Public Abstract

First Name:Sarah

Middle Name:Anne

Last Name:Lust

Adviser's First Name:Bruce

Adviser's Last Name:Bartholow

Co-Adviser's First Name:

Co-Adviser's Last Name:

Graduation Term:FS 2011

Department:Psychology

Degree:PhD

Title:To Sleep Perchance to Decide: The Effect of Sleep Deprivation on Error Reactivity

Previous research has shown that sleep deprivation can hurt a person's ability to make decisions. The focus of this research is to understand the effects of sleep deprivation on performance in a cognitive task and how a person's brainwaves might be related to that performance. Participants were healthy college students. They were assigned to either sleep for 8 hours or 4 hours for the night before the experiment. In the lab, participants completed a survey about their sleep habits. They then did the cognitive task while their electroencephalogram (EEG) was recorded. The results showed that people who slept fewer hours responded more slowly and struggled to respond accurately on certain types of trials. The 4-hour group also had more trouble correctly judging the accuracy of their responses. There appeared to be an effect of amount of sleep on brain responses but this pattern was less clear.