SLEEP Essay, Research Paper

Are All-nighters Really Worth It?

This article basically talks about the importance of sleep, specifically REM sleep, to transfer short-term memory to long-term memory. Researchers at Harvard University suggest that getting good sleep is necessary to convert short-term memory into long term memory. They have found that pulling all-nighters is probably not the best idea. They claim it takes at least two nights of good sleep to compensate for the lack of sleep on that night. In addition they have done test that indicate that there is a chemical that is released during dreaming that is linked to memory consolidation. They also found sleep is linked to alertness, which most of us know, and it also effects the individuals attention span. To test their theories they did an experiment that was based on visual discrimination. The subjects had to identify the orientation of three diagonal bars that were flashed in a 1/16th of a second time period. Half of the subjects stayed up until the second night, the other half were allowed to sleep. All of the subjects were allowed to sleep on the second and third nights. The forth day they were tested to see which group retained the most information. The group that slept the first night recognized the correct orientation of the bars more rapidly than they had previously recognized them on the first night of the experiment. The other subjects showed no improvement over the initial day of testing. Based on the experiment regular sleep tends to increase the transfer of short-term memory to long term memory. In addition, REM sleep does also tend to have an effect on retaining memories and memory recall. However sleeping is just one of the things that helps convert short-term memory to long-term memory. Repetition is another way to get something to go into long-term memory as well as the amount of attention you pay while you study the material.

There have been studies that contradict these findings. The author of this article draws form a noted sleep researchers book called ?The Promise of Sleep.? In the book it tells of a man that was in a war and the part of his brain that allows one to have REM sleep was wounded, therefore his ability to enter REM sleep was not possible. Remarkably the man could still learn and perform tasks that any normal person could. That is just one case but it still leaves room for experimentation in the short-term to long term question. I think the main point of this article is to show that there is a lot less value in pulling an all-nighter the night before the test than studying many days before a test and getting ample sleep so that your brain can rest

Even though most of this article provided information that was fairly widely known, I did learn that it is not a good idea to pull an all-nighter.