## Rock me gently: swaying makes us nod off quicker and helps memory

**Rhys Blakely, Science Correspondent** January 24 2019, 5:00pm, The Times



A study showed that being rocked helped volunteers sleep better and made them more alert the next morning ALAMY

It is not only babies who benefit from being rocked to sleep: scientists have found that being gently swayed while you slumber boosts memory in adults.

Being rocked softly and continuously through the night also appeared to induce a deeper sleep, according to research. The new study explored the effects of rocking on sleep and brainwaves throughout the night.

Researchers recruited 18 healthy young adults for sleep monitoring. They slept under observation for three nights. The first was intended to get them used to sleeping in a new place. On one of the other nights they slept on a bed that moved gently from side to side with a pendulum-like motion, by about 10cm every four seconds. On the other night they slept on an identical bed that did not move.

The scientists found that the participants fell asleep faster when they were rocked. Once asleep, they also spent more time in deep, non-rapid eye movement sleep, slept more deeply and woke less. Laurence Bayer, of the University of Geneva, co-authored the study, which was published in the journal *Cell*. He said: "They had longer periods of deep sleep and fewer microwakes, a factor frequently associated with poor sleep quality.

Our volunteers — even if they were good sleepers — fell asleep more rapidly when rocked and had longer periods of deeper sleep associated with fewer arousals during the night. We thus show that rocking is good for sleep."

Before you dust down your hammock, however, you will need something a little more high-tech to gain any benefits. One American company makes "rocking beds" with an electric device oscillating gently from side to side. The king-size version costs £2,600.

The scientists hope that the work will open new avenues of non-drug treatment for people with insomnia, and for older people who suffer from decreased deep sleep and memory impairments.

To assess the effects on memory, the volunteers were asked to learn pairs of words. The researchers measured their accuracy in recalling the paired words in an evening session and then the next morning. People did significantly better on the morning test after they had been rocked. Rocking was also found to be linked to brainwaves associated with helping memory.

The same scientists had previously shown that continuous rocking during a 45minute nap helped adults fall asleep faster and sleep more soundly.

Lack of sleep accelerates the spread of a toxic protein linked to Alzheimer's disease in the brain, research suggests. A study published in the journal *Science* found that sleep deprivation was linked to the spread of clumps of tau protein in the brains of mice. Tau is known to form tangles in areas of the brain important for memory in Alzheimer's patients.

Human subjects were found to have 50 per cent more tau in cerebrospinal fluid after a sleepless night. Dr David Holtzman, of the Washington University School of Medicine in St Louis, who co-authored the study, said: "We don't know yet whether getting adequate sleep will protect against Alzheimer's disease, but it can't hurt."

## **Slumber numbers**

Research by the University of Dundee showed that people who watched blackand-white television as children were more likely to dream in black-and-white as adults. About 40 per cent of Britons are said to sleep in the foetal position. The next most popular position is "the log" — lying on your side with both arms down by your side.

Couples who slept less than an inch apart were more likely to be content with their relationship than those who maintained a gap wider than 30 inches, a survey found

The same survey of 1,000 people, which was part of the Edinburgh International Science Festival in 2014, found that 42 per cent of couples laid back-to-back while 31 per cent faced in the same direction and 4 per cent faced one another.

Between 2 and 3 per cent of adults are thought to sleepwalk.