

Better sleep is associated with improved academic success

June 10 2009

Getting more high-quality sleep is associated with better academic performance, according to new research. The positive relationship is especially relevant to performance in math.

Results indicate that higher math scores were related to greater sleep quality, less awakenings and increased sleep efficiency. Higher English and history scores were associated with less difficulty awakening. Increased sleep-onset latency over the weekend was associated with worse [academic performance](#).

According to principal investigator Jennifer C. Cousins, PhD, postdoctoral fellow at the University of Pittsburgh Medical Center, it was surprising that although more and better sleep produced overall improvements, different types of sleep measures were related to different types of functioning.

"Sleep deficits cause problems for adolescents, but students differ in their personal resources and in how chaotic their sleep-wake schedules are," said Cousins. "The more regular and predictable their sleep is, the better they are likely to do when confronted with short-term sleep deficits. Therefore, participants with better sleep overall may be affected differently in a sleep condition compared to those who have a more varying sleep/wake schedule."

The study involved data from 56 adolescents (34 female) between the ages of 14 and 18 years who had complaints of daytime sleepiness and or

insufficient sleep at night. Participants reported their subject grades and overall academic standing. Sleep was measured objectively with actigraphy and subjectively through sleep diaries.

Higher math scores were related to less night awakenings, less time spent in bed, higher sleep efficiency and great sleep quality; there was also a trend for decreased sleep onset latency (SOL). Higher scores in English were associated with less nighttime awakenings. Increased SOL during the weekends was related to worse academic performance.

According to Cousins, poor sleep and poor sleep habits are associated with substance use, emotional problems, cognitive problems and a general decline in daily functioning. Sleep education may be a preventative tool to help increase awareness of the importance of sleep and of the negative consequences of poor sleep.

Authors of the study state that results provide overwhelming evidence of the importance of sleep during a period of development that is critical in adolescents and highlight the importance of the development of sleep intervention programs for students in order to improve existing problems with sleep and daily functioning.

Source: American Academy of [Sleep](#) Medicine ([news](#) : [web](#))

Citation: Better sleep is associated with improved academic success (2009, June 10) retrieved 6 February 2023 from <https://medicalxpress.com/news/2009-06-academic-success.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>
--