Do Zzzs Get Degrees?

A Study of the Relationship Between Sleep and GPA Among College Students

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Problem

- College students are prone to lacking adequate sleep due to academic and social obligations, which can leave them vulnerable to impaired learning, and in turn, lowered GPA.

Background

- Large portion of the population does not get the recommended hours of sleep per night.
- Many students report academic performance is hindered due to insufficient sleep.
- Main causes of sleep deprivation for college students: studying, socializing, other extracurricular obligations.
- Students are at increased risk for sleep disorders due to unpredictable schedules.

Purpose

- Determine if there is a positive relationship between sleep and grade point average.
- College students are commonly educated on the benefit of sleeping longer hours and the idealized 8hr night.
- With long assignments & pressure of exams, students often feel overwhelmed and unable to finish their work in time for a full night's rest.
- Aim to determine if students who choose sleep over extra studying in the night hours have higher GPAs.

Recruitment

- Recruited our participants via convenience sampling
- Students on Benedictine College campus
- Emailed online survey to the student-body in a weekly Benedictine FYI email
- Allowed students to easily access & complete the survey

Design

- Qualitative descriptive study
- Descriptive and qualitative data

Questions

What is the difference in GPA between students who sleep the recommended hours per night compared to those who get less sleep on average?

Survey questions:

- Major? GPA? Age?
- Average hours of sleep per night?
- Has your average amount of sleep decreased since college?
- Do you nap during the day? How long?
- What time do you go to bed/wake up?
- How many hours of sleep do you feel you need each night to be well rested?
- Do you keep a regular sleep/wake schedule?
- Modified Epworth Sleepiness Scale

Analysis

- Used the Pearson's R Correlation equation to find relationships among the data.
- Equation takes statistics gathered from 2 continuous variables (ex: hours of sleep and GPA), calculated with the means & standard deviations for each variable

Findings

- 188 participants: 54 male & 134 female
- Average cumulative GPA: 3.64
- Average hours of sleep per night: 6.944
- Average bedtime: 11:30pm & average wake time: 7:20am
- Non-significant correlation (r = .063) between hours of sleep & reported GPA
- Non-significant correlation (r = .063) between overall perceived sleep quality & GPA
- Significant moderate negative correlation -.341 (p=.01) with perceived quality of sleep & anxiety
- Significant correlation .272 (p = .01) between overall health & anxiety

Discussion

- While we expected strong correlation between sleep & GPA, no significant correlation was detected
- If this study were to be repeated, focusing on GPA & sleep correlation within a specific major may prove to have significant results.
- Limitations include: not representative of all majors, learning barriers (e.g. ADHD), personal life events