Sleep Tight, Catch a Light

Problem

Which person out of one who got nine hours of sleep, seven hours of sleep, and five hours of sleep will have the fastest average reaction time?

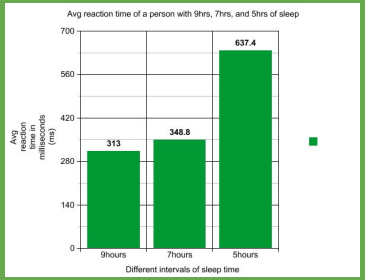
Hypothesis

If I were to test my problem, then the person who slept for nine hours will have the highest reaction time because lots of sleep heightens reflexes & response time to stimuli.

Procedures & Materials

All participants in this experiment will get their designated amounts of sleep, nine hours, seven hours, and five hours. The device will be set up to display the reaction time test, and the test will be reset each time the test is conducted/initiated. For each group we had 3 participants. Every individual was tested 5 times. Each of the participant's results will then be collected and averaged. The material we need for this experiment will be the device to display and conduct the test.

Results



Conclusion

Upon testing my problem, I came to the conclusion that someone with nine hours of sleep yielded the fastest average reaction time. As shown in my results graph, the average reaction time of the person with nine hours was three hundred and thirteen milliseconds. The major outlier in this experiment was the five hour's average reaction time, which came out to be six hundred thirty seven and four tenths.

Resources

- https://pmc.ncbi.nlm.nih.gov/articles/PMC10442850/
- https://medicine.yale.edu/news-article/sleeps-crucial-role-in-preserving-memory/
- https://sleep.hms.harvard.edu/education-training/public-education/sleep-and-health-education-program/sleep-health-education-88
- https://www.ncoa.org/article/memory-and-sleep-how-are-they-connected/
- https://kb.gcsu.edu/cgi/viewcontent.cgi?article=1006&context=thecorinthian