

# Links between sleeping patterns, childcare, and locomotor experience

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## BACKGROUND

The Play and Learning Across a Year (PLAY) project is meant to inform us of how children 12, 18, and 24 months old learn through natural PLAY.

The purpose of this research is to examine whether there is a correlation between the number of hours a child gets of sleep at night, the type of childcare environment they experience and the amount of time it took the child to transition from crawling to walking.

## PREDICTIONS

It was expected to see that those children who sleep longer at night and are in a childcare center would have the shortest transition time from crawling to walking.

## METHODS

Parent questionnaire data from the PLAY Pilot study [1] was examined. We began by examining how many months a child was when they began crawling and how many months they were when they began walking. We took the time difference and from there, we analyzed the child's method of childcare. A graph was created to observe if the correlations predicted were present. R [2] was used to organize the data, to produce graphs, and determine the outcome.

## DATA SHARING

Movies of the displays, metadata about the participants, and raw data files are available at: <https://nyu.databrary.org/volume/444>. This is a private repository. Full reports of our data analysis workflows are available at: <http://github.com/gilmore-lab/psi-chi-2019>

## ACKNOWLEDGEMENTS

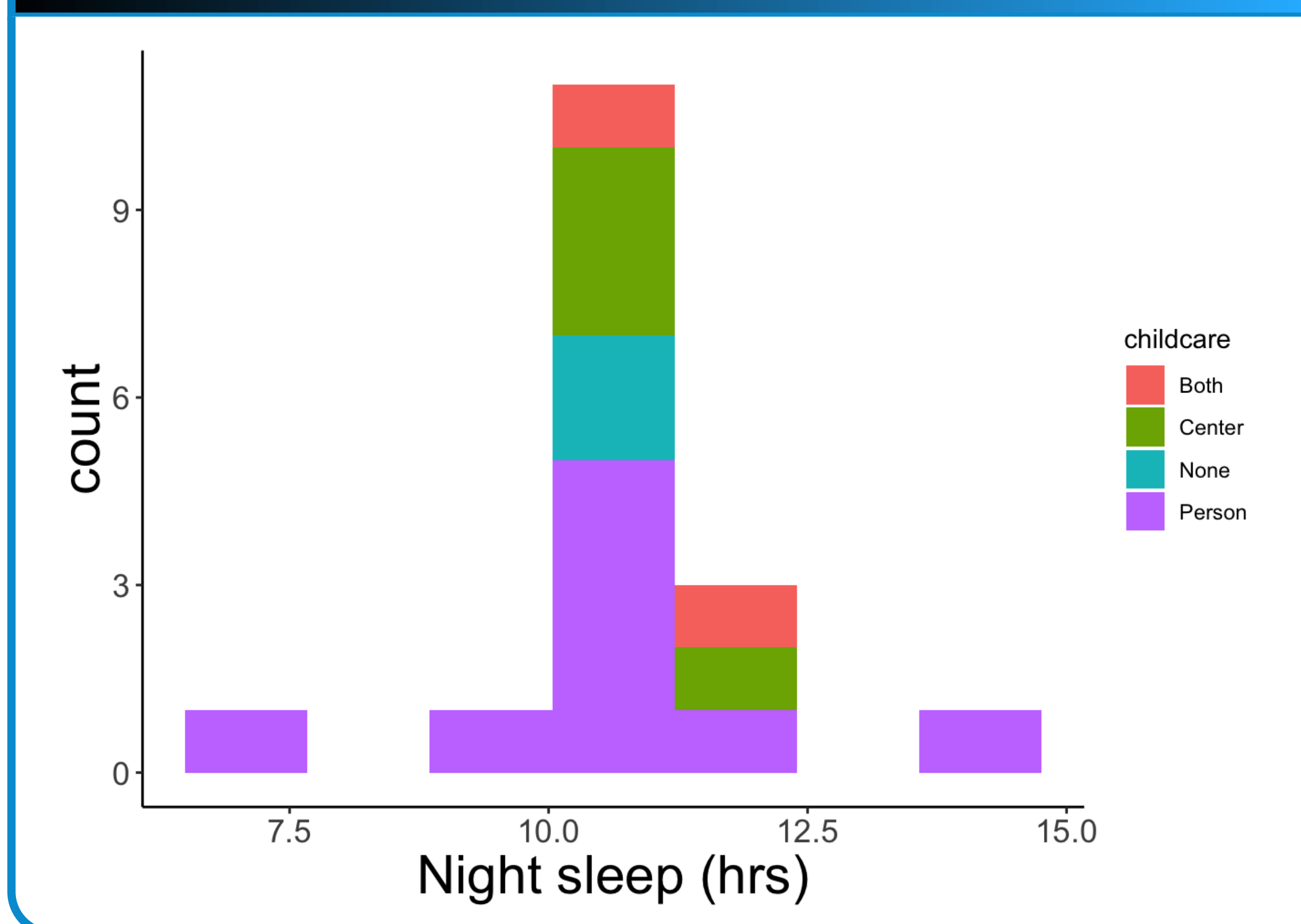
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## RESULTS AND DISCUSSION

Based on the results depicted in figures 1, 2, and 3, we did not find the predicted relationship between locomotor experience and night-time sleep.

However, this kind of research is an important contribution, especially to developmental psychology and physiological psychology. The primary purpose was to explore links between the amount of time a child spends sleeping at night, the type of childcare arrangement they experience, and how that correlates with the amount of time it takes the child to transition from crawling to walking. This can help us understand how possible relationships between locomotion and external factors, such as childcare type, play a role in development.

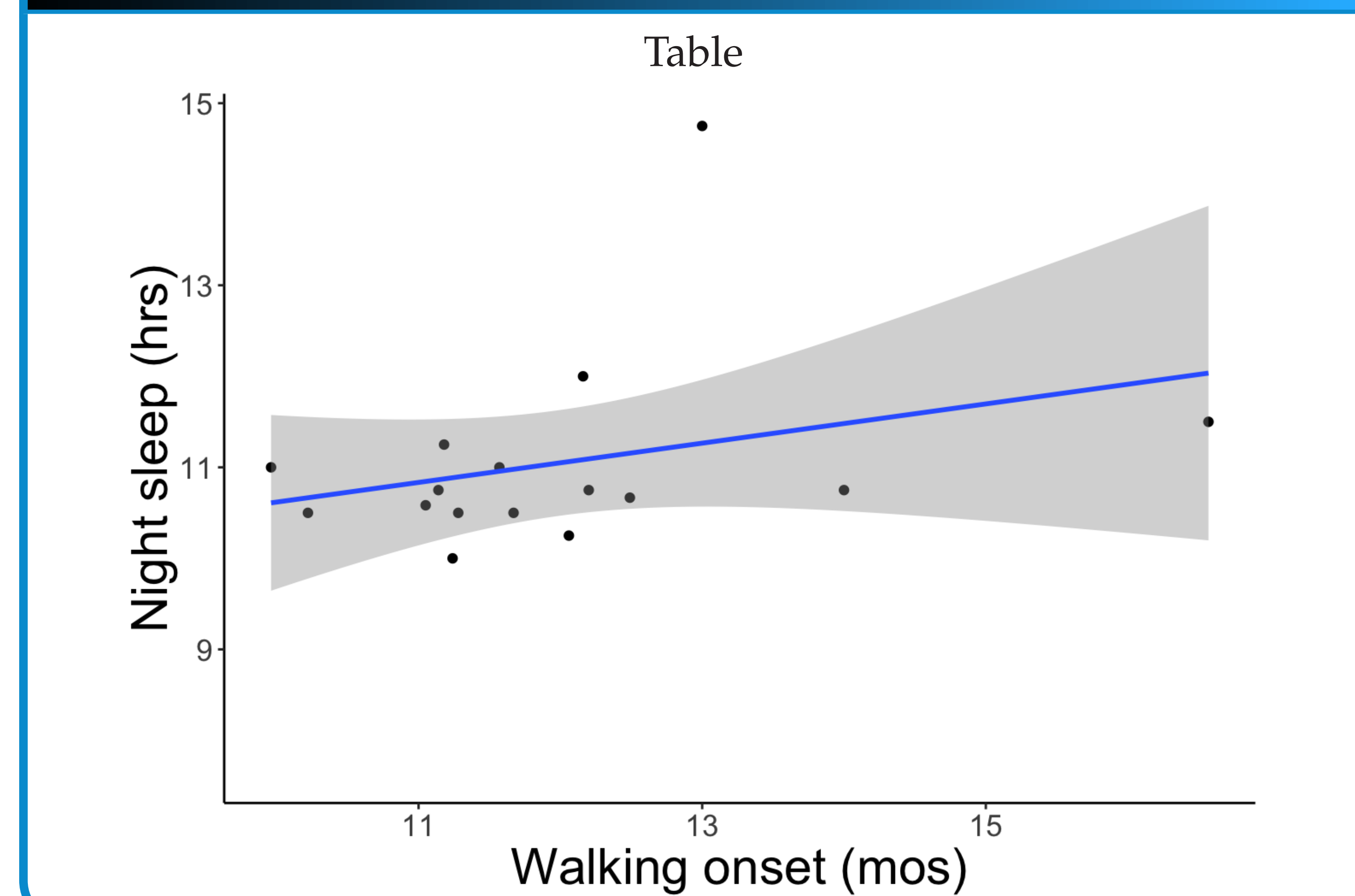
## FIGURE 1: SLEEP AND CHILDCARE



## REFERENCES

- [1] K. Adolph and K. Soska, "Play project: Solitary dyadic pilots," 2018. [Online]. Available: <http://databrary.org/volume/761>
- [2] RStudio Team, *RStudio: Integrated Development Environment for R*, RStudio, Inc., Boston, MA, 2016. [Online]. Available: <http://www.rstudio.com/>

## FIGURE 2: SLEEP BY WALKING ONSET



## FIGURE 3: SLEEP BY CRAWLING EXPERIENCE

