

Hypnosis extends restorative slow-wave sleep

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Credit: xiaphias/Wikipedia

Sleeping well is a crucial factor contributing to our physical and mental restoration. SWS in particular has a positive impact for instance on memory and the functioning of the immune system. During periods of SWS, growth hormones are secreted, cell repair is promoted and the defence system is stimulated. If you feel sick or have had a hard working day, you often simply want to get some good, deep sleep. A wish that you can't influence through your own will – so the widely held preconception.

Sleep researchers from the Universities of Zurich and Fribourg now prove the opposite. In a study that has now been published in the scientific journal *Sleep*, they have demonstrated that [hypnosis](#) has a positive impact on the quality of [sleep](#), to a surprising extent. "It opens up new, promising opportunities for improving the quality of sleep without drugs", says biopsychologist Björn Rasch who heads the study at the Psychological Institute of the University of Zurich in conjunction with the "Sleep and Learning" project.

Brain waves – an indicator of sleep quality

Hypnosis is a method that can influence processes which are very difficult to control voluntarily. Patients with [sleep disturbances](#) can indeed be successfully treated with hypnotherapy. However, up to now it hadn't been proven that this can lead to an objectively measurable change in sleep. To objectively measure sleep, [electrical brain activity](#) is recorded using an electroencephalogram (EEG). The characteristic feature of slow-wave sleep, which is deemed to have high restorative capacity, is a very even and slow oscillation in electrical brain activity.

70 healthy young women took part in the UZH study. They came to the sleep laboratory for a 90-minute midday nap. Before falling asleep they listened to a special 13-minute slow-wave sleep hypnosis tape over loudspeakers, developed by hypnotherapist Professor Angelika Schlarb, a sleep specialist, or to a neutral spoken text. At the beginning of the experiment the subjects were divided into highly suggestible and low suggestible groups using a standard procedure (Harvard Group Scale of Hypnotic Susceptibility). Around half of the population is moderately suggestible. With this method women achieve on average higher values for hypnotic susceptibility than men. Nevertheless, the researchers expect the same positive effects on sleep for highly suggestible men.

Slow-wave sleep increased by 80 percent

In their study, sleep researchers Maren Cordi and Björn Rasch were able to prove that highly suggestible women experienced 80 percent more slow-wave sleep after listening to the hypnosis tape compared with sleep after listening to the neutral text. In parallel, time spent awake was reduced by around one-third. In contrast to highly suggestible women, low suggestible female participants did not benefit as much from hypnosis. With additional control experiments the psychologists confirmed that the beneficial impact of hypnosis on slow-wave sleep could be attributed to the hypnotic suggestion to "sleep deeper" and could not be reduced to mere expectancy effects.

According to psychologist Maren Cordi "the results may be of major importance for patients with [sleep problems](#) and for older adults. In contrast to many sleep-inducing drugs, hypnosis has no adverse side effects". Basically, everyone who responds to hypnosis could benefit from improved sleep through hypnosis.

More information: Maren Cordi, Angelika Schlarb, Björn Rasch. "Deepening sleep by hypnotic suggestions." *Sleep*. 37(6). June 1, 2014. [dx.doi.org/10.5665/sleep.3778](https://doi.org/10.5665/sleep.3778)

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