

CALIFORNIA STATE SCIENCE FAIR 2010 PROJECT SUMMARY

Name(s)

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Project Number

S0318

Project Title

Pinch Me. Am I Dreaming?

Objectives/Goals

All humans require sleep, but do all humans dream while sleeping? Research shows that the longer one sleeps the more REM sleep they obtain. REM is the stage when most dreams occur, and dream recall takes place. This project tested if sleep quantity affects dream recall. The hypothesis tested if a human sleeps for a longer period, then they will experience dream recall.

Abstract

Methods/Materials

62 volunteers were tested; 15 middle schoolers, 29 high schoolers and 18 adults. For 31 days, each subject recorded their quantity of sleep and if they experienced dream recall on a calendar. Weekly reminders were sent via text messages/phone calls. Fifteen random subjects from each age group were chosen as a sample group. Of the fifteen, 5 male and 5 female subjects were randomly chosen to represent gender differences in dream recall.

Results

Peak of most recalled dreams:

- # Middle School (9-10hrs) 13% dream recall
- o Male (9-10hrs) 14% dream recall
- o Female (8-9hrs) 19% dream recall
- # High School (8-9hrs) 12% dream recall
- o Male (7-8hrs) 8% dream recall
- o Female (8-9hrs) 14% dream recall
- # Adults (6-7hrs) 11% dream recall
- o Male (7-8hrs) 14% dream recall
- o Female (6-7hrs) 15% dream recall

Conclusions/Discussion

Overall, the data collected supported the hypothesis. The results showed that more sleep hours result in increased dream recall. The data showed that high schoolers tend to remember dreams more often than middle schoolers or adults despite the number of sleep hours. High schoolers recalled their dreams a total of 245 times, while middle schoolers and adults recalled their dreams a total of 200 times or less.

Summary Statement

With increased sleep hours increased dream recall will result.

Help Received

Mother helped make graphs.