

Sleep vital for learning, memory and healthy heart-rate

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Sleep is known to [aid memory and learning](#). For example, people who learn something, sleep on it, and are tested on the material after they wake up tend to perform better than those who remain awake in the interim.

Within that general phenomenon, however, there's a lot of unexplained variation. Sleep researcher Sara Mednick wondered "what else might be going during that sleep period that helps people's memories." As it turns out, activity of the autonomic nervous system (ANS) explains a large part of this variation.

The researchers measured not only the electrical activity of the brain during sleep, but also that of the heart, providing an indicator of ANS activity. They found that the beat-to-beat variation in heart rate accounted for much of the previously unexplained variation in how well people performed on memory and creativity tests following a nap.

"There is a good possibility that this additional measure [heart-rate variability] may help account for discrepant findings in the sleep-dependent memory consolidation literature," stated sleep and cognition researcher [Rebecca Spencer](#).

Read full, original post: [Examining Sleep's Roles in Memory and Learning](#)