

# Naps Impacting School Performance

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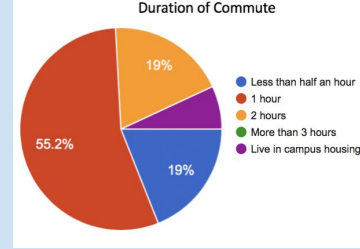
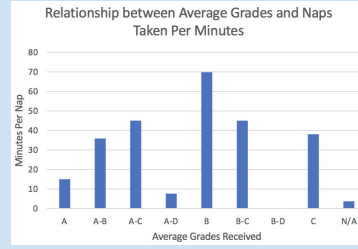
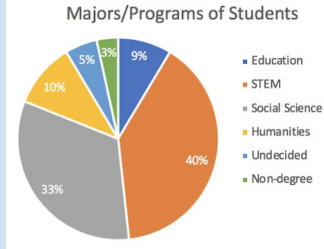
## Introduction

- Many college students do not receive sufficient amount of sleep and nap to relieve drowsiness.
- Naps can become problematic when they affect school performance.
- According to the National Sleep Foundation, an optimal nap is about twenty minutes long.
- This study analyzes the duration of naps of college students at the City College of New York, and if there is a correlation between nap duration and academic performance.
- We hypothesized students who take shorter naps or no naps at all will perform better academically.

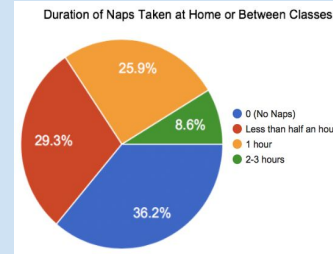
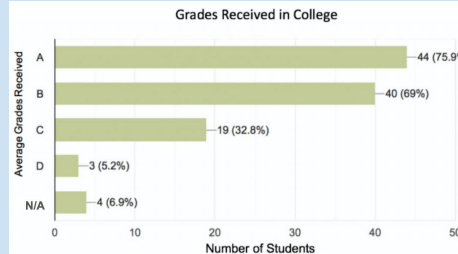
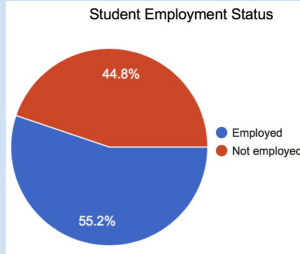
## Methods

- This study consisted of 6 questions on Google Forms survey which took place on City college Campus.
- Data was collected on cellular device in the music library, cafeteria, and courtyard.
- The disclaimer stated that questions are optional to answer.
- 58 students all above 18 years old.
- The survey analyzed participants (1) employment status, (2) commute length, (3) academic performance in high school and college, (5) nap duration, and (6) major/program part of.

## Results



- Students who received A grades, on average, napped 15 minutes.
- Students who had grades between A-B napped for 36 minutes and students who had grades between A-C napped for 45 minutes.
- Students whose grades were A-D, napped for 8 minutes.
- Participants who had a B grade had an average nap of about 79 minutes.
- Students with grades between B-C napped 45 minutes on average.
- Those with grades between B-D did not nap while participants with C grades napped for 38 minutes. Those who did not offer their grades napped for 4 minutes.



## Discussion

- Shortest nap time is correlated with best grades, supporting the hypothesis.
- Not a direct relationship between naps and grades.
- Diverse majors (pull from STEM and social science), high school grades similar to college, over half had 1 hour commute, half of students had an occupation.
- Limitations include: small sample size, false reporting, no measure for sleep duration, and external psychological factors.
- Future studies would increase sample size, be on a different campus (suburban/rural), and test for individual class grades or sleep.

## Citations

Debunking Sleep Myths: Does Napping During the Day Affect Your Sleep at Night? National Sleep Foundation [Internet]. [cited 2019 March 23]. Available from: <https://www.sleepfoundation.org/articles/debunking-sleep-myths-does-napping-du-ring-day-affect-your-sleep-night>

Driskell J, Mullen B. 2005. The Efficacy of Naps as a Fatigue Countermeasure: A Meta- Analytic Integration. Human Factors: The Journal of the Human Factors and Ergonomics Society [Internet]. [cited 2019 March 24]; 47(2):360-377. Available from: <https://journals-sagepub-com.cny-proxy1.libr.ccnycuny.edu/doi/pdf/10.1518/0018720054679498>

McDevitt E, Alaynick W, Mednick S. 2012. The effect of nap frequency on daytime sleep architecture. Physiology & Behavior [Internet]. [cited 2019 March 23]; 107(1):40-44. Available from: [https://saramednick.com/htmls/pdfs/McDevitt\\_Physiology\\_Behav\\_2012.pdf](https://saramednick.com/htmls/pdfs/McDevitt_Physiology_Behav_2012.pdf)