



HEALTH AND HUMAN SCIENCES

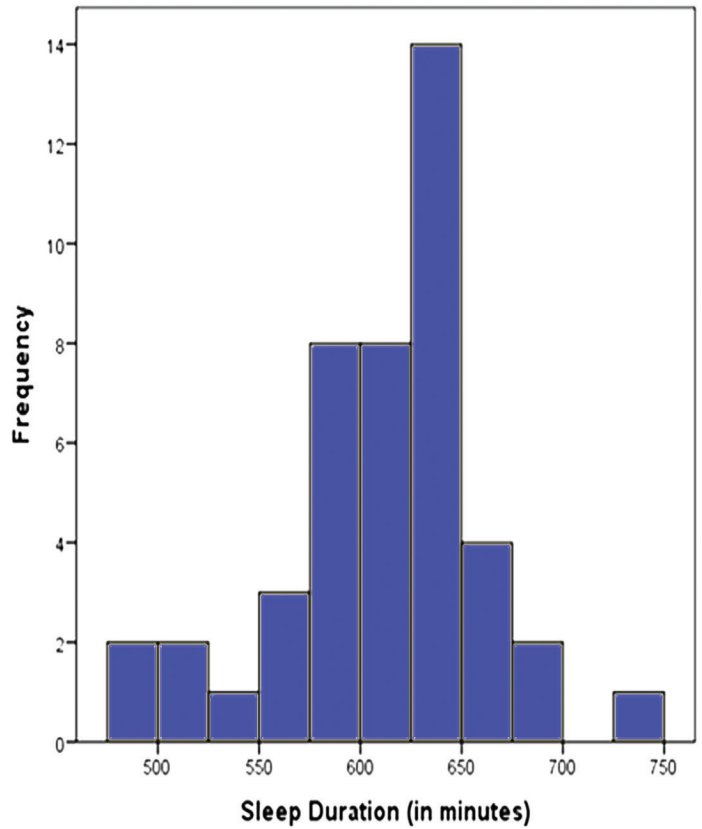
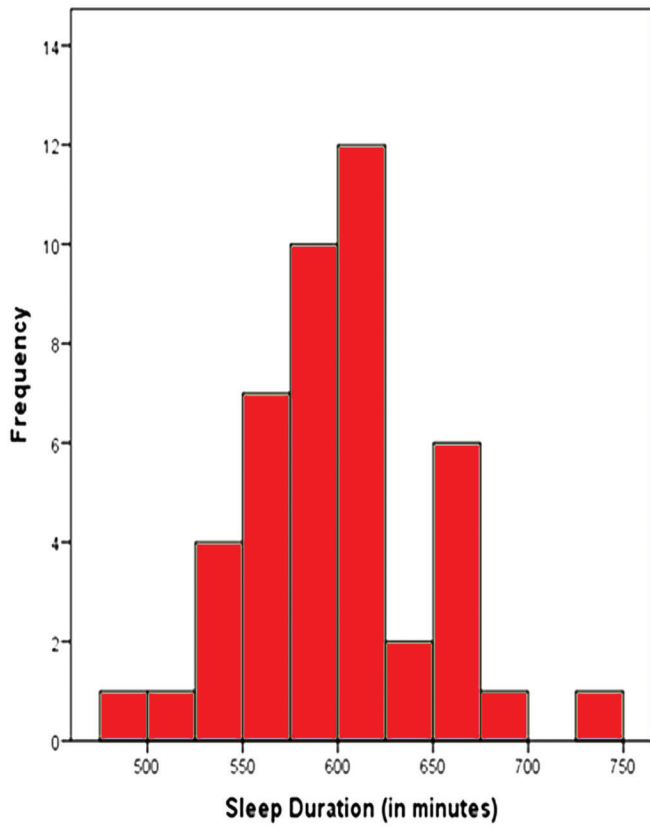
Toddler Sleep Behaviors: Videosomnography and Parent-Report Diary Comparisons

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Parent-report diaries are often used to measure toddler sleep behaviors. Previous literature supports supplementing these sleep diaries with more objective sleep assessments such as videosomnography, which allows reliable observers to determine whether a child is awake or asleep with time-lapsed video recordings. However, little research has been conducted to determine how sleep estimates obtained by videosomnography compare with other sleep assessment methods. The present study compared child sleep estimates obtained from parent-report diaries to home-based videosomnography. Participants were selected from a larger longitudinal study assessing children's sleep at 24 or 36 months of age. Fifty-nine families completed at least three nights of videosomnography and parent-report diaries. Analyses included paired-sample t tests and Wilcoxon rank-sum tests. Mean estimates of sleep duration, sleep onset, morning rise

time, and number and duration of awakenings were slightly different across the two methods. Although many of these differences were statistically significant, they were not meaningful in practical terms (e.g., parents reported awakenings that were 4 minutes longer on average). Thus in this sample, parent-report sleep estimates were functionally comparable to videosomnography estimates. While this study is a preliminary step in comparing estimates from sleep diaries to videosomnography in pediatric populations, more research is needed to evaluate the strengths and weaknesses of each method as an accurate indicator of a toddler's sleep quality and sleep behaviors.

Research advisor A. J. Schwichtenberg writes, "Tara's ambitious research project explored statistical and clinically meaningful differences between two sleep assessment methods: videosomnography and parent-report diaries. Her detailed assessment of the sleep data supports the use of parent-report sleep diaries. Tara's work has direct clinical implications and may help inform practice guidelines for toddler sleep assessments."



Mean sleep duration as reported by videosomnography (left) and parent-report diaries (right).