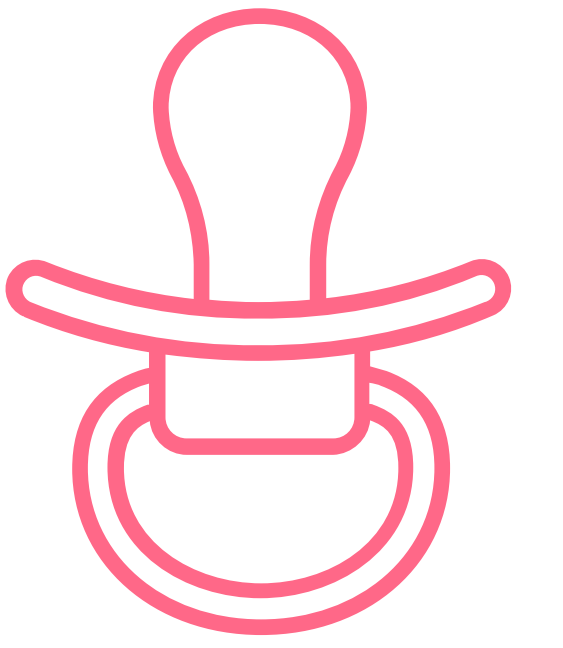
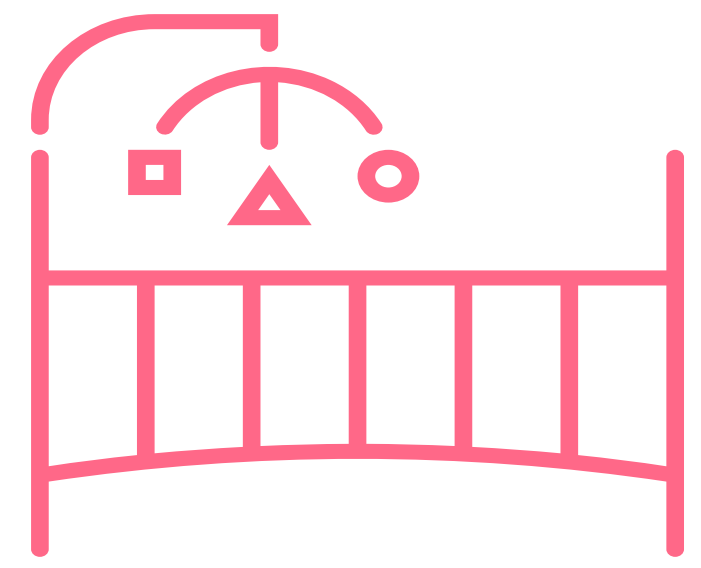


The Links Between Infant Use of Pacifiers and Swaddling with Infant Sleep Arousal

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Purpose

- We hope to provide knowledge to parents and caregivers with children of these ages about using pacifiers and swaddles as they relate to child sleep arousal.

Background Literature

- Infants require an estimated 10 to 18 hours of sleep for proper growth and development, which decreases in toddlerhood to an average of 8.5 to 11 hours (Bruni et al., 2014).
- Decreasing child sleep arousal is pertinent to encouraging better sleep practices in children, and this can be achieved by utilizing self-soothing devices and soothing behaviors (Moon et al., 2016; Öztürk Dönmez & Bayik Temel, 2019).
- Pacifier use decreases child arousal during sleep and offers increased protection against SIDS for children in adverse sleeping environments (Moon et al., 2011).
- The swaddling technique promotes better sleep within children by decreasing the likelihood of waking, reducing the startle reflex, and providing comfort (Kelly et al., 2016).

Participants

- 24 English-speaking adults who are primary caregiver of a child 1 to 24 months of age.
- Recruited through physical and digital flyers posted at various locations and on various social media platforms.

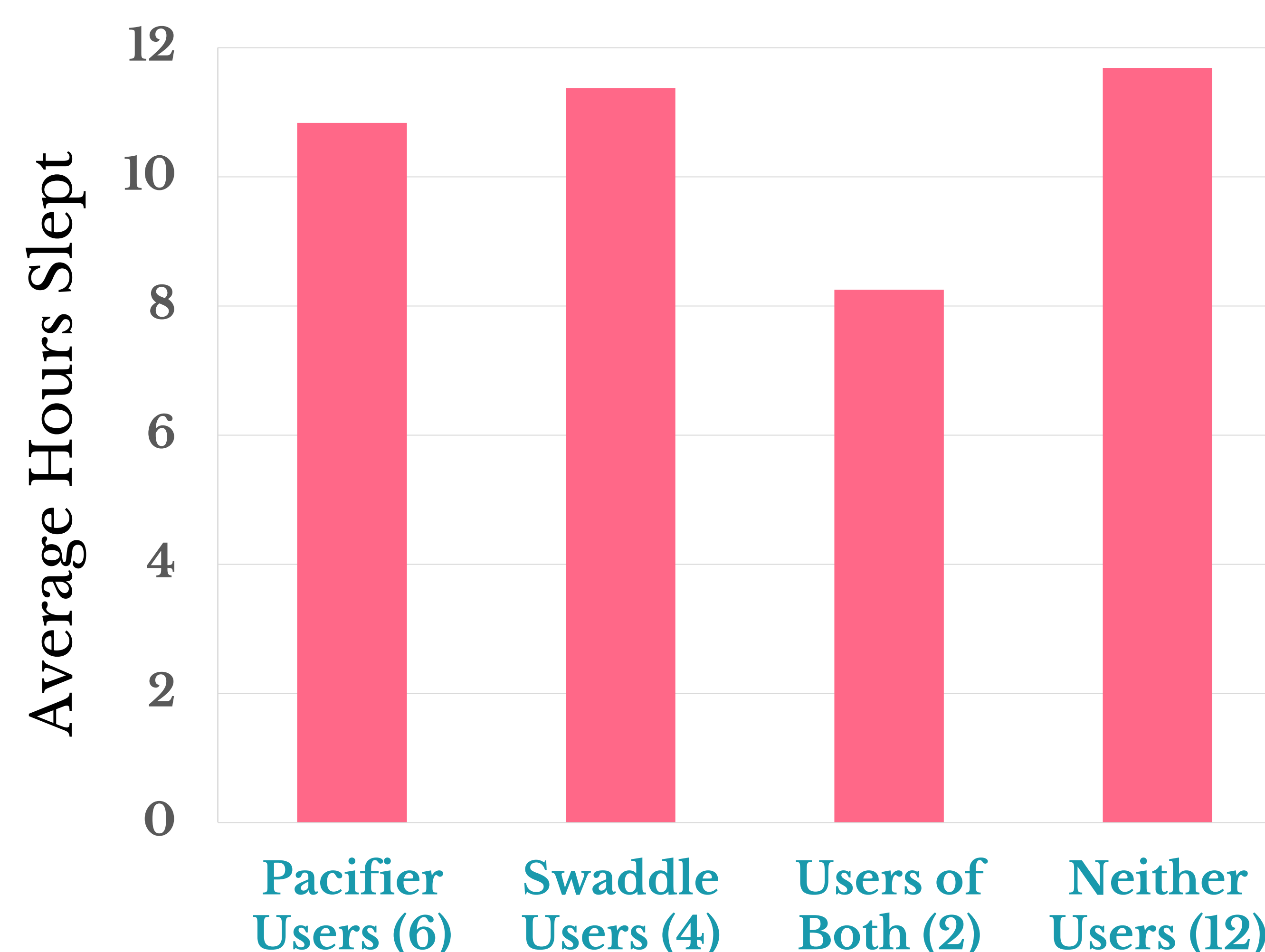
Method

- Participants took an online survey with questions about the caregiver's child and their nighttime sleep routines.
- Select questions from the Brief Infant Sleep Questionnaire-Revised (BISQ-R; Sadeh et al., 2020) was included to examine the arousal responses of the child with the engagement in caregiver soothing behaviors.

Preliminary Findings

- The average number of young children sleep in the night was 11.14 hours ($SD = 1.43$).
- Modes for the number of hours of sleep young children got were 10.5 and 11 hours.
- 87.5% of children awoke at least once during the night.

Average Hours of Sleep of Pacifier and Swaddle Users



Discussion

Limitations

- Working on a limited time schedule.
- Recruiting only from one Goddard School location.
- Participants completion of survey.

Current Conclusions

- Self-soothing devices and soothing behaviors/techniques have some impact on sleep arousal.
- Future research should look more into this impact and the specific impact of other devices, behaviors, and techniques.

References

- Bruni, O., Baumgartner, E., Sette, S., Ancona, M., Caso, G., Di Cosimo, M. E., Mannini, A., Ometto, M., Pasquini, A., Ulliana, A., & Ferri, R. (2014). Longitudinal study of sleep behavior in normal infants during the first year of life. *Journal of Clinical Sleep Medicine*, 10(10), 1119-1127. <https://doi.org/10.5664/jcsm.4114>
- Kelly, B. A., Irigoyen, M. M., Pomerantz, S. C., Mondesir, M., & Isaza-Brando, N. (2016). Swaddling and infant sleeping practices. *Journal of Community Health*, 42(1), 10-14. <https://doi.org/10.1007/s10900-016-0219-1>
- Moon, R. Y., Darnall, R. A., Feldman-Winter, L., Goodstein, M. H., & Hauck, F. R. (2016). SIDS and other sleep-related infant deaths: Updated 2016 recommendations for a safe infant sleeping environment. *Pediatrics*, 138(5), 1-12. <https://doi.org/10.1542/peds.2016-2938>
- Moon, R. Y., Tanabe, K. O., Yang, D. C., Young, H. A., & Hauck, F. R. (2011). Pacifier use and SIDS: Evidence for a consistently reduced risk. *Maternal and Infant Health Journal*, 16(3), 609-614. <https://doi.org/10.1007/s10995-011-0793-x>
- Öztürk Dönmez, R., & Bayik Temel, A. (2019). Effect of soothing techniques on infants' self-regulation behaviors (sleeping, crying, feeding): A randomized controlled study. *Japan Journal of Nursing Science*, 16(4), 407-419. <https://doi.org/10.1111/jjns.12250>
- Sadeh, A., Mindell, J. A., & Tikotzky, L. (2020). *Brief Infant Sleep Questionnaire-Revised*. Pediatric Sleep Council. <https://www.babysleep.com/wp-content/uploads/2020/02/BISQ-R-Jan-2020-final.pdf>