

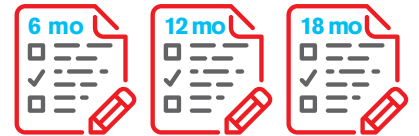
Study Fact Sheet

Sleep and Social-Emotional Development in Infants and Toddlers

STUDY BACKGROUND & METHODOLOGY:

Sleep is an integral component of healthy development in early childhood, affecting **multiple developmental outcomes**; there have already been recorded associations between these, seen in psychological functioning, cognitive performance, and overall developmental status.¹

Over a period of 12 to 18 months, **117 pairs of mothers** with their children (3 to 18 months old) participated in this study. The mothers completed the **Brief Infant Sleep Questionnaire at 6, 12, and 18 months**, as well as the Infant Toddler Social Emotional Assessment at 12 and 18 months.



The aim of this study was to examine the **relationships between variables related to sleep patterns**, and both social-emotional problems including internalizing, externalizing, and dysregulation of emotions, and healthy social development like social competence (a person's ability to get along with other people).

RESULTS:

There are significant relationships between sleep patterns and problem areas in social-emotional development across infancy and toddlerhood.²

Later bedtimes and **less total sleep** across the 24 hour period predicted more **frequent occurrences of internalizing issues**, including separation distress, general anxiety, depression/withdrawal, and inhibition.³



Later bedtimes, longer sleep onset latency (how long it takes to fall asleep), and less total sleep were associated with **more social-emotional problems**.

Sleep fragmentation was minimally associated with decreased social competence, but not with any negative social-emotional problems.⁴

WHY IS THIS IMPORTANT FOR PARENTS AND HEALTHCARE PROVIDERS?

This study is one of the few that has assessed children 18 months and younger with a focus primarily on:

- **Social-emotional** development
- Examining **problem behaviors**
- Examining **healthy, competent trajectories**

The results of this study indicate that sleep patterns, primarily later bedtimes and **less total sleep, seem to be correlated with and predictive of social-emotional wellness** in infants and toddlers.



Clinically, these results may suggest that **implementing intervention or secondary prevention strategies to support healthy sleep habits** in infancy may also affect the developmental trajectory of parent-perceived internalizing problems, such as shyness, inhibition, depression, and separation anxiety.

The findings of this **study contradict the common perception that an "overtired" child is overactive** and noncompliant, but rather the "overtired" toddler will more likely be socially withdrawn and anxious.



This study provides important findings for healthcare professionals and parents by contributing to the **growing literature on the role of sleep** in early social-emotional development, thus improving knowledge of beneficial childrearing practices.

Study Title: Mindell J, Lee C, Goh D, Leichman E, Rotella K (2017). Sleep and Social-Emotional Development in Infants and Toddlers. *Journal of Clinical Child & Adolescent Psychology* 46:2, 236-246, DOI: 10.1080/15374416.2016.1188701

¹ Boekamp JR, Williamson, L, Martin S, Hunter H, Anders T (2015). Sleep Onset and Night Waking Insomnias in Preschoolers with Psychiatric Disorders. *Child Psychiatry & Human Development*, 46, 622-631. doi:10.1007/s10578-014-0505-z ² Mindell J, DuMond C, Sadeh A, Leichman E (2017). Sleep and Social-Emotional Development in Infants and Toddlers. *Journal of Clinical Child & Adolescent Psychology*, 46:2, 236-246, DOI: 10.1080/15374416.2016.1188701 ³ Ibid ⁴ Ibid.