

## Bidirectional Associations of Sleep With Cognitive Interference in Employees' Work Days



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### **BACKGROUND**

*“We all need to sleep everyday but these days sleep time is often in competition with waking time because most people fear they don't have enough time to do everything during the day.” - Dr. Lee*

Past research has shown that acute sleep deprivation has negative effects on an individual's mental performance. However, there hasn't been any research done that observes people's sleep behavior. This study provides evidence that poor sleep and not being able to recover from that loss of sleep negatively affects workers' mental ability the next day, and even predicts earlier bedtimes in an attempt to catch up. This evidence means that sleep predicts and is predicted by our daily mental health and functioning.

This research focuses on midlife adults ranging in age from 35 to retirement age. It's imperative for this group of people to get good sleep because they are still in the workforce, still raising families and still needing to function at peak performance levels. Poor sleep in midlife predicts poor health in later life. About 40% of midlife workers report having insomnia symptoms.

*“If many midlife workers have poorer daily functioning because of their lack of sleep or poor quality sleep, it can have a huge impact in our society.” - Dr. Lee*

While it's known that everyone needs sleep, people often forget its importance. Sleep often suffers when people are worried they won't accomplish enough during the day or the stressors of daily life keep them awake. Sleep education is important for all age groups, but learning how to get good sleep is even more important for younger generations because it's a daily, routine behavior that is best developed early in life.

### **STUDY METHOD**

This study used a sample of 131 midlife information technology employees with at least one child still living at home. These 131 participants had interviews with researchers and then completed a daily diary describing their sleep and daily events the month after their interview. Researchers also telephoned participants on eight consecutive evenings and asked about their daily experiences, including sleep, and their mental state.

### **FINDINGS**

*“Everyone has heard you need to rest up for the next day, but there's actually little scientific research to support this age-old advice.” - Dr. Lee.*

Participants reported that when they had a poor night's sleep they experienced intrusive and ruminative thoughts during their workday, meaning they spent a considerable amount of time over-analyzing situations and dwelling on negative thoughts, which affected their concentration while on the clock.

Researchers concluded that sleep was associated with experiencing stress. Sleep and stress operate in a vicious cycle, each one contributing to the other. After a long day's work full of negative, intrusive thoughts on a poor night's sleep, participants reported going to bed earlier the next night. Not only did poor sleep predict their earlier bedtimes, but after a bad night's sleep, participants felt stress in anticipation of the next day. This suggests that sleep is related to human functioning and ability. It can be difficult for individuals who are always trying to "catch up" on their sleep to get out of the cycle.

### **FUTURE IMPLICATIONS**

*"Sleep is a personal domain. We need individual efforts to improve individuals' sleep." -Dr. Lee*

Workers cannot significantly improve their sleep on their own. Because sleep is embedded in work

and family life, employers play a role in improving the sleep health of their workforce. This has the potential to benefit both the worker and the employer because poor sleep is associated with job commitment - or lack thereof.

Solutions could include employers' urging employees to extend their nighttime sleep by one hour or creating nap pods in their offices to enable workers to rest and rejuvenate.

- Amy Haywood

### **ORIGINAL ARTICLE:**

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