

Associations between Early Maternal Sensitivity and Infants' Sleep

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Introduction

- It has been proposed that **mother-infant relationships could influence infant sleep organization** (Dahl & El-Sheikh, 2007).
- Maternal sensitivity** (capacity to perceive and to respond promptly and appropriately to infant cues; Ainsworth et al., 1978)
 - **supports** the development of **children's self-regulatory** capacity (Bornstein, 1985) **and emotional security** (Keller & El-Sheikh, 2011); these are essential to initiate and to maintain sleep (Dahl, 1996).
- Accordingly, **maternal sensitivity should favor child sleep.**
- However, **findings** have been mixed, and **seem to vary according to child age.**

Aim of the current study

- To examine the **prospective associations between maternal sensitivity and infants' sleep.**
- In order to isolate the contribution of child age, sleep was assessed 4 times in early childhood.

Method

Participants

- 200** mother-child dyads (101 girls) at **Time 1 (12 months)**; **125** at **Time 2 (18 months)**; **148** at **Time 3 (2 years)**; **117** at **Time 4 (3 years)**.

Measures

- Maternal sensitivity (T1):**
 - Maternal Behavior Q-Sort (MBQS; Pederson & Moran, 1995)
 - **Quality of maternal behavior during mother-infant interactions at home.**
 - New structure (Bailey, Bernier, & Bouvette-Turcot, submitted) with **3 dimensions**; Cooperative Responsiveness, Positivity and Accessibility.

- Children's sleep (T1 to T4):**
 - Sleep diary**
 - A timeline of 24 hours, on which the **mother reports the child's sleep-wake patterns.**
 - For three consecutive days.

Results

Hierarchical Regressions Predicting Percentage of Nighttime Sleep from Dimensions of Maternal Sensitivity

| | R ² | Δ R ² | F | β |
|----------------------------|----------------|------------------|--------|-------|
| 12 months | | | | |
| Cooperative Responsiveness | .04 | .01 | .61 | .04 |
| Positivity | | | | -.06 |
| Accessibility | | | | .08 |
| 18 months | | | | |
| Cooperative Responsiveness | .08 | .02 | .60 | .09 |
| Positivity | | | | .04 |
| Accessibility | | | | .04 |
| 2 years | | | | |
| Cooperative Responsiveness | .08 | .08 | 4.11** | .27** |
| Positivity | | | | -.08 |
| Accessibility | | | | .07 |
| 3 years | | | | |
| Cooperative Responsiveness | .11 | .11 | 4.45** | .18t |
| Positivity | | | | .21* |
| Accessibility | | | | .02 |

t p < .10; * p < .05; ** p < .01



Discussion

- Cooperative Responsiveness and Positivity are associated** with children's sleep
 - but those associations emerge only **after infancy.**
- No associations** were found at **12 and 18 months;**
 - Environmental factors such as **caregiving** become **more important for children's sleep as they get older** (Ferber, 1987).
 - Important changes in children's sleep occur throughout the second year of life (Acebo et al., 2005), so it may be **too early in infancy to measure associations between caregiving and children's sleep.**

Conclusions

- This study provides insight into the **possibly critical role of child age in the parenting-sleep links.**
- The results suggest that **researchers should take developmental considerations into account** when investigating parenting and child sleep.
- However, this study doesn't allow to determine which components of maternal behavior could be particularly salient for children's sleep.

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