

Sleep tight and stay bright? 'Investing' in sleep may help later in life

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Sound sleep in young and middle-aged people helps memory and learning, but as they hit their seventh, eighth and ninth decades, they don't sleep as much or as well—and sleep is no longer linked so much to memory, a Baylor researcher says.

That raises an "alluring question"—whether improving <u>sleep</u> early in life might delay, or even reverse, age-related changes in <u>memory</u> and thinking, said Michael K. Scullin, Ph.D., director of Baylor University's Sleep Neuroscience and Cognition Laboratory, who examined 50 years of <u>sleep research</u> for an article in the journal *Perspectives on Psychological Science*.

"It's the difference between investing up front rather than trying to compensate later," said Scullin, assistant professor of psychology and neuroscience in Baylor's College of Arts & Sciences. "We came across studies that showed that sleeping well in middle age predicted better mental functioning 28 years later."

The article—"Sleep, Cognition, and Normal Aging: Integrating a Half Century of Multidisciplinary Research"—notes that the benefits of a sound night's sleep for young adults are diverse and unmistakable. One example is that a particular kind of "deep sleep" called "slow-(brain)-wave-sleep" helps memory by taking pieces of a day's experiences, replaying them and strengthening them for better recollection.

By the time people reach middle age, more sleep during the day, such as an afternoon nap, also helps people's memory and protects against its decline—as long they don't skimp on nighttime sleep.

But as they grow older, people wake up more at night and have less <u>deep sleep</u> and dream sleep—both of which are important for overall brain functioning, Scullin said.

Researchers' extensive review began with studies as long ago as 1967, including more than approximately 200 studies measuring sleep and mental functioning. Participants ages 18 to 29 were categorized as young; ages 30 to 60 as middleaged; and older than 60 as old.

Participants were asked how many hours they typically slept, how long it takes them to go to sleep, how often they wake in the middle of the night and how sleepy they feel during the day. The research also correlated results from numerous brain-wave studies and experiments dealing with sleep deprivation, napping and sleep intervention, such as sleep medications.

Scullin noted that if a person lives 85 years, he or she may sleep nearly 250,000 hours - more than 10,000 full days.

"People sometimes disparage sleep as 'lost' time," he said. But even if the link between sleep and memory lessens with age, "sleeping well still is linked to better mental health, improved cardiovascular health and fewer, less severe



disorders and diseases of many kinds."

Provided by Baylor University

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