJzendoorn. We acknowledge the assistance of H. J. M. Wassink and C. M. van den Hout in coding data.

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