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Patterns of Attachment in Frequently and Infrequently Reading Mother–Child Dyads

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ABSTRACT This study explored the relationship between the quality of the mother
child attachment and how often mothers read to their children Eighteen children
who were read to infrequently were matched to a group of children who were read
to daily for sex, age, and socioeconomic status The children's mothers read them a
booklet mother and child were observed in a reunion episode the children com
pleted the Peabody Picture Vocabulary Test (Dunn, 1965) and Frostig's (1966) test
for spatial orientation, and the mothers were given the Adult Attachment Interview
(George, Kaplan, & Main, 1984) The mothers in the frequently reading dyads did
not need to discipline their child to focus on the reading task as often as the mothers
in the infrequently reading dyads did Mothers whose attachment to their child was
less secure spent less time reading to their child and had more troublesome episodes
during the reading session than mothers whose attachment to their child was more
secure The security of the mother–child attachment was related to the mothers
representation of their relationship with their parents, and mothers who had a secure
relationship with their child read more frequently to their child than did mothers who
had an insecure relationship with their child

PARENTS DIFFER GREATLY in the amount of time they read to their chil-
dren during their first 3 years (Teale, 1986) Some children are not read to at
all, whereas other children have been read to more than 1,000 hr by the time
they enter elementary school (Adams, 1990) The reasons for and the conse-
quences of this tremendous difference in reading experience have not been
studied extensively, but at least part of the difference can be attributed to the
complexities of reading to a child who does not understand written language
(Bus, 1990) Storybook reading has been regarded as a social interaction
(Sulzby & Teale, 1987) When reading to their child, parents cannot simply

read the text aloud (Pellligrim Brody, & Sigel, 1985), children will under-stand a story only if their parents use highly interactive language, particularly when the book is new to the child Some parents are less aware than others of their child's intentions and knowledge (Bus & Sulzby, 1990) Some parents cannot focus their child's attention on a story, the children do not show any real interest in the book and try to disturb the reading session by making noises playing with toys, or running away

Based on attachment theory (Ainsworth, Blehar, Waters, & Wall, 1978, Bowlby 1969) we hypothesized that mothers in insecurely attached dyads would be less able to focus their child's attention on a reading task and less able to explain the context and the content of a story Insecure children have less trust in their caregivers and in themselves and are less resilient, that is, less able to cope with difficulties, than securely attached children are (Matas, Arend & Sroufe 1978, van IJzendoorn, van der Veer, & van Vliet Visser, 1987) In previous studies, we found that insecure children were less inclined to explore written language (Bus & van IJzendoorn, 1988a) and that inse-curely attached mother–child dyads experienced more troublesome episodes when reading than securely attached dyads did (Bus & van IJzendoorn 1988b) In this study we further explored the relation between frequency of reading number of troublesome episodes during reading, and quality of the mother–child attachment Because the quality of the mother–child attachment seems to be related to the number of troublesome episodes during reading sessions, we hypothesized that children who are infrequently read to are in securely attached to their mothers more often than are children who are fre-quently read to Securely attached dyads are characterized by open communi-cation (Grossmann & Grossmann, 1990 Main, 1990) and may therefore deal more satisfactorily with frustrations that arise when the child is intro duced to written language

Main and her coworkers suggested that the quality of the parent–child attachment may be strongly related to the parents' own experience of attach ment (Main 1990, Main & Hesse 1990, Main, Kaplan, & Cassidy, 1985) Parents cognitive representation, or state of mind, with respect to their at-tachment experiences with their parents determines how they will relate to their children affectively Secure parents (those who have a secure represen

tation of attachment) tolerate more averse stimuli from their children than do insecure parents because they do not feel threatened by their children's anxiety or frustration (Main & Goldwyn in press) In contrast, insecure parents may become insensitive to their children's needs and signals when they are reminded of their own painful attachment experiences Crowell and Feldman (1988) found that secure mothers support their toddlers more adequately during a problem solving task than insecure mothers do

We hypothesized that more insecure mothers than secure mothers would read infrequently to their children and that more secure mothers than insecure mothers would read frequently to their children Our rationale was that, because secure mothers handle troublesome interactions that arise during reading sessions with their children more adequately than insecure mothers do secure mothers should derive more satisfaction from reading to their children and should feel more motivated than insecure mothers would to read to their children

Our study was carried out in the laboratory, in contrast to most studies on reading to children, which have been carried out in a natural setting (Sulzby & Teale, 1987) We performed our research in a more structured setting to control for the content of the reading material and the context of the reading session

Method

Procedure

We used a questionnaire to select 36 mother–child dyads We invited all the dyads to our laboratory and observed a reading session and a reunion of mother and child after a separation First the mothers read to their children We told the mothers to act as they did at home The reading sessions were videotaped Then, while the children were separated from their mothers, they completed (among other tests) the Peabody Picture Vocabulary Test (Dunn 1965) and a test for spatial orientation (Frostig, 1966) The separation lasted for at least half an hour We visited the mothers at home to administer the Adult Attachment Interview (George, Kaplan & Main, 1984)

Subjects

We administered a questionnaire to about 300 mothers when they brought their child to a playgroup To prevent the mothers from feeling that reading infrequently to their children was undesirable, we asked whether they had *already* begun to read to their children (Sulzby, personal communication) If the answer was affirmative the mothers were to indicate how many times a week they read to their children Twenty one mothers volunteered that they

read to their children twice a week or less. So that the mothers would not guess the goal of the questionnaire, we asked four other questions about their children's play behavior. We also asked about the children's age and sex and the parents' occupation and educational level. Eighteen of the 21 mothers who read at most twice a week to their child agreed to participate in the study. Their children were matched to children who were read to daily, for socio-economic status, age, and sex. Two pairs of children could not be matched on sex.

Troublesome Interactions

The mothers read a booklet to their children that included all the relevant aspects of a story (setting, initiating event, internal response, internal plan, attempt, direct consequence, and reaction) (Stein & Glenn, 1979). The booklet was 10 pages long and contained text and an illustration on every page. Using the videotape of the reading sessions, we coded the number of episodes in which the mothers tried to focus their child's attention on the booklet after the child verbally or nonverbally demonstrated that he or she had no interest in the booklet or wished to do something else. These troublesome episodes sometimes contained more than one remark. Agreement between two independent coders was .85 ($N = 8$).

Mother–Child Attachment

Following the procedure of Main, Kaplan, and Cassidy (1985, p. 80 ff.), we separated the children once for about half an hour from their mothers, and recorded their reunion on videotape. We rated the children's behavior during the first 5 min of the reunion, using a revised version of a 9-point security scale for 6-year-olds (Main et al.). The revised scale included more extensive descriptions of insecure behavior and emphasized the kinds of behavior that are typical of younger children. The intercoder reliability of two independent coders was .86 ($N = 15$). The application of a similar scale for the same age group was reliable and valid in previous research; the security scale showed convergent validity in correlating strongly ($r = .75$) with a combination of frequency scores for positive affective behaviors (such as smiling, looking, showing, and accepting) and also appeared to have predictive validity. The atmosphere surrounding the interaction of securely attached dyads appeared to be more positive than that surrounding the interaction of the insecurely attached dyads. Also, as expected, the mothers of securely attached children were able to stimulate their children to function at a higher level when reading (Bus & van IJzendoorn, 1988b).

The Adult Attachment Interview

We measured maternal state of mind with respect to attachment, using the Adult Attachment Interview (AAI, George et al., 1984) The AAI is a semi structured interview designed to elicit descriptions of a person's childhood relationship with his or her parents, specific supportive memories, and de scriptions of a person's current relationship with his or her parents The interview was recorded on audiotape and transcribed verbatim The transcribed interviews were classified according to the security of the current parent–child attachment Coding of the AAI according to the Main and Goldwyn coding system resulted in four attachment categories *secure/autonomous* (F) *dis missive* (D), *preoccupied* (E), and *unresolved with respect to trauma* (U) Interviews that were classified *U* were reclassified in the next closest of the three remaining categories (Main & Goldwyn, in press)

In this article we will discuss only insecure (D and E) versus secure di chotomy because our sample size was relatively small and because we did not make specific hypotheses about the dismissive and preoccupied groups, expecting that both these groups would deal less adequately than secure mothers would with troublesome episodes that arose when they read to their children The unresolved status is a transitory stage that periodically accompanies one of the main strategies (D, E, or F) of dealing with attachment relationships (van IJzendoorn, 1992)

Because some subjects refused to participate and because of technical failure, there were 33 transcripts available for coding Eleven mothers were coded as dismissively attached, 14 mothers as securely attached, and 8 mothers as preoccupied This distribution reflected an overrepresentation of insecurely attached mothers (58%) compared with the distribution of insecurely attached mothers in middle-class samples (52%, see van IJzendoorn, 1992) The second author coded the transcripts without any knowledge about the children's characteristics, how often they were read to, or their interactions with their mother After training, intercoder agreement reached 82% on 22 English transcripts and 90% on 10 Dutch transcripts

Statistical Analysis

We compared the two groups of children using *t* tests for matched pairs The tests were one tailed because we had explicit expectations about the direction of the effects All the analyses were performed twice—once with all the pairs and once without the two pairs that were not matched for sex The results of the latter set of analyses did not differ from those of the former set and there fore will not be reported The correlations between continuous variables were established with Pearson product–moment correlation coefficients

Results

First, we examined the differences between the background variables for the frequently reading dyads and the infrequently reading dyads. The children's mean age was 3.4 years (see Table 1), and the subjects were from families of low socioeconomic status (van Westerlaak, Kropman, & Collaris, 1975). The only difference between the two groups was frequency of reading.

Second, we examined the number of troublesome episodes, the security of the mother–child attachment, and the mother's representation of her attachment experience, for each group. The number of troublesome episodes for the frequently reading dyads was significantly lower than that for the infrequently reading dyads, $t(17) = 3.54$, $p < .002$. The mean numbers of troublesome episodes were 7 ($SD = 1.0$), and 2.4 ($SD = 1.8$), for frequently reading dyads and infrequently reading dyads, respectively.

The security of the mother–child attachment for five dyads could not be assessed because the children refused to be separated from their mothers. Four out of five of these children belonged to infrequently reading dyads. The mean security of the children who were read to infrequently was significantly lower ($M = 4.1$, $SD = 1.2$) than that of the children who were read to daily ($M = 6.0$, $SD = 1.7$). Infrequently reading dyads were less securely attached

TABLE 1
Characteristics of Children in Infrequently and Frequently Reading Dyads

Background variables	Infrequently reading dyads		Frequently reading dyads		
	M	SD	M	SD	t
Frequency of reading (per week)	1 7	8	4 8	7	12 23[b]
Age (in months)	39 7	5 8	40 1	5 5	1 00
SES					
(maximum score = 6)	2 2	1 1	2 4	8	67
Peabody Picture Vocabulary					
Test	98 6	18 0	95 0	20 8	69
Spatial orientation test					
(maximum score 8)	3 5	1 3	3 0	1 0	1 07
Birth order	1 6	5	2 2	1 3	1 57

Note There were 12 boys and 6 girls in the infrequently reading dyads and 10 boys and 8 girls in the frequently reading dyads Cross tabulation of reading frequency (frequently vs infrequently reading pairs) and sex (female vs male) $\chi^2(1, N 36)   47$ *ns* Seventy-eight percent of the children in each type of reading dyad had siblings Cross-tabulation of reading frequency (frequently vs infrequently reading pairs) and siblings (with vs without siblings) $\chi^2(1, N 36)   00$, *ns*

[b]$p   001$

than frequently reading dyads were, $t(12) = 3.67$, $p < .002$, and the less secure dyads experienced more troublesome episodes during the reading session than the more secure dyads did, $r(31) = -.43$, $p < .009$.

The security of the mother–child attachment was strongly related to the security of the mother's representation of previous attachment experiences $r(32) = .52$, $p < .002$. There were more insecure mothers in infrequently reading dyads than in frequently reading dyads, 75% and 41%, respectively, $\chi^2(1, N = 33) = 3.86$, $p < .05$. Insecure mothers provoked more troublesome episodes than secure mothers did, $r(33) = -.30$, $p < .05$.

Discussion and Conclusions

One purpose of this study was to describe the differences between frequently and infrequently reading dyads. The atmosphere of the reading interaction seemed better in frequently reading dyads than in infrequently reading dyads; in frequently reading dyads, there appeared to be less need to discipline the child to focus on the reading task. This may explain why the mothers in the infrequently reading dyads did not read often to their child, assuming that a greater number of troublesome episodes lessens the pleasure of reading. However, we cannot ignore the possibility that reading may have been more troublesome for the infrequently reading dyads because they were not used to reading at home.

To investigate the difference in reading frequency, we explored the relation between attachment and frequency of reading. Attachment and reading were related in several different ways. Frequently reading dyads appeared to be more securely attached than infrequently reading dyads. Furthermore, the security of the mother–child attachment was related to the number of troublesome episodes during reading sessions; the more secure a dyad was, the fewer troublesome episodes it experienced. This result confirms an earlier finding that secure children are easier to instruct during reading sessions (Bus & van IJzendoorn, 1988b). Some might interpret this finding as a suggestion that children become more securely attached to their parents as a result of frequent, successful contact that involves reading. To us, it seems more plausible that a secure attachment relationship results in a better affective atmosphere during a relatively difficult task (such as reading to a child and introducing the child to written language) and that this more favorable atmosphere may stimulate mothers to read more often to their child.

The findings that frequently reading mothers are more secure than infrequently reading mothers and that secure mothers do not provoke as many troublesome episodes during reading sessions as insecure mothers do further support this hypothesis and suggest that the quality of the interaction during reading sessions is closely related to the mother's attachment experiences. Secure mothers are more aware of their child's signals of anxiety and frustra-

tion and better able to respond flexibly to the challenges of introducing their child to a new subject (Crowell & Feldman, 1988) The fact that the percentage of secure mothers in this sample was relatively low (42%) may be related to the low socioeconomic status of the participating families Previous studies that used middle class samples did have a somewhat higher percentage (48%) of secure adult attachment (van IJzendoorn, 1992)

Two of our findings were especially important First, the affective relationship between mother and child may be important for instruction and cognitive development Mothers are less able to instruct their child when the attachment relationship is less secure, and they spend less time reading to their children Second, the results of our study supported the theory that the maternal representation of attachment is related to the quality of the mother–child attachment and that a secure maternal representation of attachment may be a prerequisite if a mother is to adequately assist her child in the exploration of written language

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