

Babies (and mobiles) can lead to 'daytime dysfunction'

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Parents of infants with sleep trouble have increased risk of daytime dysfunction, including work and driving performance.

New Flinders research has also measured the effects of sleep disruption from waking up regularly to deal with text messages during the night.

The research was among the key presentations at the national Sleep DownUnder 2019 conference—and international World Sleep 2019 Conference in Vancouver.

Poor infant sleep deprives parents

The study found sleep-deprived [parents](#) are three times at risk of experiencing daytime dysfunction compared to the parents of infants without [sleep problems](#).

Further, as infants continue to have sleep problems, the likelihood of parents reporting daytime dysfunction increases by 14 percent per month.

Daytime dysfunction can impede activities including driving and occupational performance and, with sleep problems prevalent in 20-30 percent of infants, potentially impacts a significant portion of parents.

Flinders University sleep researchers partnered with New York-based tech company Nanit for this new sleep research study that links infant sleep troubles and daytime dysfunction among parents.

The paper—titled "Are parents of infants with sleep problems at risk for daytime dysfunction?", by lead author Meg Pillion from Flinders University—was presented at the World Sleep 2019 Conference.

The study used Nanit's smart baby monitors to track infant sleep quality across 619 families and automatically analyze the data with its computer vision algorithm.

A Brief Infant Sleep Questionnaire was then used to measure the presence of infant sleep problems as reported by parents. To measure parents' daytime dysfunction, researchers utilized a sub-component of the Pittsburgh Sleep Quality Index (PSQI).

Co-author Professor Michael Gradisar, Clinical Psychologist at the Child and Adolescent Sleep Clinic at Flinders University, says using the Nanit camera system and AI allows for objective measurement of both the infants' sleep quality and parents' behavior.

"This is going to give researchers insights that we've not had on this scale before. It will ultimately lead us to provide parents with the best advice to improve their infant's sleep health," says Professor Gradisar.

Flinders University and Nanit are collaborating on another study to provide objective evidence demonstrating the link between parental

involvement and deficient infant sleep, finding that parental night-time visits were more frequent for younger infants, as well as for [infants](#) with poorer sleep quality.

"We have so many questions that can now be answered by leveraging Nanit's technology," says Dr. Michal Kahn, a co-author on the study and a postdoctoral fellow at Flinders University.

"We're looking forward to doing many more innovative projects together."

One in five Aussies wake to text

Meanwhile, researchers at the Adelaide Institute of Sleep Health at Flinders University have found Australians routinely wake up to send and receive texts messages long after lights out.

After questioning 2044 adults about their use of electronic devices after going to sleep, the research found late-night texting and emailing regularly disturbs the sleep of Australians from adolescence and beyond.

"We found that one in five adults reported waking or being woken to send and receive emails and messages on social media two to three nights or more in the past week," says lead researcher Dr. Sarah Appleton. "One in 20 did this most or every night."

These people were two to six times more likely to report adverse daytime functional outcomes due to sleepiness or a sleep problem including having or nearly having a motor vehicle accident, work absenteeism and errors, falling asleep on the job and missing social activities.

"We also found an increased likelihood of having mood, motivation, and concentration problems in those frequently using their technology," Dr. Appleton says.

These outcomes were not limited to young adults, with adults 55 years and older experiencing device disturbance. The research team called for new public health strategies aimed across the age spectrum to encourage people to switch off, turn

down or relocate their electronic devices or phones to another room at bedtime.

Provided by Flinders University

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