

A Study into how Screen Time Impacts College Students

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INTRODUCTION

Most, if not all, college students hold a smartphone, which they use for school, employment, or even enjoyment. Cell phone usage is becoming increasingly common. Cell phone dependence can develop into mobile addiction.

6.3% of the world's population is addicted to smartphones (Gomez & Smith-Slade, 2021).

An estimated 7 hours and 4 minutes per day are spent looking at a screen by the average American (Moody, 2022).

College-age students in the United States may spend an average of 8–10 hours per day using a smartphone (Roberts et al., 2014).

Our research seeks to determine if college students are addicted to their phones or if they prefer to be offline.

METHODS

To evaluate if mobile device usage was beneficial or detrimental impact on a college student's lifestyle, a survey of a **100** Harrisburg University students' daily screen use was done.

We used Google Forms to survey Harrisburg University students and additional HU community members. **"What major?" "What year are you in college?" and "What is your gender?"** After answering these three questions, the responder was asked to estimate their phone screen time the previous day. We sought to determine if the relationship between HU students and their devices was healthy or not.

RESULTS

When asked "What is your gender?" **over half of the sample size was male at 55%, females responded to our survey at 42%, and non-binary at 3%.**

Majority of responses were from "Freshmen" at 42%, and Seniors being the lowest at 22%, that is excluding the 1% obtained from a faculty member .

19% of students had the highest screentime which was between 4-5 hours, and 15% of students had a screen time between 5-6 hours; meaning, 34% of the students had an average screentime between 4-6 hours.

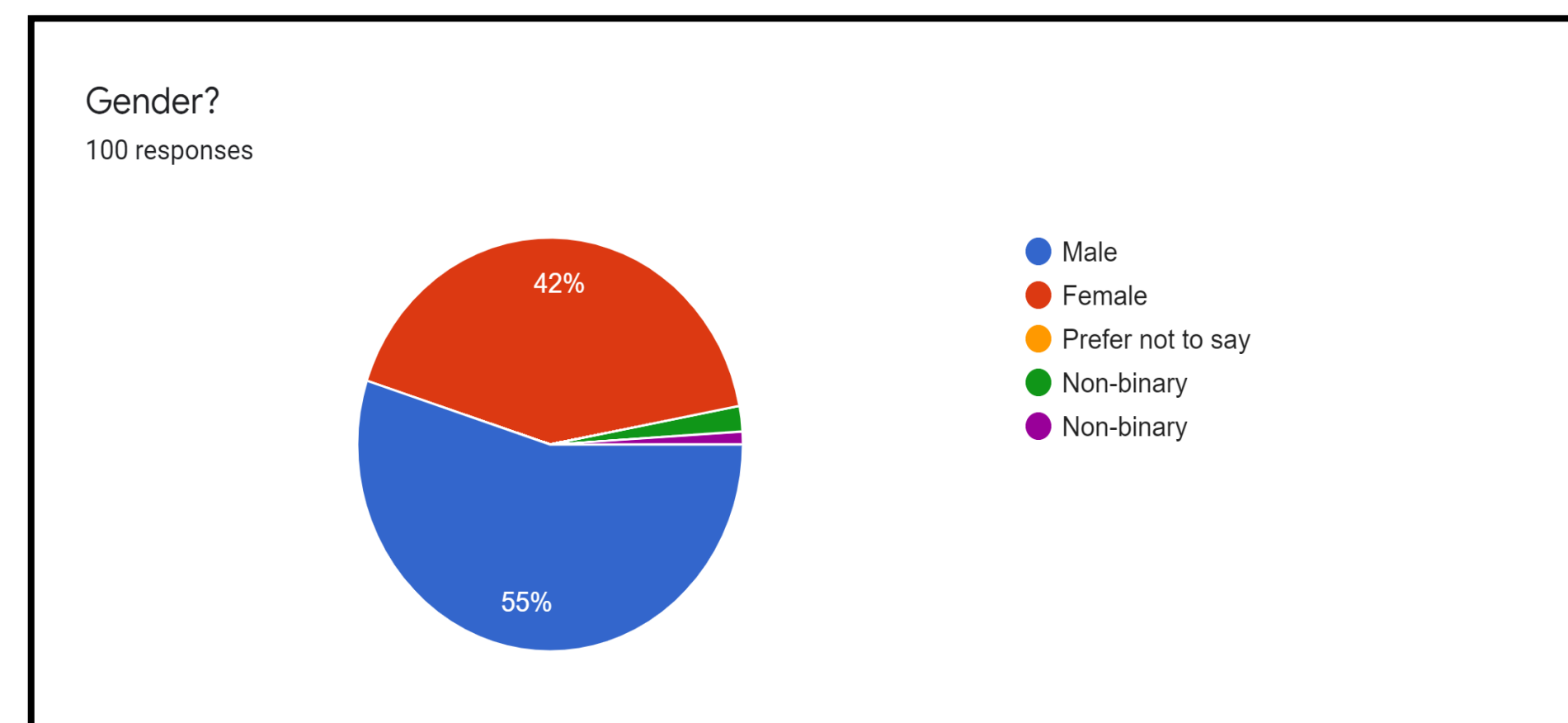


Fig 1. This pie chart provides the percentage of gender respondents on our survey.

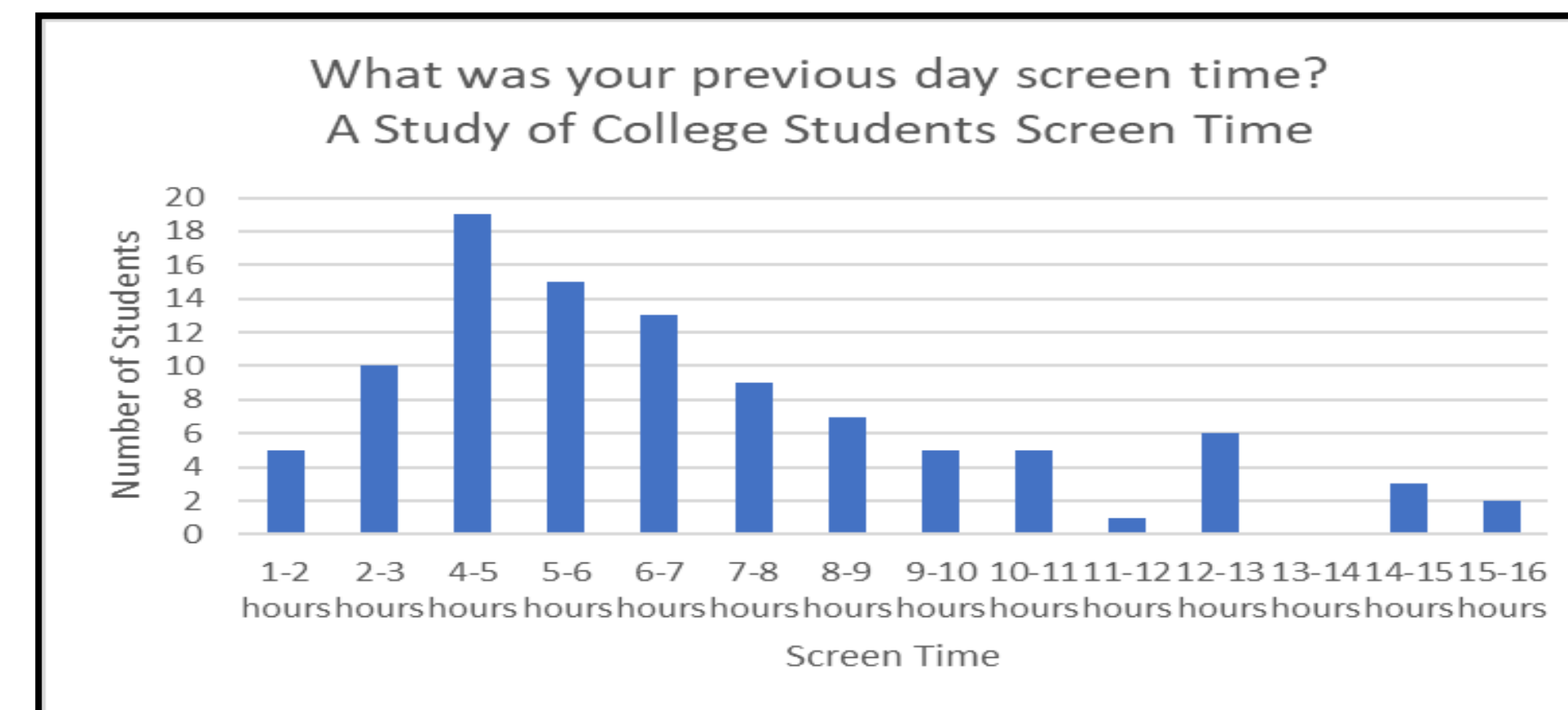


Fig 2. This bar chart provides the relationship between the number of respondents and their screen time.

HYPOTHESIS

We hypothesized that 80% of respondents to the survey would have screen time of between 7 and 10 hours per day.

STATISTICAL ANALYSIS

In a sample of 100 students, 21 of them picked a range between 7 to 10 hours. This means that my statistic was 21%. We found our margin of error to be 0.08%, and further calculated our confidence interval to be between 13% and 29%. Based on our hypothesis (p_o) = 80%. We found a test statistic of -14.75 and found a P-Value of 0.0001. Finally, 0.05 being greater than 0.0001, we failed to reject our hypothesis.

CONCLUSION

We are 95% confident that the true percentage of students that had a screen time between 7 and 10 hours, is between 13% and 29%. We do not have evidence to conclude that the true percentage of all students who had a screen time between 7 to 10 hours, is significantly different from my guess of 80%. The only limitation we encountered were variations in screen time data , which we fixed by ranging the screen time.

REFERENCES

- Gomez, S., & Smith-Slade, D. (2021, December 17). Phone Addiction: Warning Signs and Treatment. Addiction Center. Retrieved February 2, 2022, from <https://www.addictioncenter.com/drugs/phone-addiction/#:%7E:text=There%20is%20a%20fine%20line,is%20addicted%20to%20their%20smartphone>
- Moody, R. (2022, March 21). *Screen Time Statistics: Average Screen Time in US vs. the rest of the world - Comparitech*. Comparitech; www.comparitech.com. <https://www.comparitech.com/tv-streaming/screen-time-statistics/>
- Roberts, J., Yaya, L., & Manolis, C. (2014). The invisible addiction: Cell-phone activities and addiction among male and female college students, *Journal of Behavioral Addictions*, 3(4), 254-265. Retrieved Apr 13, 2022, from <https://akjournals.com/view/journals/2006/3/4/article-p254.xml>