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SIBLING MOTHER-INFANT ATTACHMENT: DIFFERENT PATTERNS OF INTERACTION LEAD TO SIMILAR RELATIONSHIPS

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ABSTRACT

PURPOSE: To investigate the role of maternal sensitivity and interactive behavior in sibling attachment non-/concordance.

RESULTS: 1) Global measures of sensitivity suggest that mothers of concordant-secure and non-concordant infants demonstrate a similar degree of sensitivity towards each child. 2) Mothers with non-concordant infants interact more similarly with each child on domains of maternal sensitivity, compared to mothers whose infants are concordant.

CONCLUSION: The quality of the attachment relationship in families with non-concordant mother-infant relationships – in contrast to families with concordant dyads – does not appear to be systematically affected by maternal sensitivity as typically assessed. More detailed assessment of the interactions suggest that mothers with non-concordant relationships with their infants may be unable to adapt their behaviour to suit the unique needs of each child.

INTRODUCTION

Attachment has been conceptualized and researched as existing between one child and her mother; however, more often than not, attachment exists as part of a greater family structure that consists of several children and their mother.

Attachment theory posits that siblings should form similar relationships with their mother as long as she interacts equally sensitively with each child (van IJzendoorn et al., 2000).

A substantial percentage of attachment relationships of siblings have been found to be non-concordant (61%, Ward et al. 1988; 64%, Teti et al., 1988) and not consistent with theoretical predictions based on measures of maternal sensitivity.

It has been suggested that a single global dimension of sensitivity may fail to capture the full range of variation in maternal sensitivity, and that distinct aspects of maternal interaction may differentially influence attachment security. An examination of specific aspects of maternal interactive behavior may help to account for such differences in sibling attachment relationships.

HYPOTHESES

- 1) Distinct content domains of maternal interaction will identify patterns of specific behaviors better accounting for non-/concordance than global measures of sensitivity.
- 2) Some domains of maternal interaction will be more important in establishing non-/concordant relationships than others.

METHOD

PARTICIPANTS

- 50 mothers were assessed with each of their two children when each child was 13 months of age. The average spacing between children was 29 months ($SD = 11.5$).
- Mothers ranged from 24 to 39 years at the birth of their first child ($M = 31.7$ years). On average, mothers had completed an average of 14 years of education, and reported a mean annual total family income between \$40,000 and \$50,000.

MEASURES

Home Visit: Mother-infant dyads were observed during a 2.5-hour home visit, which included a divided attention task for the mother. The following assessments were performed:

Maternal Behaviour Q-Sort (MBQS; Pederson et al., 1995):

- 90 cards that each reflect a specific aspect of mother-infant interaction are sorted into 9 different piles, ranging from "most like" to "least like" the mother

e.g. "Annoyed by baby's uncooperative behavior"; "Shows delight in interactions with baby"

- Global sensitivity is the correlation between the observer's Q-Sort of the interaction with a Q-Sort describing a prototypically sensitive mother.

Domains of Maternal Interactive Behaviour:

- The 90 items of the MBQS were sorted into nine rational domains based on how closely items were conceptually related.
 - Awareness ($\alpha = .93$):** Mom's awareness of her baby's needs.
 - Response Effectiveness ($\alpha = .89$):** The effectiveness of Mom's response to the baby's signals.
 - Positive Affect ($\alpha = .88$):** How Mom's affect influences her interactions with the baby.
 - Rejection ($\alpha = .87$):** Mom's degree of acceptance towards the baby and his behaviors.
 - Synchrony ($\alpha = .92$):** Degree to which Mom and baby are engaged in reciprocal interaction.
 - Controlling/Interfering ($\alpha = .88$):** Extent to which Mom interferes with her baby's autonomy in their interactions.
 - Facilitation of Exploration and Learning ($\alpha = .55$):** Degree to which Mom encourages baby's exploratory behaviors.
 - Comfort with Physical Contact ($\alpha = .84$):** Degree to which Mom is comfortable engaging in physical contact with baby.
 - Engagement ($\alpha = .80$):** Degree to which Mom actively engages her baby during interactions.

Lab Visit:
Strange Situation Procedure (SSP; Ainsworth et al., 1978):

- Mothers and infants participated in the SSP lab procedure within 2 weeks of the home visit.

RESULTS

Non-/Concordance Rates

- Two-way (secure-nonsecure) attachment classifications were used to establish non-/concordance.
- Sibling attachment classifications were not significantly related, $\chi^2(1) = 1.72, ns$ (see Table 1).

Table 1. Non-/concordance in sibling attachment classifications.

		Younger Sib		
		B	Not B	Total
Older Sib	B	22 (44%) 19.8, 2.2	9 (18%) 11.2, -2.2	31 (62%) 31
	Not B	10 (20%) 12.2, -2.2	9 (18%) 6.8, 2.2	19 (38%) 19
Total		32 (64%) 32	18 (36%) 18	50 50

Global Sensitivity

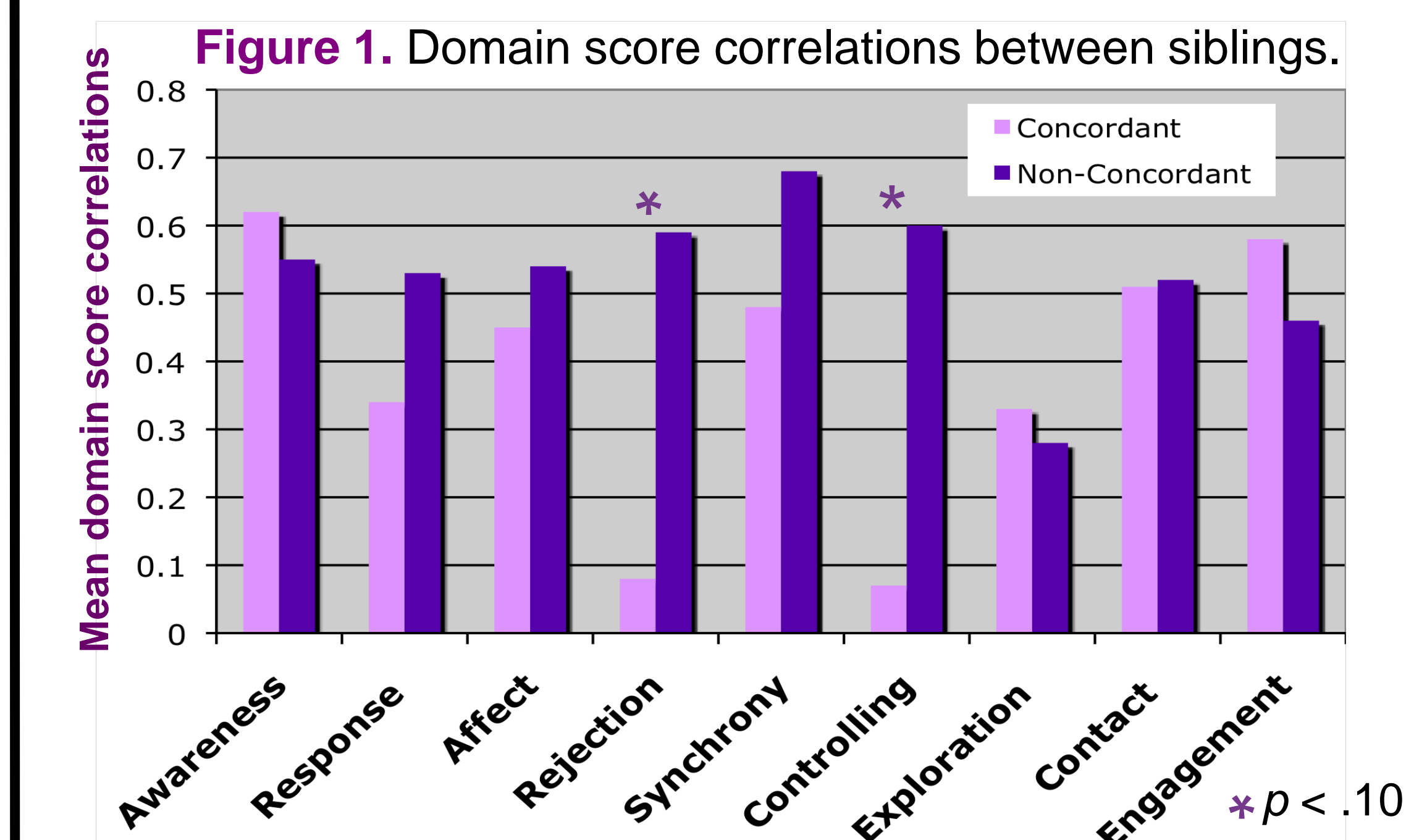
- Siblings' secure-nonsecure classifications were used to assign each child to one of four groups: SS (secure with secure sib), Ss (secure with insecure sib), sS (insecure with secure sib), and ss (insecure with insecure sib).
- Maternal sensitivity differed significantly between groups, $F(3, 97) = 4.04, p < .01$. The ss group differed significantly from all other groups; maternal sensitivity did not differ in the SS, Ss, and sS groups. Mean MBQS scores by group are presented in Table 2.
- The relationship between concordance group and sensitivity did not differ by birth order, $F(3, 92) = .27, ns$.

Table 1. Mean sensitivity scores by non-/concordance group.

Group	Mean	SD	N
SS	.55	.41	44
Ss	.27	.63	19
sS	.24	.83	19
ss	.05	.66	18
Total	.35	.57	100

Domains of Maternal Interactive Behaviour

- Concordant families: Scores describing a mother's interaction with her infants were significantly correlated ($p < .05$) in 3 domains: Awareness, Comfort, and Engagement
- Non-concordant families: Scores describing a mother's interaction with her infants were significantly correlated ($p < .05$) in 8 domains: Awareness, Effectiveness, Affect, Rejection, Synchrony, Controlling, Comfort, and Engagement.
- Mothers with non-concordant children interacted more similarly towards their children with regard to Rejection and Controlling than did mothers of concordant children.



CONCLUSIONS

- While global maternal sensitivity scores in concordant families are consistent with theoretical predictions, no systemic relationship between sensitivity and security was found for infants in non-concordant families.
- The presence of a secure dyad in the family appears to moderate the association between sensitivity and security for the child in an insecure relationship.
- In non-concordant dyads, global measures do not appear to be assessing maternal sensitivity from the child's perspective, i.e. the actual felt maternal sensitivity may be higher than assessed for the securely attached child, and lower for the insecurely attached child.
- Correlations of interaction content domain scores across mother-infant dyads within a family suggest that non-concordance may result when mothers are unable to adapt their behaviour to suit the unique needs of each child.
- From an observer's perspective, sensitivity may take many different forms; however, from the child's perspective, only one of these forms is effective in establishing attachment security.

