

Researchers identify distinct sleep types and their impact on long-term health

March 12 2024, by Mary Campbell



Credit: Unsplash/CC0 Public Domain

Poor sleep habits are strongly associated with long-term chronic health conditions, according to decades of research. To better understand this relationship, a team led by researchers in Penn State's College of Health

and Human Development identified four distinct patterns that characterize how most people sleep. These patterns are also predictive of long-term health, the researchers said.

Soomi Lee, associate professor of [human development](#) and [family studies](#) at Penn State, led a team in identifying these sleep patterns and their correlation to overall health. Their results were published in [Psychosomatic Medicine](#).

Using a national sample of adults from the [Midlife in the United States study](#), the team gathered data on approximately 3,700 participants' sleep habits and their [chronic health conditions](#) across two time points 10 years apart. The data included self-reported sleep habits, including sleep regularity and duration, perceived sleep satisfaction and daytime alertness, as well as the number and type of chronic conditions.

Researchers used the data to identify four different sleep patterns:

- Good sleepers, who are characterized by optimal sleep habits across all datapoints.
- Weekend catch-up sleepers, who are characterized by irregular sleep, specifically short average sleep duration, but longer sleep times on weekends or non-workdays.
- Insomnia sleepers, who are characterized by sleep problems related to clinical insomnia symptoms, including short sleep duration, high daytime tiredness and a long time to fall asleep.
- Nappers, who are characterized by mostly good sleep but frequent daytime naps.

Researchers found that more than half of participants were identified as

insomnia sleepers or nappers, both of which are suboptimal sleep patterns. Additionally, being an insomnia sleeper over the 10-year period was associated with a significantly higher likelihood of chronic health conditions, including cardiovascular disease, diabetes and depression.

Results also showed that people were unlikely to change their sleep pattern over the course of the 10 years. This was especially true for insomnia sleepers and nappers. The MIDUS study may not represent the entire population, researchers said, as it primarily comprises [healthy adults](#), but—despite this—most participants displayed suboptimal insomnia sleeper or napper sleep patterns.

"These results may suggest that it is very difficult to change our sleep habits because sleep health is embedded into our overall lifestyle. It may also suggest that people still don't know about the importance of their sleep and about sleep health behaviors," Lee said. "We need to make more efforts to educate the public about good sleep health. There are sleep hygiene behaviors that people could do to improve their sleep, such as not using cell phones in bed, exercising regularly and avoiding caffeine in the late afternoon."

While the sleep patterns were seemingly not age-related, researchers found that older adults and retirees were more likely to be nappers. They also found that those with less education and those facing unemployment were more likely to be [insomnia](#) sleepers.

According to Lee, the fact that phase of life and [economic conditions](#) can influence longstanding sleep patterns suggests that societal and neighborhood influences—including economic stressors and access to health resources—may have significant effects on individual health and, in this case, sleep habits.

All these findings strongly suggest the need for programs and

interventions to promote healthy sleep and sleep habits, the researchers said. The identification of distinct [sleep patterns](#) also suggests that these [prevention programs](#) should not be one-size-fits-all and can be targeted based on a variety of factors, including the risk of chronic conditions and socioeconomic vulnerability.

"Sleep is an everyday behavior," Lee said. "Sleep is also modifiable. So if we can improve sleep almost every day, what outcomes might we see after several months, or even several years? Better sleeping habits can make many significant differences, from improving [social relationships](#) and work performance to promoting long-term healthy behaviors and healthy aging."

More information: Soomi Lee et al, 10-year Stability of an Insomnia Sleeper Phenotype and Its Association with Chronic Conditions, *Psychosomatic Medicine* (2024). [DOI: 10.1097/PSY.0000000000001288](https://doi.org/10.1097/PSY.0000000000001288)

Provided by Pennsylvania State University

Citation: Researchers identify distinct sleep types and their impact on long-term health (2024, March 12) retrieved 27 April 2024 from <https://medicalxpress.com/news/2024-03-distinct-impact-term-health.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--